

PERCEPTIONS OF FLORIDA SECONDARY SCHOOL PRINCIPALS AND  
SUPERINTENDENTS TOWARD AGRICULTURAL EDUCATION

By

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In memory of Rudene Gentry, my Papa, for setting the example of high expectations

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## LIST OF ABBREVIATIONS

AYP	Annual Yearly Progress
CTE	Career and Technical Education
FFA	Formerly known as the Future Farmers of America. Now known as the National FFA Organization.
NCLB	No Child Left Behind
SAE	Supervised Agricultural Experience

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In American public schools, the bulk of financial decisions have been left up to local boards of education, local school superintendents, and individual school principals. Traditionally, superintendents have been the highest individual form of authority in a school system and principals have been considered the utmost leader in their schools. Agricultural education, which has been a part of the American public school system for many years, has been linked to student achievement in a variety of ways. The National Council for Agricultural Education's *Strategic Plan for Agriculture Education* included a "call to increase the number of quality agricultural education programs" around the nation. Currently, there is no data on how Florida decision makers perceive agricultural education programs and how their perceptions align with the values of principals and superintendents. Additionally, the relatively stagnant growth or decline in FFA Chapters around the country and in Florida is concerning.

The purpose of the study was to determine the perceptions of secondary agricultural education programs held by Florida superintendents and secondary school principals. A quantitative study was used to gather Florida secondary school principals and superintendents' perceptions toward agricultural education programs. A

questionnaire which was partially designed by the researcher was analyzed by a panel of experts before being distributed to the random sample of Florida principals and the census of Florida superintendents.

The results of this study found that both Florida secondary school principals and superintendents have positive perceptions of agricultural education programs. Additionally, the presence of a local secondary agricultural education program influences the perceptions of Florida secondary school principals. Demographics had many influences on the perceptions of Florida secondary school principals and superintendents. A key finding of this study was the influence of student achievement on funding decisions that principals and superintendents make.

## CHAPTER 1 INTRODUCTION

### **Overview**

The public school system in the United States is a highly complex system that serves students from pre-kindergarten to twelfth grade (Structure of U.S. Education, 2008). Every state has a state board of education that along with the state school superintendent or commissioner controls the state-wide decisions (Structure of U.S. Education, 2008). State boards of education have made decisions about the academic expectations of the state's schools, have decided on long-term goals for the entire state, and have made rules and regulations for schools to follow (A Guide to Decision-Making in Schools, 2010). Although boards of education have controlled rules and regulations, the cost of funding public schools has been largely the burden of the local taxpayer in local counties or local school districts (Structure of U.S. Education, 2008). With 90% of funding coming from local sources, the majority of financial decisions have been left up to local boards of education, local school superintendents, and individual school principals (Structure of U.S. Education, 2008; A Guide to Decision-Making in Schools, 2010). The local board of education adopts the system-wide budget and helps develop overall budgets for individual schools in the system (A Guide to Decision-Making in Schools, 2010). Local boards of education have also been charged with the hiring or approving the hiring of the district superintendent and principals as well as all teachers at individual schools within the school district (A Guide to Decision-Making in Schools, 2010).

## **Superintendents**

Traditionally, superintendents have been the highest individual form of authority in a school system (Pavelock, Ullrich, Janagriff, & Baer, 2001) and have been known as the chief executive officer of a school system (A Guide to Decision-Making in Schools, 2010). Superintendents have helped administer budgets, have aided in deciding on the hiring or non-renewal of teachers and other personnel, and have served as the direct line of communication between a school system and the community (A Guide to Decision-Making in Schools, 2010). Another job of superintendents has been to motivate principals, who then motivate teachers (Konnert & Augenstein, 1995). Pavelock and Ullrich, et al. (2001) stated that the success of all school programs is contingent upon support of the school's leader. Superintendents have reached the level of authority that they have by proving themselves as successful classroom teachers and principals (Carlson, 1961). Therefore, their expectations of their employees have been high. Additionally, in Florida, superintendents are either elected by tax payers in their counties or appointed by the local school board.

## **Principals**

Principals have been considered the utmost leader in their schools (Hallinger, 1992). Literature revealed that when "educators, researchers, communities, and politicians are interested in improving" (p. 56) schools, they look to the principal as a "critical force in creating and maintaining strong schools" (Voorhis & Sheldon, 2004, p. 56).

Overall and continuous school improvement has been a pressure that has been put upon all principals, and making funding decisions that align with student learning has been the goal of principals (School Finance Redesign Project, 2008). A principal's

role has been a balance between a manager and a leader (Portin, Shen, & Williams, 1998). As leaders, principals have improved school programs, have inspired staff to take part in a vision for the school, and have built relationships between the school as a whole and the community (Portin, Shen, & Williams, 1998). As managers, a principal's most important job has been controlling the budget, followed by dealing with discipline problems and complying with all educational policies set forth by state and federal legislation. Principals have felt the challenge to comply with increasingly stringent state and federal policies and reforms and have been forced to make hard decisions at times (Portin, Shen, & Williams, 1998). Portin, Shen, and Williams (1998) stated that because of increased budget cuts, 62% of principals "indicated they devoted increasing amounts of time seeking grants from external sources" (p. 4). As leaders in schools, principals have been charged with focusing their staff on improving student achievement (Hallinger, 1992).

### **Continuous Change and Reform in Public Schools**

Public education has entered a new accountability movement due to public concern regarding the effectiveness of U.S. public schools (Braden & Tayrose, 2007).

Superintendents and principals have been responsible for overseeing accountability measures put forth by federal legislation (Portin, Shen, & Williams, 1998). The accountability movement focuses on educational outcomes instead of providing equal opportunities for education which was the primary focus of the past (Braden & Tayrose, 2007). Thus, President George H. Bush initiated the 1988 Education Summit which developed goals for education that measured how students performed on tests. In 1988, schools had no common goals or vision for standards of student achievement (Braden & Tayrose, 2007). School leaders were directed to align the goals and vision

set forth by federal legislation to get all teachers and students involved, heading in the same direction (Portin, Shen, & Williams, 1998). In 2001, President George W. Bush signed a reauthorization of the Elementary and Secondary Education Act of 1965 which was renamed the No Child Left Behind (NCLB) Act (2002). The main objective of NCLB was to hold local school districts accountable for student achievement. NCLB has set specific objectives for schools and these objectives have been monitored by Annual Yearly Progress (AYP). If AYP has not been reached for two years in a row, sanctions against the school begin (NCLB, 2002). In 2004, reauthorization of the Individuals with Disabilities Act began including students with disabilities in the accountability measures held to schools (Braden & Tayrose, 2007). All of these changes have placed increased pressures on school decision makers to comply with all rules.

The public school system has been an ever-changing environment. Federal and state mandates have continued to place pressure on schools to promote higher student achievement (Braden & Tayrose, 2007). The primary pressure to uphold these mandates have been placed on the superintendents and principals (Voorhis & Sheldon, 2004.) These school leaders must make decisions on a daily basis to promote student achievement and remain compliant with the mandates as well as stay true to their value system.

### **School Leader Decision Making, Values, and the Environment**

School decision makers have been faced with making difficult decisions at times. These decisions have been based on a variety of information sources, but in general have aligned with the values of the leader. Principals' leadership and perceptions have had an effect on student achievement (Eberts & Stone, 1988; Rayfield & Wilson, 2009). There have been direct and indirect effects of principals leadership and perceptions on

student achievement including “the degree to which teachers believe that the principal” supports them (Eberts & Stone, 1988; p. 293). School decision makers’ values, perceptions, and support of certain programs have been influenced by many different effects of the outside environment.

Although student achievement has been the most common goal among school decision makers (Frick, 2009), many administrators agreed that teaching should be emphasized more than the test (Herbert, 2010). Deborah Kenny, principal of Harlem Village Academies in New York claimed that more important than test scores, she desired for the students of her school to be of high character, compassionate, and independent thinkers who live significant lives (Herbert, 2010). The values of administrators have been determined by a number of things including their past experiences (Pavelock, Vaughn, & Kieth, 2001) as well as the goals that they have developed over time for their schools (Frick, 2009). In addition to personal values, administrators are under pressure to heed the values of those in their communities

Superintendents have tended to be hired for their vision for school systems and ideas regarding curriculum yet fired for their decisions regarding finances (Bredeson, 1995). Although they have been hired for very different reasons, superintendents have reported spending a vast majority of their time dealing with budgetary concerns and have considered fiscal maintenance to be their top administrative job. Additionally, superintendents have been especially susceptible to political forces (Bredeson, 1995). Bredeson (1995) stated, the roles of “superintendents has increasingly become defined by political pressures, high public visibility, unstable school finances, and greater

external controls exerted through court rulings, legislation, and state department of education mandates” (p. 3).

Superintendents have been perceived to have positional power and be influential in their communities (Owen, 1998). Superintendents have often been dependent on communities to communicate their values regarding education and educational programs. Because superintendents have been forced to be political through their community interactions, they must please the greatest number of people (Owen, 1998).

Just as superintendents have been influenced by the outside environment, principals have also felt this pressure. When principals have made decisions regarding funding and program cuts, the programs that support student achievement have been the programs that stick around, claimed Jason Leahy of the Illinois Principals Association (2010, personal communication). Mr. Leahy stated that the culture and values of the school and community have been one of the largest determining factors when deciding which programs will be cut in tough economic times.

As pressures from the outside environment continue to place stress and extremely high standards on superintendents and principals, the problem of turnover among administrators has arisen. The mobility of administrators has caused teachers, policymakers, and community members concern over the large turnover of school administrators. Some have argued that administrators relocate frequently due to the rigorous and sometimes unattainable accountability measures put in place to demonstrate school improvement (Gates, Ringel, Santibanez, Guarino, Ghosh-Dastidar, & Brown, 2005). This has been a particular area of concern when attempting to prove the merit of an educational program. Teachers attempting to build relationships with

decision makers may have been at a disadvantage, due to the mobility of administrators (Gates, et. al., 2005).

Although state boards of education have been the force behind state-wide curriculum decisions, local decision makers have a say in curriculum development and strategy. Superintendents and principals have made decisions regarding curriculum taught in their school systems and schools.

### **Agricultural Education**

Agriculture has been a part of the United States public school system for many years, but only received federal funding in 1917 when the Smith-Hughes Act was passed in Congress. This legislation provided funding for high school courses that taught vocational agriculture (Smith-Hughes National Vocational Education Act of 1917).

Agricultural education has been linked to student achievement in a variety of ways, including the way in which curriculum has been administered, through Supervised Agricultural Experience (SAE) programs, and student involvement in the National FFA Organization (Cheek, Arrington, Carter, & Randell, 1994). The agricultural education model has promoted experiential learning and hands on experience through laboratory activities and regular instruction. Agricultural education has also been said to boost understanding of science because of the applied, hands on nature of instruction (Dyer & Osborne, 1999). Experiential learning has also been encouraged through out-of-school projects known as SAEs. In addition, FFA has been an intracurricular part of the agricultural education model. Leadership development has been taught through involvement in the FFA. With high-stakes testing focusing on areas such as science

(Braden & Tayrose, 2007), agricultural education is the “premier educational model” (Wesch, 2008, p.13) to facilitate student achievement.

Agricultural education courses have been classified in the United States public school system as Career and Technical Education courses. Career and Technical Education (CTE) courses have been offered in middle school, high school, as well as at technical centers around the state of Florida (Florida CTE State Profile, 2010). The goal of CTE courses has been to prepare students for a great variety of careers and to provide experiences in both school and work settings (What is Career and Technical Education?, 2010). Florida’s Education Commissioner, Dr. Eric Smith agreed that CTE courses have allowed students to “explore careers and gain hands-on experience” that prepares them for “success in today’s global economy” (Florida Department of Education, 2010). Many have argued that when CTE courses are coupled with academics, high school students’ enthusiasm for school has increased, decreasing drop-out rates (Plank, 2001). Combining a mix of academic course load with CTE courses has provided the most options for students upon graduating from high school. This track has allowed for the most options including college, technical school, or the workforce (Plank, 2001). In addition, students who plan on attending college have gained important skills from CTE courses that may lead them to higher achievement in academic areas because of the practical applications gained in CTE courses (Plank, 2001).

### **Role of Agricultural Education in the Agricultural Industry**

The American Farm Bureau (2009) reported that over 21 million people are employed in some sector of agriculture, making the agricultural industry the United States’ largest single employer. With 15% of the population depending on agriculture

for work, agriculture has been an essential sector of the U.S. economy. To provide enough people to maintain the massive agricultural workforce in America, agricultural education in public schools is needed.

As the general public becomes more attentive of agricultural issues (Blandford & Fulponi, 1999), there has been an outcry for well educated agriculturalists, citizens, and policy makers (National Council for Agricultural Education, 2007; Wright, Stewart, & Birkenholz, 1994). Agricultural education can provide the education needed to support well-educated agriculturalists as well as well-informed citizens. The National Research Council (1988) stated, "Agriculture is too important a topic to be taught only to the relatively small percentage of students" that are being taught at this time (p. 8).

Agriculture has played a vital societal role in providing a safe domestic food supply. In addition, agriculture's economic impact is too vast to not have agricultural education as a part of the public school system to ensure an educated workforce can continue the wellbeing of the agricultural industry (Martin, 1991).

### **Florida's Current Educational Climate**

Florida's population has been growing at dramatic rates. Bouvier & Stein (2001) predicted that by 2025, Florida's population will have increased by 5.5 million people. What impact has urban sprawl due to major population increases, had on support for agricultural education programs in Florida? If superintendents and principals have made budgetary decisions based on the values and culture of the community in which they live, has urban sprawl and the degradation of farmland changed the values and culture of communities in Florida?

Florida is a bellwether state. That is, the state's trends are indicative of what the rest of the country can expect (MacManus, 2009). MacManus (2009) stated that Florida

has “increased its stature as a mirror-image of the nation, which is why it continues to be in the national spotlight” (p. 8).

The South has been characterized as the most economically disadvantaged area of the United States (Mulkey, 1993). Mulkey (1993) stated in *Education in the Rural South: Policy Issues and Research Needs*, “Education is considered the primary vehicle for improving regional economic performance” (para. 4). Mulkey stresses the importance of a skilled workforce who is educated in a way that can contribute to the local economy for “increased development of the region’s human capital” (para. 7).

Per-pupil spending in the South has been lower than the national average (Mulkey, 1993). In 2005-2006, Florida ranked 41<sup>st</sup> in per pupil spending as reported by the EPE Research Center (Mitani, 2009). With the state’s per-pupil spending being among the worst in the nation, now is a critical time to make sure additional opportunities are not taken away from students in Florida by ensuring the continuation of agricultural education programs.

A potential issue for agricultural educators is that there is currently no standardized test that can prove the merit and effectiveness of the agricultural educator similar to tests used in science or English (Leahy, J. personal communication, May 26, 2010). Mr. Leahy claimed that cutting extracurricular activities such as sports or other extracurricular programs does not save the school money; cutting staff will save the school the most money. The risk to programs has been when a principal decides to lay-off the teacher of the program to meet budget requirements (Leahy, J. personal communication, May 26, 2010).

## Statement of the Problem

The National Council for Agricultural Education's *Strategic Plan for Agriculture Education* included a "call to increase the number of quality agricultural education programs" around the nation to ensure that the needs of students as well as the needs of the agricultural industry are met (National Council for Agricultural Education, 2007). The Strategic Plan also makes a call to include all stakeholders involved, including principals, superintendents, and other leaders within the school system (National Council for Agricultural Education, 2007). Data suggests that "program support plays a major role in recruitment and retention of students" (Kalme & Dyer, 2000). In 2000, Kalme and Dyer noted that Iowa principals had fairly positive perceptions of agricultural education programs, but do Florida superintendents and principals feel the same way? At this time, it is unclear what principals and superintendents value. Because of this, agricultural education has not explicitly tried to align agricultural education programs with these values. This study ascertains these values.

The problem being investigated by this study was that there is no data on how Florida decision makers perceive agricultural education programs and how their perceptions align with the values of principals and superintendents. Additionally, the relatively stagnant growth or decline in FFA Chapters around the country and in Florida is concerning. Nationally, there are 7,487 schools with FFA Chapters or only a net increase of 175 additional chapters since 2000 (National FFA Organization, 2011). However, this number leaves 30,743 schools – 80% of all schools - around the nation without agricultural education programs (National Council for Agricultural Education, 2007). In Florida, there has been a decline in the number of FFA Chapters from 2000 to 2010; In 2000, there were 324 FFA Chapters, in 2005 there were 330 FFA Chapter, and

in 2010 there were 286 FFA Chapters in Florida (Simmons, R. personal communication, January 25, 2011).

As budget cuts continue to affect education across the board (Lav & Hudgins, 2008; Portin, Shen, & Williams, 1998), now is a critical time to generate and maintain support for agricultural education programs. Recently, various agricultural education programs across the country have experienced major cuts, forcing some programs to make major changes and face potential closures (Grimes, 2010; McCarthy, 2010; Martin, 2010). With economic struggles being at the forefront of current issues, it is essential that agricultural education programs in Florida ensure their support systems.

### **Purpose and Objectives**

The purpose of the study was to determine the perceptions of secondary agricultural education programs held by Florida superintendents and secondary school principals.

The objectives of this study were to:

1. Determine the perceptions of Florida public school superintendents toward secondary agricultural education programs.
2. Determine the perceptions of Florida public secondary school principals toward secondary agricultural education programs.
3. Compare the perceptions of Florida public school superintendents and principals toward secondary agricultural education programs.
4. Determine the influence of the presence of a local secondary agricultural education program on the perceptions of principals.
5. Examine the relationships between demographic characteristics and views toward secondary agricultural education programs as reported by principals and superintendents.
6. Understand the items that Florida principals and superintendents take into consideration when making program funding decisions.

## **Significance of the Study**

In the absence of a national curriculum, agricultural education remains largely a state and locally defined program. The outcome of this study will provide Florida agricultural educators with a better understanding of how principals and superintendents perceive agricultural education programs. It will also provide a better understanding of whether administrators' perceptions are related to lack of agricultural education programs in some schools. Analyzing the perceived support of agricultural education can help the profession focus on the areas in which administrators view as important and improve the areas that they perceive have less value. This can enable agricultural educators to improve programs to improve support. Agricultural education programs can use this knowledge when revising and planning programs. Having this knowledge will lead to better teacher to administrator relationships. The evaluation of perceptions of agricultural education programs can help agricultural education highlight how they can contribute to the areas that principals and superintendents value when making decisions. In addition, there is a gap in knowledge from the late 1990s regarding perceptions of agricultural education programs, and no such study has been conducted in the State of Florida. Understanding the perceptions of Florida decision makers can be indicative of perceptions of decision makers in other states. Kalme and Dyer recommended the evaluation of perceptions of principals with and without agricultural education programs to determine if lack of administrator support contributed to the school not having an agriculture program (2000).

## **Definition of Terms**

ADMINISTRATOR – a leader and decision maker in a school system. This term applies to both superintendents as well as building level leaders such as principals and vice principals.

AGRICULTURAL EDUCATION TEACHERS – teachers at the secondary level who teach agriculturally related curricula and serve as FFA Advisors.

ATTITUDE- “a learned pre-disposition to respond in a consistently favorable or unfavorable manner with respect to a given object” (Fishbein & Ajzen, 1975, p. 6). In this study attitude is defined as a way of feeling or thinking about an object and measured by a response to a likert-type questionnaire.

CAREER AND TECHNICAL EDUCATION (CTE) – courses that are intended to prepare students “for a wide range of careers” and are offered in middle schools, high schools, and technical centers (What is Career and Technical Education?, 2010, para. 1).

FFA – “a dynamic youth organization that is a part of agricultural education programs at middle and high schools” (ffa.org, 2010).

HIGH/SECONDARY SCHOOL – grades 9-12.

PERCEPTION – the process that people go through to interpret sensation to form a meaningful view or conceptualization of their environment (Lindsay & Norman, 1977). In this study perceptions were defined as a belief or attitude about a subject or object.

PRINCIPAL – the utmost leaders in a school and head building administrator. (Hallinger, 1992).

SUPERINTENDENT – “a public schools district’s highest academic officer” and chief executive officer of a school system (Pavelock, Vaugh, & Kieth, 2001, p. 471).

### **Limitations and Assumptions of the Study**

The limitations of this study included issues with response rate and the sample type. Principals and superintendents are very busy people and may overlook or not understand the importance of completing the questionnaire. All measures to promote a higher response rate were taken. Another limitation is the sample type being used. Because the sample is strictly from the state of Florida, generalizability will be lowered. Additionally, some responses on questionnaires may be influenced by the quality of the local agricultural education program. Higher quality programs may elicit more positive responses from principals and superintendents versus lower quality programs.

Another limitation of this study involved locating the verified and exact number of agricultural education programs in the state of Florida. Despite exhausting all options, the exact number of programs could not be located. The numbers used in this study were based on FFA Chapters. Although there should be a close overlap of the number of FFA Chapters and the number of agricultural education programs, this overlap is not exact.

The assumptions of this study are that all respondents answered honestly and put forth genuine effort into answering the questions. Another assumption was that the respondents had a general knowledge of agricultural education programs.

### **Summary**

The public school system is a highly complex system in which the power falls on local school boards, superintendents, and principals. Superintendents have been a schools' chief executive officer and make many decisions regarding funding as well as alignment of school system values with school decisions. Principals have been key leaders and managers in a school system and have served the role of making daily decisions and promoting student achievement. Educational reforms have placed pressure upon school decision makers making their jobs even more difficult. Principals and superintendents have been responsible for making sure the school and school system is aligned with state and federal mandates. However, they have also been influenced by the outside environment and must keep the most people happy. This task has caused administrator turnover to be a significant issue. Secondary agricultural education promotes student achievement and is an essential part of the school system. Agricultural education has a duty to ensure the prosperity of the United States

agricultural industry by preparing a well-educated workforce, consumers, and policy makers. Changing population trends and funding crises have created a messy situation for education, and now is the critical time to ensure Florida agricultural education's support system. The problem being investigated by this study was the stagnant growth of agricultural education nationally, as well as in Florida. In addition, because superintendents and principals make decisions regarding program continuation, determining the perceptions of school decision makers to ensure their values align with agricultural education's values is essential for the growth of agricultural education.

## CHAPTER 2 LITERATURE REVIEW

### **Overview**

Principals and superintendents make decisions regarding the curriculum being taught at schools. Because of this, perceptions of school decision makers have been sought after in several studies. The knowledge gained from these studies has helped the agricultural education community determine its stance in public education. These studies have also attempted to determine the influence of reform of agricultural education programs on the perceptions of decision makers. However, no studies have been conducted on the direct perceptions of principals and superintendents in recent years and no studies have been conducted in the State of Florida regarding the perceptions of school decision makers on agricultural education.

Administrators have great control over curriculum decisions and can be the deciding factor as to whether a school does or does not have an agricultural education program. Even when support is demonstrated by others in the community, such as local businesses, parents, and educational supporters, administrators ultimately have the final decision in whether schools have agricultural education programs. This was shown by a study of Kansas school districts that did not have agricultural education programs. Although support was shown by residents in the community as well as by agribusiness leaders, the study demonstrated that the administrators did not want agricultural education programs, and therefore did not have them (Parmley, 1982). This was a true sign of the power that administrators have regarding curriculum decisions in their schools.

Past studies on the perceptions of administrators regarding agricultural education have revealed a fairly positive view of agricultural education (Pavelock, Ullrich, Hanagriff, & Baer, 2003; Pavelock, Vaughn, and Kieth, 2001; Kalme & Dyer, 2000; Johnson & Newman, 1993; Price, 1990; Jewell, 1989). Other studies have ascertained the perceptions of school administrators toward vocational education. In these studies, vocational education was perceived to be a positive program in public schools (Huh, 1991; Barnett, 1984; Miller, 1981).

### **Theoretical Framework**

This study is based on Fishbein and Ajzen's (1975) Theory of Reasoned Action that suggested that a person's behavior can be predicted by evaluating their beliefs and attitudes toward a program, subject, or another behavior (Fishbein & Ajzen, 1975). Fishbein and Ajzen (1975) contended that if a person has a positive attitude toward a program, subject, or behavior, they will view the program, subject, or behavior with positive attributes. Fishbein and Ajzen (1975) also contended that if a person's attitude could be measured, then their behavior could be explained and predicted. Fishbein and Ajzen (1975) claimed that "a person's intention to perform a given behavior is a function of his attitude toward that concern" (p. 17). Therefore, if a superintendent or principal has had positive beliefs and attitudes regarding agricultural education, positive behavior in the form of support can be expected.

Fishbein and Ajzen's (1975) definition of attitude is "a learned predisposition to respond to an object in a consistently favorable or unfavorable manner" (p. 336). Fishbein and Ajzen (1975) contended that beliefs and attitudes are often formed by direct observation or experience with a subject. If an individual has little experience or direct observation with a subject, their beliefs and attitudes are determined by inference

processes (Fishbein & Ajzen, 1975). These inference processes vary but could be derived from word of mouth or other sources which may or may not be reliable sources (Fishbein & Ajzen, 1975). These sources, whether negative or positive, influence the way individuals perceive the world around them and have a direct effect on their behavior. Fishbein and Ajzen (1975) stated that the attitude a person has toward the behavior or subjective norms determines their intention to carry out the behavior and this leads to either action or inaction of the behavior. Figure 1 depicts Fishbein and Ajzen’s conceptual framework of “the prediction of specific intentions and behaviors” (p. 16).

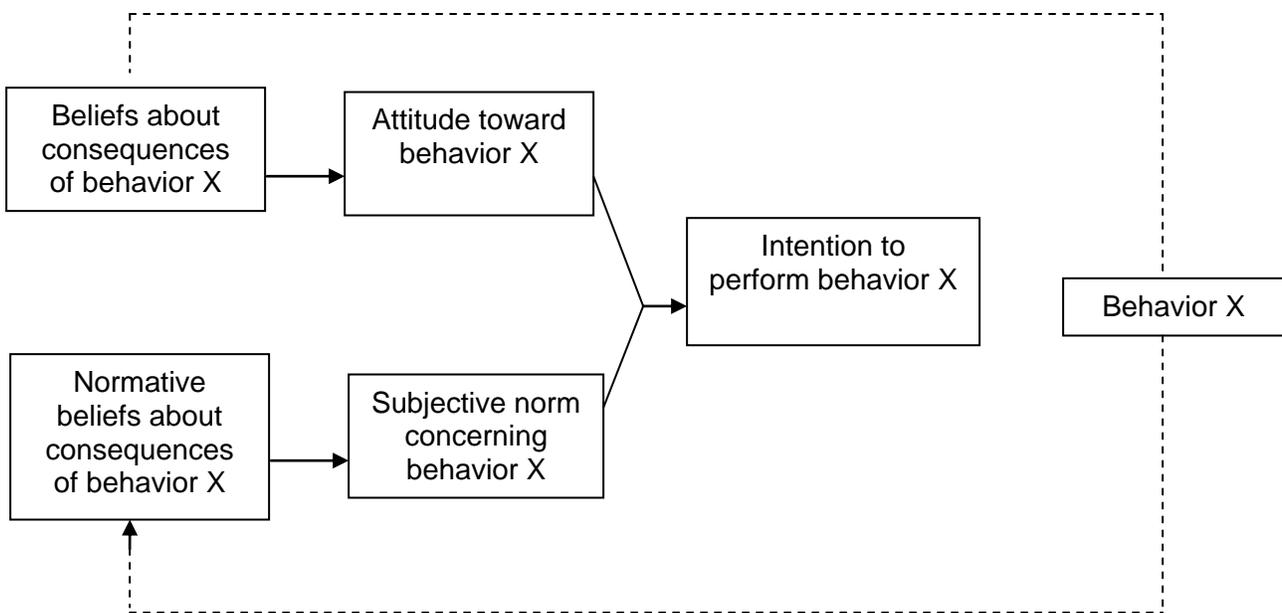


Figure 2-1. Fishbein and Ajzen’s model of the prediction of specific intentions and behaviors. (Fishbein & Ajzen, 1975).

This model displayed the progression of beliefs on attitudes, attitudes to intention to perform a behavior, and intention to perform a behavior to behavior. Their behavior then influences their beliefs about the subject and the cycle begins again.

Consequently, if a person has positive beliefs and attitudes toward something, then they

are more likely to support it through action and behavior (Fishbein & Ajzen, 1975). At the same time, if a person has negative beliefs and attitudes toward something, then they are not likely to support it through action and behavior (Fishbein & Ajzen, 1975).

When administrators make decisions, they generally follow a pattern; whether these decisions are petty day-to-day decisions or major decisions that change the structure of schools, they generally have followed a pattern. Cross (1980) stated that once a problem is perceived, information is obtained related to the problem, alternatives are thought through, the possibilities of consequences are listed, and a choice is made. The information that is obtained comes from subordinates, extraordinates, hierarchies, peers, and records. Decisions are then made based on a decision premise. Cross (1980) contended that the three most common decision premises were based on administration which pertained to “professional knowledge relevant to directing and controlling life in the school organization”, education which pertained to “professional knowledge relevant to philosophical and technical bases underlying instruction of students”, and cultural knowledge which pertained to “knowledge presumably possessed by the man in the street” (p. 156). If administrators make decisions based on this type of information as well as their own experiences and knowledge, then understanding what administrator’s value is of particular value to any teacher.

Therefore, if agricultural education aligns with the values of administrators, decisions that favor agricultural education programs will be made. In addition, if agricultural education programs are perceived to be positive by superintendents and principals, then support for programs will be heightened.

## Conceptual Model

Based on Fishbein and Ajzen's (1975) model of the prediction of specific intentions and behaviors, the conceptual model developed for this study is shown in Figure 2.

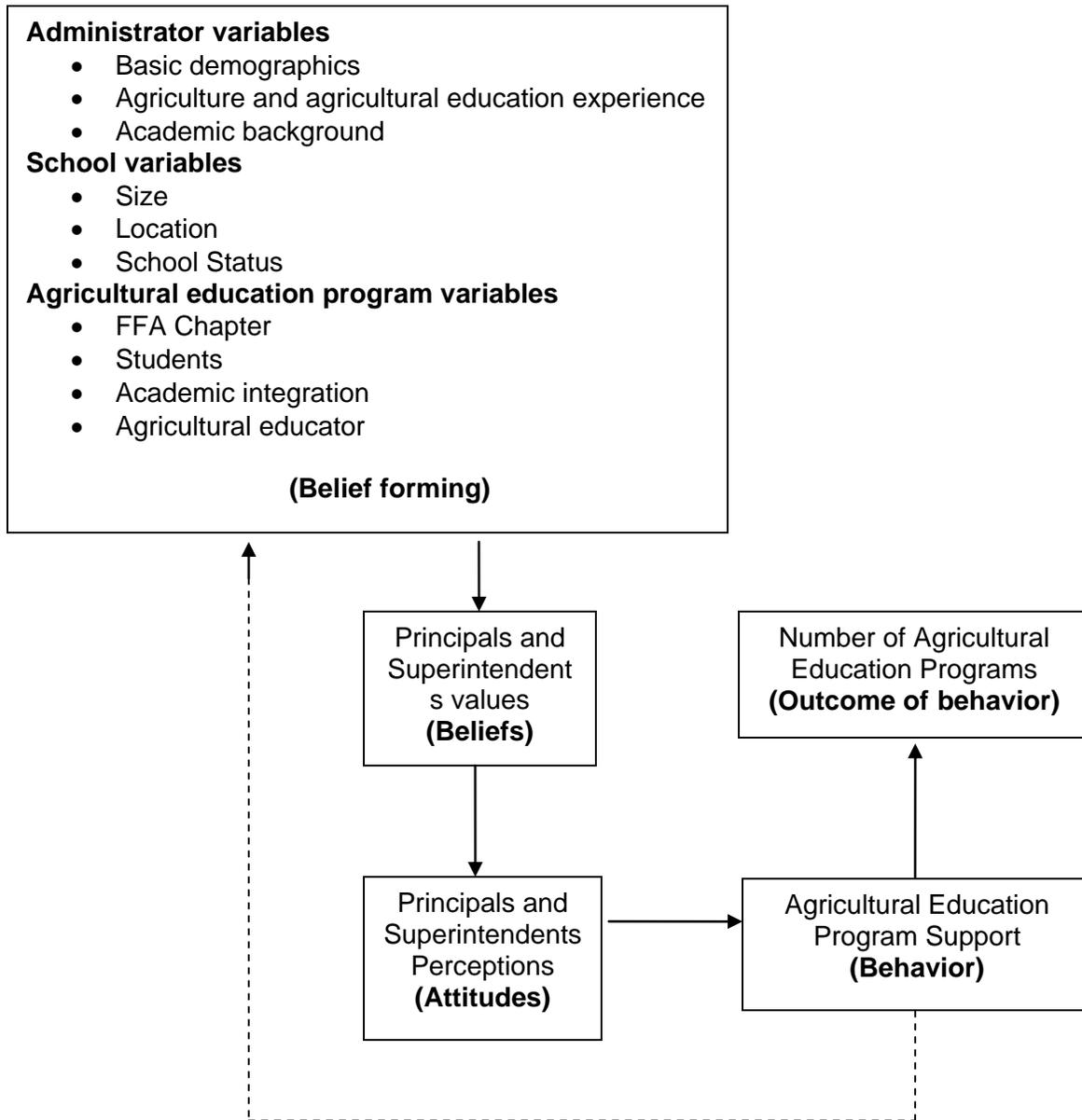


Figure 2-2. Progression of principals and superintendents values and perceptions on the number of agricultural education programs.

This model displays how independent variables can influence the values and beliefs of principals and superintendents regarding agricultural education. These values and beliefs influence the principals' and superintendents' perceptions and attitudes regarding agricultural education. Behavior in the form of support of the agricultural education program can be predicted if these perceptions are positive. On the other hand, behavior in the form of non-support can be predicted if the perceptions of principals' and superintendents' are negative. The outcome of this behavior is indicative of the number of agricultural education programs. The principal or superintendents' behavior toward agricultural education then reinforces their belief forming in either a positive or negative way and the cycle continues.

Principals' and superintendents' values determine what is important in their schools (Frick, 2009). All administrators have a value system that they bring in to work with them. These values have been influenced by their past experiences, the culture in the school and community, and the visible quality (Fishbein & Ajzen, 1975) of the agricultural education program. The administrator's values have an effect on their attitudes and beliefs which effect their perceptions. Perceptions are demonstrated in the form of action or behavior and this is either positive or negative.

## **Previous Research**

### **Administrator Variables**

Kalme and Dyer (2000) conducted a study of the perceptions of Iowa high school principals toward agricultural education programs, courses, and teachers. This study found that Iowa principals have positive perceptions of agricultural education programs, courses, and teachers. This study recommended that researchers examine schools

with and without agricultural education programs to determine if lack of principal support was a cause of the schools not having agricultural education programs.

### **Basic demographics**

Past studies have analyzed administrators' perceptions of agricultural education programs or some aspect of agricultural education programs. Dyer and Osborne (1999) conducted a study of Illinois guidance counselors' attitudes toward agricultural education programs that integrated science into the curriculum. Demographic characteristics were found to be related to the perceptions of the Illinois guidance counselors surveyed in this study. A correlation between gender and perceptions of agricultural education teachers and courses was found. Male guidance counselors perceived agricultural education to be a more traditional type of course than females. Male counselors ranked the competency of agricultural educators as very high, whereas female counselors only ranked the competency of agricultural educations as high. In addition, a correlation between age and perceptions of the agricultural industry was found. Counselors who were older than 40 years held more positive views of agriculture as an industry than did counselors who were under 40 years old (Dyer & Osborne, 1999).

Barnett (1984) conducted a study of principals' perceptions of vocational education in public schools in Texas. Barnett (1984) found that Texas principals had positive perceptions of vocational education. In addition, no significant differences were found among perceptions of principals based on the age of the principal. However, principals between the ages of 50 and 59 had more positive perceptions of vocational education programs than those principals who were between the ages of 40 and 49.

This study also found that principals did not view vocational education differently based on their number of years in education (Barnett, 1984).

### **Agriculture and agricultural education experience**

Pavelock, Ullrich, Hanagriff, and Baer (2003) reported that Texas superintendents had positive perceptions of agricultural education programs in Texas. This study reported that 58.6% of Texas public school superintendents had experience with agricultural education by either having taught, taken a course in, or had a child that took an agricultural education course (Pavelock, Ullrich, et al., 2003). Pavelock, Ullrich, et al. (2003) also indicated that the superintendents who had more experience with agricultural education believed that agricultural education courses are less vocational and more academic. In addition, the superintendents with less experience had varying perceptions on the area of instruction that were in need of enhancement (Pavelock, Ullrich, et al., 2003). Pavelock, Ullrich, et al. (2003) recommended that agricultural education teachers spend time with superintendents who have little or no experience in agricultural education to help them understand the value of the program, as well as become aware of the academic incorporation of most agricultural education programs.

Although Pavelock, Ullrich, et al. (2003) found that experience with agricultural education was associated with more positive perceptions of superintendents, Kalme (1998) indicated that experience in the agriculture industry did not directly correlate with higher perceptions of agricultural education programs in Iowa. In addition, Kalme (1998) indicated that principals whose child had been enrolled in agricultural education did not have higher perceptions of agricultural education programs than principals whose children had not been enrolled in agricultural education classes. Kalme (1998) also reported that there was no correlation between higher perceptions in Iowa

principals and being enrolled in an agricultural education class when the principal was in high school, compared to principals who had never taken an agricultural education class.

Rayfield and Wilson (2009) reported that only 10% of principals surveyed in North Carolina had taught a Career and Technical Education course while teaching high school. However, 16.5% of principals had been enrolled in an agricultural education class while in high school. No significant differences were found in the perceptions of SAE programs between the principals who had taken an agricultural education class and principals who had taken an agricultural education class. Rayfield and Wilson (2009) noted that principals without agricultural education experience saw merit in SAE for students.

Pavelock, Vaughn, and Kieth (2001) studied 100 Texas public school superintendents and determined that overall, Texas superintendents had positive perceptions of agricultural education programs. The superintendents believed that the amount of money spent on agricultural education was a wise investment. Texas superintendents tended to have more experience in agricultural education programs than superintendents in other states. Of the superintendents who responded, 67.1% indicated that they had work experience in agriculture. Of the responding superintendents, 41% had been enrolled in an agricultural education course, and 34% had children that had been enrolled in agricultural education courses. This study also recommended that teachers make greater efforts to keep superintendents informed of what's going on in their agricultural education programs and how they are teaching students of a variety of backgrounds and achievement levels.

## **Academic background**

Pavelock, Ullrich, Hanagriff, and Baer (2003) reported of the superintendents surveyed, 11.4% had experience either teaching vocational education or agricultural education. Most principals teaching experience was in an academic area. However, regardless of their area of teaching when teaching high school, Texas superintendents perceived agricultural education positively.

Dyer and Osborne's (1999) study of Illinois guidance counselors revealed that the subject area that they previously taught influenced their perceptions of agriculture. Guidance counselors who taught English, special education, or science held more positive views toward agriculture than counselors with experience teaching in other subject areas.

Barnett's (1984) study of Texas principals compared perceptions according to their prior teaching assignments. The groups were broken up into "academic teacher, fine arts teacher, athletic teacher/coach, counselor, vocational teacher, and other" (Barnett, 1984, p.119). No significant difference was found in the perceptions of principals based on their prior teaching assignment. However, principals who had taught in vocational areas held more positive perceptions of vocational education.

## **School Variables**

There are school variables that can influence administrator perceptions. Below, are certain school variables that previous research has found to influence administrator perceptions.

### **Size**

Rayfield and Wilson (2009) reported that 70% of principals who responded worked in schools with medium to large sizes of 501-1,500 students. Although the schools

were rather large, principals still viewed Supervised Agricultural Experiences (SAE) as important and agricultural education programs as valuable (Rayfield & Wilson, 2009). Rayfield and Wilson (2009) stated that “the number of urban programs is growing” (p.77). This study also recommended the examination of affirmative measures that can get both teachers and administrators to act upon their positive perceptions of SAE (Rayfield & Wilson, 2009).

### **Location**

Some studies contend that the size and type of community can be an indicator of the support that is given to a school’s agricultural education program. Smith and Park (2009) reported that communities that are centered on agricultural production can promote very different perceptions of agriculture than communities that are not. Kalme reported that 74.8% of Iowa principals who responded were from communities of less than 5,000 people. Agricultural education programs were viewed positively in this study (Kalme, 1998).

Osborne and Dyer (2000) conducted a study of parent and agriscience students’ perceptions of agricultural education programs in Illinois. A very high rate of 75% of the parents and students indicated that they lived in a rural area, and 90% of the parents and agriscience students ranked the agricultural education program between good and excellent. However, parents were unsure as to whether or not they would encourage their child to enter the agricultural industry. This study recommended that agricultural educators keep parents, as well as others, aware of the many career opportunities in agriculture.

Kalme and Dyer’s (2000) study of Iowa principals indicated that over 78% of principals agreed that “agricultural education programs were positive influences in the

community” (p.119). Principals in this study also believed that the agricultural industry provided many jobs in their communities.

Jewell (1989) stated that administrators perceived that their communities consider agricultural education programs to be important. In addition, administrators believed that the main purpose of agricultural education was to prepare students for careers in agriculture. Administrators also believed that there is more justification for agricultural education programs than simply the number of students who enter the agricultural industry after high school.

Pavelock (2000) compared superintendents in larger towns and cities to rural area. This study determined that superintendents in large towns and cities believed that the primary purpose of agriscience was not to prepare students for immediate entry into the agricultural industry. In addition, superintendents from larger areas did not agree to the high level that superintendents in smaller schools did, that agricultural education programs are useful in helping at-risk students stay interested in school (Pavelock, 2000).

### **School status**

Martin, Fritzsche, and Ball (2006) conducted a Delphi study of expert panelists regarding the foreseen impacts of No Child Left Behind (NCLB) legislation on secondary agricultural education programs. The expert panelists determined that because of the monetary punishments and rewards of the results of mandatory testing put in place by NCLB legislation, that funding could be a potential issue for schools. These funding issues could force schools to focus on academic areas instead of elective type course like agricultural education. The expert panelists agreed that because CTE courses are not included in NCLB mandates, that these programs have the potential to be lowered

in priority when decision makers have to make hard choices (Martin, Fritzsche, & Ball, 2006).

### **Agricultural Education Program Variables**

There are certain agricultural education program variables that could influence administrator perceptions of agricultural education programs. There are certain aspects that past studies have found that influence administrator perceptions of agricultural education programs.

### **FFA chapter**

Pavelock (2000) found that superintendents do not believe that too much attention is placed on FFA Activities and leadership development activities. However, superintendents in Texas did believe that too much attention is being focused on livestock activities, such as livestock judging and livestock showing. Pavelock recommended reducing the emphasis on livestock events to improve support from superintendents and other administrators.

### **Students**

Kalme and Dyer (2000) noted that Iowa principals believed that students of all achievement levels could benefit from agricultural education courses. In this study, “principals believed agricultural education courses to be beneficial for both high achievers and also for low achievers” (p. 119).

Pavelock, Ullrich, et al. (2003) reported that Texas superintendents believed that agricultural education programs have had success assisting at-risk students stay engaged in their education. This study recommended that teachers work with community members, administrators, teachers, and parents to develop a curriculum and courses that caters to students of varying future interests. Superintendents agreed that

students who wanted to enter the agricultural industry after high school, as well as students who wanted to pursue higher education could all benefit from being enrolled in agricultural education, and the courses should be based on what the student intends to do after high school (Pavelock, Ullrich, et al., 2003). In addition, in a related study conducted by Pavelock, Vaughn, and Kieth (2001) teachers were encouraged to pay special attention to lower achieving students because agriscience could provide them with a “personal connection to other curricular areas and find relevance in them” (p.482).

Johnson and Newman (1993) indicated that administrators, guidance counselors, and science teachers agreed that agriscience courses that integrated science curricula were more appealing to higher achieving students. However, these respondents believed that the curriculum would be challenging to students of every skill level (Johnson & Newman, 1993).

Dyer and Osborne (1999) reported that Illinois guidance counselors believed that agricultural education was good preparation for college or entrance into the agricultural industry. This study also concluded that agriculture courses can benefit high achieving students.

Brister (2008) reported that guidance counselors, agriscience teachers, and administrators believed that agriscience courses were beneficial and appropriate for high achieving students. In addition, the students believed that the agriscience course was good for any student to. Overall, results from this study indicated support for agricultural education programs from all parties surveyed.

## **Academic integration**

Dyer and Osborne (1999) conducted a study of the influence of science integration into agricultural education courses on the attitudes of Illinois guidance counselors. In schools that integrated science into their agricultural education courses, the guidance counselors displayed more positive views of the agricultural education program. This finding was different than a previous study conducted by Dyer and Osborne (1994) that indicated that Illinois guidance counselors were unsure of the value of agricultural education.

Thompson (2001) evaluated the perceptions of Oregon principals regarding science integration in agricultural education programs. Thompson (2001) stated that “administrator support is an important aspect of program development and expansion” (p.58). Thompson (2001) contended that a majority of principals “were in agreement that students were more aware of the connection between science and agriculture, that students learn more about agriculture, and science concepts are easier to understand if science is integrated into the agricultural education program” (p.58). Overall, principals perceived science integration to be positive and had positive perceptions of agricultural education programs. Thompson (2001) recommended that agricultural educators highlight their knowledge of scientific concepts to administrators. Thompson also contended that agricultural educators can benefit from involvement of administrators in curriculum decisions (Thompson, 2001).

Kalme and Dyer (2000) noted that principals disagreed that “agricultural education focuses too heavily on the development of job skills” (p.119). Principals agreed that academics are reinforced in agricultural education (Kalme & Dyer, 2000). However, one finding that contradicts the belief that agricultural education courses are

integrating academic material is that “principals continue to view agricultural education courses as vocational in nature” (p.122). Marrs (1983) agreed with this statement and claimed that although vocational education is viewed as “good”, there was much room for improvement.

Brister (2008) surveyed Mississippi guidance counselors, administrators, agriscience teachers, and students’ perceptions of agricultural education programs. This study found that Mississippi agriscience teachers, guidance counselors, and administrators believed that science credit should be given for agriscience classes and that agricultural education teachers were capable of teaching this type of material (Brister, 2008).

### **Agricultural educators**

Blezek (1987) conducted a study on the perceptions of superintendents on the professionalism of vocational agriculture instructors in Nebraska. Nebraska superintendents ranked the professionalism of the agricultural education teachers fairly high. However, the superintendents ranked the agricultural educators lower than they ranked other professionals on the professionalism scale (Blezek, 1987). Blezek (1987) recommended using this study to evaluate the relationships between agricultural education instructors and administrators.

Weeks (2006) found that administrators were very satisfied with the quality of applications that they received for an open position in their school for agricultural education teachers. Additionally, administrators were extremely satisfied with the performance in interviews of the applicants. Administrators claimed they were seeking candidates who were enthusiastic about teaching and had skills to help them with community relations (Weeks, 2006). In addition, Cantrell and Weeks (2004) found that

when administrators were hiring first year agricultural education teachers, they were more interested in their agricultural knowledge, preferred candidates that had completed student teaching requirements as opposed to being alternatively certified, and wanted students who were enthusiastic about teaching agriculture. In addition, Weeks and Terry (2000) conducted a study of administrator satisfaction with first year agricultural educators in Oklahoma and found that administrators were satisfied with the agricultural educator's performance in their first year. The overall rating was "good" among the administrators who responded (Weeks & Terry, 2000).

Kalme and Dyer (2000) indicated that Iowa principals believed that agricultural educators had very positive and professional relationships with other teachers in the school as well as administrators. They also agreed that agricultural educators had positive relationships with guidance counselors. Principals also stated that they believed the agricultural educator in their school to be of high quality.

Johnson and Newman (1993) reported that administrators, guidance counselors, and science teachers all agreed that the agricultural educator at their school was qualified to teach agriscience classes that awarded science credit. However, of all the respondent groups, administrators had the lowest level of agreement with this statement, and science teachers had the highest. In this study, the agricultural educators worked directly with the science teachers to implement a pilot agriscience for science credit course. This extensive exposure may have led to more positive perceptions from the science teachers (Johnson & Newman, 1993).

### **Other Elective Courses**

In 1908, Bagley conducted a study of high school principals' perceptions towards elective type courses. This study found that approximately 28% of the principals

surveyed believed that elective courses were detrimental to students (Bagley, 1908).

Bagley (1908) reported that approximately 35% of the principals surveyed believed that elective courses were beneficial to students. Bagley (1908) argued that elective courses can serve the special purpose of meeting local needs.

Krumenaker (2010) conducted a study of the reasons that astronomy classes were not offered in a vast majority of high schools around the United States. According to Krumenaker (2010) an astronomy class is only offered in approximately 10% of schools around the country. A concluding reason for the lack of astronomy classes in high schools was more administrators needed to be convinced of the value of these classes. Krumenaker (2010) stated that administrators have an enormous influence on whether a course or program is offered or not. He also contended that administrators have the majority of say when determining who and what gets funding (Krumenaker, 2010). Krumenaker (2010) recommended that teachers and students who have been interested in astronomy as a course offering justify the merit of these classes by indicating that there are national standards that can be addressed by astronomy curriculum.

Short and Matlock (1982) conducted a study of the characteristics of schools that offer Sociology as a Social Studies elective. This study ascertained the opinion of high school principals regarding the reasons behind the school offering or not offering Sociology as a Social Studies elective. Short and Matlock (1982) contended that smaller, poorer schools would not have the available funds to offer many choices of elective type courses. The principals in this study reported positive perceptions of the courses based on student's attitudes toward the courses (Short & Matlock, 1982).

Railsback and Hite (2008) conducted a study of the perceptions of principals, boards of education, and guidance counselors regarding the value of business education classes in high schools. Railsback and Hite (2008) stated that there has been an ongoing debate as to whether schools should strictly offer core curriculum or a wide variety of elective type courses. Railsback and Hite (2008) also stated that “the effect of squeezing elective courses out of the high school curriculum may have a profound effect on society” (p. 151). This study concluded that overall, principals were more supportive of high school business classes than the board of education members and guidance counselors. This study recommended that business teachers reach out to administrators in an effort to improve support and expand the availability of business classes in high schools.

### **Summary**

Overall, past studies have indicated fairly positive support of agricultural education programs. The literature revealed that overall, vocational education and agricultural education were viewed fairly positive by many different sources. Several studies indicated that guidance counselors, principals, superintendents, parents, students, and teachers from other disciplines all indicated that they had fairly positive perceptions of agricultural education programs.

The theoretical framework for this study was Fishbein and Ajzen’s theory of how attitudes lead to intentions and intentions lead to behavior. Therefore, if decision makers have a positive perception of agricultural education programs, then positive behavior in the form of support can be predicted.

The conceptual model for this study was based on Fishbein and Ajzen’s model of the prediction of specific intentions and behaviors. The conceptual model of this study

included the progression of administrator variables, school variables, and agricultural education program variables on administrator perceptions; and then from administrator perceptions to administrator support and behavior.

## CHAPTER 3 METHODOLOGY

This study was designed to determine the perceptions of Florida secondary school principals and superintendents regarding agricultural education. Perceptions were sought from Florida secondary school principals with and without agricultural education programs to determine if a relationship existed between perceptions and the absence of an agricultural education program. Perceptions of Florida public school superintendents and Florida secondary school principals were compared. The following objectives were investigated to accomplish the purpose of this study:

- Determine the perceptions of Florida public school superintendents toward secondary agricultural education programs.
- Determine the perceptions of Florida public school principals toward secondary agricultural education programs.
- Compare the perceptions of Florida public school superintendents and principals toward secondary agricultural education programs.
- Determine the influence of the presence of a local secondary agricultural education program on the perceptions of principals.
- Examine the relationships between demographic characteristics and views toward secondary agricultural education programs as reported by principals and superintendents.
- Understand the items that Florida principals and superintendents take into consideration when making program funding decisions.

### **Research Design**

This quantitative study used a descriptive survey design. A modified questionnaire originally designed by Kalme and Dyer (2000) was used to ascertain the perceptions of principals and superintendents toward agricultural education. Both web-based and mailed questionnaires were distributed to determine perceptions. Threats to internal validity were addressed. History was addressed by documenting any significant

occurrences during the duration of the study. Selection was addressed by choosing a simple random sample of the principals in Florida and taking a census of the superintendents in Florida. Statistical regression was addressed by having no pretest or posttest. Attrition and maturation were addressed by having only one questionnaire and data collection only lasted a short amount of time. Instrumentation was addressed by giving identical questionnaires to all participants. Experimenter effects were addressed by only having one questionnaire and were coded in a uniform manner to remove any bias. Subject effects were addressed by assigning each questionnaire and respondent a respondent number so that anonymity could be established to reduce the effects of social desirability.

### **Procedures**

A proposal to conduct the study was sent to the University of Florida Institutional Review Board (IRB-02) prior to collecting data and was approved (Appendix A). An informed consent form was developed to describe the purpose of the study, as well as the voluntary nature of the study (Appendix B). The informed consent also described the risks and benefits connected with the study. Dillman's tailored design of a mixed-mode survey was used (Dillman, Smyth, & Christian, 2009). Dillman's recommendation to make four contacts with the sample was followed. An e-mail was sent to the sample on September 29, 2010 which included an informed consent, an introduction and the questionnaire. A follow up e-mail was sent one week after the questionnaire to remind the respondents to complete the questionnaire and thank them for their participation. Two weeks later, another reminder e-mail was sent. Three weeks later, another reminder was sent. At the one month mark, the questionnaire was mailed to people who had not yet responded. Then, phone calls were made to a random sample of

principals who had not yet responded to remind them of the importance of the study. A sample of these letters may be viewed in Appendix B.

Non-response error is the most common problem in survey research (McMillan & Schumacher, 2010) and Dillman (2009) recommends addressing non-response error in survey research. Ary, Jacobs, Razavieh, and Sorenson (2006) stated that research has indicated that late respondents and non-respondents are often similar. Therefore, non-response error was addressed by comparing early and late respondents on both the online form and the paper form of the questionnaire, as well as comparing the online answers to the paper answers. If the data is statistically alike, then the data was generalizable to the rest of the population (Miller & Smith, 1983).

### **Population and Sample**

The target population for this study was Florida public school superintendents and principals. Israel (2009) stated that for populations under 200, a census should be used to eliminate sampling error and provide an accurate data set. There were 67 superintendents in the state of Florida, so a census was the most accurate and appropriate sample. A simple random sample of principals in the state of Florida was taken. The sample size of the principals selected followed the guidelines presented by Israel (2009). The formula  $n = N / 1 + N(e)^2$ , where  $n$ =sample size,  $N$ =sampling frame or population, and  $e$ =desired precision was used (Israel, 2009). There were 354 eligible schools for testing. Therefore, 184 principals were surveyed ( $n=354/1+354[.05]^2$ ) using a confidence level of 95% or .05 alpha. The population frame for these two groups was obtained from the Florida Department of Education. This frame was used because it was the only accurate and existing list of all principals and superintendents in the state of Florida.

## **Instrument**

The instrument being used was designed by Kalme and Dyer (2000) and was determined to be valid and reliable by Kalme and Dyer. Some questions were modified and/or deleted to fit the needs of superintendents being surveyed. The edited instrument was pilot tested using 30 principals and superintendents from the State of Georgia to determine design validity and reliability. Face and content validity were assessed utilizing a panel of experts in the Department of Agricultural Education and Communication at the University of Florida. The instrument was deemed valid. Participants were asked to designate the degree to which they agreed or disagreed with every statement using a Likert-type scale (1=strongly disagree – 5=strongly agree or 6 = No Opinion). Most questions were written in a positive manner, however, some items were reverse coded to help ensure instrument rigor. A copy of the instrument may be viewed in Appendix B.

Four constructs were used to measure perceptions of agricultural education programs. “Student Benefits” measured to what extent principals and superintendents agreed or disagreed that agricultural education programs benefited students. “Community” measures to what extent principals and superintendents agreed or disagreed that agricultural education programs were important in their communities. “Courses” measures to what extent principals and superintendents agreed or disagreed that agricultural education courses were of high quality. And, “Teachers” measures to what extent principals and superintendents agreed or disagreed that agricultural education teachers were of high quality.

Post hoc reliability was calculated using SPSS Version 17.0. Reliability was determined for each construct using Cronbach’s alpha . Alpha levels for

superintendents are displayed in Table 3-1. It is important to note that the “Community” construct was lower than the acceptable reliability of .70 (McMillan & Schumacher, 2010). Therefore, caution should be used in generalizing the results of the construct “Community” to the population of Florida superintendents.

Reliability was determined for each construct being measured for principals (Table 3-2). All principal constructs were deemed reliable.

Table 3-1. Post-hoc reliability for constructs in Superintendent’s study

Construct	$\alpha$
Student Benefits	.78
Community	.64
Courses	.78
Teachers	.84

Table 3-2. Post-hoc reliability for constructs in Principal’s study

Construct	$\alpha$
Student Benefits	.81
Community	.76
Courses	.72
Teachers	.89

### Data Analysis

Since the superintendents’ sample consisted of a census of the population, descriptive statistics were the appropriate analysis to describe the perceptions of superintendents. Inferential statistics were used to determine the perceptions of principals since a simple random sample was taken. ANOVAs were calculated to compare the perceptions of principals and of the superintendents, to compare the perceptions of principals with and without agricultural education programs, and compare demographic characteristics in reference to perceptions of agricultural education

programs. The scale that was used when analyzing means was 1.0-1.49 was deemed low or negative perceptions, 1.5-3.49 was deemed medium or neutral perceptions, and 3.5-5.0 was deemed high or positive perceptions. SPSS® version 17.0 for Windows® software package was used to analyze the data.

### **Summary**

This study was a quantitative study that used a descriptive survey design. The procedures of this study followed Dillman's Tailored Method. An instrument that was originally created by Kalme and Dyer was used in this study after modifications and a pilot study. Threats to internal validity were addressed. Face and content validity were assessed utilizing a panel of experts in the Department of Agricultural Education and Communication at the University of Florida. Cronbach's alpha was used to determine reliability. The population for this study was Florida secondary school principals and school superintendents. Descriptive statistics were used to describe the census of Florida school superintendents. Inferential statistics were used to describe the simple random sample of Florida secondary school principals. SPSS® version 17.0 for Windows® software package was used to analyze all data.

## CHAPTER 4 RESULTS

### Overview

This study was designed to determine the perceptions of Florida secondary school principals and superintendents regarding agricultural education. Perceptions were sought from Florida secondary school principals with and without agricultural education programs to determine if a relationship existed between perceptions based on the absence of an agricultural education program. Perceptions of Florida public school superintendents and Florida secondary school principals were compared. The following objectives were investigated to accomplish the purpose of this study:

- Determine the perceptions of Florida public school superintendents toward secondary agricultural education programs.
- Determine the perceptions of Florida public school principals toward secondary agricultural education programs.
- Compare the perceptions of Florida public school superintendents and principals toward secondary agricultural education programs.
- Determine the influence of the presence of a local secondary agricultural education program on the perceptions of principals.
- Examine the relationships between demographic characteristics and views toward secondary agricultural education programs as reported by principals and superintendents.
- Understand the items that Florida principals and superintendents take into consideration when making program funding decisions.

The findings of this study are presented in this chapter. The chapter addresses the response rate and measures taken to handle non-response error. Additionally, the chapter addresses the findings in relation to all objectives.

### **Response Rate, Non-response, and Reliability**

In order to attain the objectives of this study, questionnaires were sent to 184 principals in the state of Florida. Eight principals opted to not participate in the study decreasing the sample size to 176. A total  $n$  of 71 complete responses were analyzed for data collection. The total response rate for principals was 40.34%.

Superintendents were also sent questionnaires. The population of superintendents in Florida was 67. A total of three superintendents opted to not participate in the study decreasing the population to 64. Forty-five complete responses were analyzed for data collection. The final  $N$  for superintendents was 45 making the total response rate 70.31%.

Non-response error was addressed by comparing early and late respondents on both the online form and the paper form of the questionnaire, as well as comparing the online answers to the paper answers (Ary, Jacobs, Razavieh, & Sorenson, 2006). Early respondents were defined as the first 50% of respondents to respond online as well as through the mail. Therefore, early respondents for principals online questionnaires were  $n=16$  and  $n=18$  for paper questionnaires. Early respondents for superintendents for online questionnaires was  $n=15$  and  $n=8$  for paper questionnaires. Late respondents were defined as the last 50% of respondents to respond online as well as through the mail. Therefore, late respondents for principals on online questionnaires was  $n=18$  and  $n=17$  for paper questionnaires. Late respondents for superintendents for online questionnaires was  $n=14$  and  $n=8$  paper questionnaires. Additionally, online questionnaires were compared to paper questionnaires in both principals and superintendents. No significant differences were found between early and late respondents in the principal questionnaires. Additionally, no significant differences were

found between online and paper questionnaires in principals. No significant differences were found between paper questionnaires from superintendents. However, a significant difference on the construct “student benefits” was found between early and late respondents on online questionnaires in superintendents (Table 4-1). The results of this construct should not be generalized beyond the population of Florida superintendents.

Table 4-1. *T-tests* comparing early and late superintendent respondents on online questionnaires

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	27	7.03	.01
Community	27	2.48	.12
Courses	27	0.12	.72
Teachers	27	1.51	.22

**Objective 1: Determine the Perceptions of Florida Public School Superintendents toward Secondary Agricultural Education Programs.**

Overall, superintendents had positive perceptions of agricultural education programs. Superintendents ranked “Student Benefits” of agricultural education highest of any of the constructs with a mean of 4.11 (*SD*=.46). Superintendents ranked how important agricultural education was in their “Community” at a mean of 4.02 (*SD*=.60). The mean quality of the “Courses” construct was 3.93 (*SD*=.46), and the mean quality of the agricultural education “Teachers” construct was 3.93 (*SD*=.57) (Table 4-2).

Table 4-2. Superintendent descriptive statistics of four constructs

Construct	N	Mean	Standard Deviation
Student Benefits	45	4.11	.46
Community	45	4.02	.60
Courses	45	3.93	.46
Teachers	45	3.93	.57

**Objective 2: Determine the Perceptions of Florida Public School Principals toward Secondary Agricultural Education Programs.**

Overall, principals had positive perceptions of agricultural education. Principals valued the quality of agricultural education teachers with a mean of 4.08 (SD=.63). Principals' next highest mean was "Student Benefits" and had a mean score of 3.99 (SD=.59) when ranking the benefits of agricultural education to students. Principals believed that the quality of agricultural education courses was high and had a mean score of 3.85 (SD=.65) on the "Courses" construct. Principals valued the importance of an agricultural education program in their community the lowest, yet still high with a mean score of 3.83 (SD=.54) on the "Community" construct (Table 4-3).

Table 4-3. Principal's descriptive statistics of four constructs

Construct	<i>n</i>	Mean	Standard Deviation
Student Benefits	69	3.99	.59
Community	70	3.85	.65
Courses	69	3.83	.54
Teachers	63	4.08	.63

Note: Differences in *n* due to respondents selecting not to complete this section of the instrument or respondents designating "No Opinion" which was removed for data analysis.

**Objective 3: Compare the Perceptions of Florida Public School Superintendents and Principals toward Secondary Agricultural Education Programs.**

An ANOVA was calculated to compare the perceptions of superintendents and principals in reference to agricultural education programs. No significant differences were found between principals and superintendents on any of the four constructs measuring perceptions of agricultural education programs (Table 4-4)

Table 4-4. Summary of ANOVA measures for principal and superintendent perceptions of four constructs

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	1.46	.22
Community	1	3.20	.07
Courses	1	0.60	.43
Teachers	1	1.62	.20

#### **Objective 4: Determine the Influence of the Presence of a Local Secondary Agricultural Education Program on the Perceptions of Principals.**

An ANOVA was calculated to compare the perceptions of principals with and without agricultural education programs and to determine the influence of the presence of a local secondary agricultural education program on the perceptions of principals. All constructs demonstrated a significant difference between the two groups of principals. A significance level of  $P < .01$  was found on all four constructs (Table 4-5).

Table 4-5. Summary of ANOVA measures for principals with and without agricultural education programs at their school

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	36.98	<.01
Community	1	44.66	<.01
Courses	1	26.23	<.01
Teachers	1	34.89	<.01

When analyzing the means of principals with and without a local agricultural education program at their school, all means were significantly higher for principals with agricultural education programs at their school. For “Student Benefits,” principals with agricultural education programs at their school had a mean of 4.26 ( $SD=.40$ ) whereas principals without agricultural education programs had a mean of 3.53 ( $SD=.58$ ). For “Community,” principals with agricultural education programs at their school had a mean of 4.18 ( $SD=.54$ ) whereas principals without agricultural education programs at their school had a mean of 3.34 ( $SD=.44$ ). In reference to the quality of agricultural education courses, principals with agricultural education programs at their school had a mean of 4.06 ( $SD=.43$ ) and principals without agricultural education programs at their school had a mean of 3.49 ( $SD=.46$ ). The same trend continued with principals opinions of the quality of agricultural education teachers. Principals who had an

agricultural education program at their school held high positive perceptions about agricultural education teachers with a mean of 4.35 ( $SD=.49$ ), and Principals without agricultural education programs at their schools only had positive perceptions about agricultural education teachers with a mean of 3.54 ( $SD=.53$ ) (Table 4-6).

Table 4-6. Summary of Means for principals at schools with and without agricultural education programs

Construct	Presence of Ag. Ed. Program	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	42	4.26	.40
	2	26	3.53	.58
Community	1	42	4.18	.54
	2	27	3.34	.44
Courses	1	42	4.06	.43
	2	26	3.49	.46
Teachers	1	42	4.35	.49
	2	21	3.54	.53

Note: In presence of Ag. Ed. Program, 1=Yes, 2=No.

It is important to note that although none of the perceptions, regardless of the existence of a local agricultural education program, were extremely low. However, there was a significant difference on all four constructs when comparing the perceptions of principals of schools with and without agricultural education programs at their school.

**Objective 5: Examine the Relationships between Demographic Characteristics and Views toward Secondary Agricultural Education Programs as Reported by Principals and Superintendents.**

ANOVAs were calculated to examine relationships between demographic characteristics and views toward agricultural education programs as reported by principals. ANOVAs were calculated in relation to the following demographic

characteristics for principals: gender, previous subject taught, size of the school, racial breakdown of school, if the principal had taken an agricultural education class when in high school, if the principals child had taken an agricultural education class, if the principal had work experience in the field of agriculture, if the principal had been at a school where the agricultural education program had been discontinued, if the principal had been at a school where a new agricultural education program had been started, the geographic region of the school, the breakdown of free or reduced lunch participants at the school, and if the school made Annual Yearly Progress last year.

Out of 71 principals, only 30.9% ( $n=22$ ) were female. An ANOVA was calculated to compare the perceptions of principals based on gender. On the basis of gender, no significant differences were found between female and male principals' perceptions of agricultural education programs.

An ANOVA was conducted to compare the perceptions of principals based on the subject that they taught before becoming principals. Principals were grouped into three categories. The categories were composed of principals who had previously taught math or science, principals who had previously taught agricultural education, and principals who had previously taught other subjects such as English, Social Studies, and other subjects. Of the 71 responses, only 4.22% ( $n=3$ ) were former agricultural educators, 29.57% ( $n=21$ ) were former science or math teachers, and 45.07% ( $n=32$ ) were categorized as other. It is important to note that there was a relatively low number of former agricultural educators which could have possibly influenced the ANOVA measures. However, one significant difference of  $p = .02$  was found between the three groups on the "Courses" construct (Table 4-7).

Table 4-7 Summary of ANOVA measures for the subjects taught by principals prior to going into administration

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	2	0.96	.39
Community	2	3.99	.02
Courses	2	2.34	.10
Teachers	2	2.76	.07

Additionally, differences in means were observed between the three groups of principals. Former agricultural educators ranked the quality of courses at a mean score of 4.41 ( $SD=.59$ ) whereas former science and math teachers ranked the quality of agricultural education classes at 3.93 ( $SD=.51$ ) and other former teachers ranked the quality of agricultural education courses at 3.80 ( $SD=.45$ ). Overall, the principals who were former agricultural educators had the highest mean score for all four constructs. Science and math teachers had the second highest mean score for the three categories with mean scores that demonstrated positive regard for agricultural education programs. Principals who taught other subjects ranked all four constructs lower than any other group (Table 4-8).

Table 4-8 Summary of Means for the subjects taught by principals prior to going into administration

Construct	Subject Taught	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	21	4.09	.56
	2	3	4.41	.59
	3	31	3.99	.49
Community	1	21	4.10	.63
	2	3	4.40	.52
	3	32	3.68	.61

Table 4-8. Continued

Construct	Subject Taught	<i>f</i>	Mean	Standard Deviation
Courses	1	21	3.93	.51
	2	3	4.41	.52
	3	31	3.80	.45
Teachers	1	20	4.31	.49
	2	3	4.53	.41
	3	28	3.96	.64

Note: Principals who previously taught math or science are represented by 1, 2 is former agricultural education teachers, and 3 represents other subjects previously taught.

An ANOVA was calculated to compare the perceptions of principals regarding agricultural education in reference to school size. Schools were categorized by their student population in reference to the Florida High School Athletic Association's school classification system (FHSA, 2010). Single A and Double A schools were classified as small schools ( $n=15$ ). Triple A schools and Four A schools were classified as midsize schools ( $n=27$ ). Five A schools were classified as large schools ( $n=18$ ). And, Six A schools were classified as extra large schools ( $n=9$ ). No significant differences were found between the four groups based on school size. Although no significant statistical difference was found, the mean scores of small schools were consistently higher than that of all other school sizes (Table 4-9).

Table 4-9. Summary of Means for principal perceptions based on school size

Construct	School Size	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	15	4.25	.31
	2	26	4.05	.58
	3	18	3.83	.73
	4	9	3.67	.53

Table 4-9. Continued

Construct	School Size	<i>f</i>	Mean	Standard Deviation
Community	1	15	4.11	.63
	2	27	3.95	.66
	3	18	3.65	.64
	4	9	3.55	.49
Courses	1	15	4.04	.53
	2	26	3.86	.62
	3	18	3.75	.42
	4	9	3.66	.34
Teachers	1	15	4.25	.43
	2	24	4.22	.67
	3	15	3.82	.69
	4	9	3.84	.59

Note: For school size, 1 represents small schools, 2 represents midsize schools, 3 represents large schools, and 4 represents extra large schools.

An ANOVA was calculated to compare the perceptions of principals in reference to the racial breakdown of the principal's school as reported by the principal. Schools were categorized as having 25% or less white population (n=4), 26-50% white population (n=15), 51-75% white population (n=15), or 76-100% white population (n=20). A significant difference of  $p=.04$  was found on the "Courses" construct (Table 4-10).

Table 4-10. Summary of ANOVA measures for principal perceptions based on the racial breakdown of the school

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	3	2.16	.10
Community	3	0.77	.51
Courses	3	2.94	.04
Teachers	3	0.84	.47

The principals with the schools that had the highest percentage of minorities had the lowest mean scores for the construct “Courses.” However, this trend was not consistent as the percentage of minorities decreased through the categories. The group with the highest perceptions of the quality of agricultural education courses was the group with 51-75% white population (Table 4-11).

Table 4-11. Summary of Means for principal perceptions based on the racial breakdown of the school

Construct	Racial Breakdown	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	4	3.36	.35
	2	15	3.94	.63
	3	15	4.09	.58
	4	20	4.01	.36
Community	1	4	3.38	.47
	2	15	3.75	.69
	3	15	3.91	.76
	4	20	3.85	.53
Courses	1	4	3.50	.10
	2	15	3.76	.52
	3	15	4.08	.47
	4	20	3.68	.44
Teachers	1	4	3.63	.60
	2	15	4.00	.68
	3	15	4.17	.77
	4	20	4.08	.36

Note: In the column Racial Breakdown, 1 is representative of 25% or less white population, 2 is representative of 26-50% white population, 3 is representative of 51-75% white population, and 4 is representative of 76-100% white population.

An ANOVA was calculated to compare the perceptions of principals in reference to whether or not the principal took an agricultural education class when in high school. A relatively low percentage of 18.8% (n=13) of principals had taken an agricultural

education class when in high school. A significant difference of  $p=.01$  was found between the two groups of principals who had and had not taken an agricultural education class when in high school on the quality of agricultural education courses (Table 4-12).

Table 4-12. Summary of ANOVA measures for principals who had and had not taken an agricultural education class

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	2.49	.11
Community	1	1.72	.19
Courses	1	6.41	.01
Teachers	1	1.23	.27

Principals who had taken an agricultural education class in high school had a mean score of 4.16 ( $SD=.42$ ) when ranking the quality of agricultural education classes whereas principals who had not taken an agricultural education class had a mean score of 3.77 ( $SD=.52$ ) when ranking the quality of agricultural education classes (Table 4-13).

Table 4-13. Summary of Means of principals who had and had not taken an agricultural education class

Construct	Ag. Ed. enrollment	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	13	4.22	.53
	2	55	3.93	.60
Community	1	13	4.07	.65
	2	56	3.81	.64
Courses	1	13	4.16	.42
	2	55	3.77	.52
Teachers	1	12	4.26	.58
	2	51	4.03	.65

Note: In Ag. Ed. Enrollment, 1=Yes, and 2=No

An ANOVA was calculated to compare the perceptions of principals whose child had and had not taken an agricultural education class. Only 17.39% ( $n=12$ ) of principals had a child that had taken an agricultural education class. A significant difference of  $p<.01$  was found on “Student Benefits”,  $p<.01$  on “Community”, and  $p<.01$  on “Courses” constructs (Table 4-14).

Table 4-14. Summary of ANOVA measures for principals whose child had or had not taken an agricultural education class

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	12.76	<.01
Community	1	10.87	<.01
Courses	1	10.86	<.01
Teachers	1	3.53	.07

Principals whose child had taken an agricultural education class had a mean score of 4.50 (SD=.34) when ranking perceptions of the benefits that agricultural education offers to students, 4.38 (SD=.44) when ranking perceptions of the importance of an agricultural education program to the community, 4.27 (SD=.26) when ranking perceptions of the quality of agricultural education classes, and 4.38 (SD=.46) when ranking perceptions of the quality of agricultural education teachers. On the other hand, principals whose child had not taken an agricultural education class had overall lower mean scores on all four constructs. For principals whose child had not taken an agricultural education class the mean score was 3.87 (SD=.58) when ranking perceptions of the benefits that agricultural education offers to students, 3.74 (SD=.63) when ranking perceptions of the importance of an agricultural education program to the community, 3.75 (SD=.52) when ranking perceptions of the quality of agricultural

education classes, and 4.01 (SD=.65) when ranking perceptions of the quality of agricultural education teachers (Table 4-15).

Table 4-15. Summary of Means for principals whose child had or had not taken an agricultural education class

Construct	Child Ag. Ed. Enrollment	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	12	4.50	.34
	2	56	3.87	.58
Community	1	12	4.38	.44
	2	57	3.74	.63
Courses	1	12	4.27	.26
	2	56	3.75	.52
Teachers	1	12	4.38	.46
	2	21	4.01	.65

Note: In Child Ag. Ed. Enrollment, 1=Yes, 2=No.

An ANOVA was calculated to compare the perceptions of principals who had work experience in the field of agriculture versus principals who did not have work experience in the field of agriculture. A total of 32.35% ( $n=22$ ) principals had experience in the field of agriculture. A significant difference was found of  $p=.01$  on the “Student Benefits” construct as well as a significant difference of  $p<.01$  on the “Courses” construct (Table 4-16).

Table 4-16. Summary of ANOVA measures for principals who had and did not have work experience in the field of agriculture

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	6.46	.01
Community	1	2.42	.12
Courses	1	8.01	<.01
Teachers	1	2.60	.11

Principals who did have work experience in the field of agriculture had a mean score of 4.24 (SD=.45) when ranking perceptions of the benefits that agricultural education offers to students and 4.10 (SD=.41) when ranking perceptions of the quality of agricultural education classes. Principals who did not have work experience in the field of agriculture had a mean score of 3.86 (SD=.62) when ranking perceptions of the benefits that agricultural education offers to students and 3.73 (SD=.53) when ranking perceptions of the quality of agricultural education classes (Table 4-17).

Table 4-17. Summary of Means for principals who had and did not have work experience in the field of agriculture

Construct	Ag. Work experience	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	22	4.24	.45
	2	45	3.86	.62
Community	1	22	4.02	.69
	2	46	3.76	.61
Courses	1	22	4.10	.41
	2	45	3.73	.53
Teachers	1	21	4.26	.59
	2	41	3.99	.65

Note: In Ag. Work experience, 1=Yes, 2=No.

An ANOVA was calculated to compare the perceptions of principals who had been at a school where an agricultural education program had been discontinued. Only 2.8% ( $n=2$ ) of principals had been at a school where the agricultural education program had been discontinued. No significant differences were found between the two groups of principals.

An ANOVA was calculated to compare the perceptions of principals who had been at a school where a new agricultural education program had been started. A total of 13.0% ( $n=9$ ) principals had been at a school where an agricultural education program

had been started. Significant differences were found at a level of  $p=.01$  for “Student benefits”,  $p<.01$  for “Community”,  $p<.01$  for “Courses”, and  $p=.01$  for “Teachers” (Table 4-18).

Table 4-18. Summary of ANOVA measures for principals who had and had not been at a school where a new agricultural education program was started

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	6.08	.01
Community	1	12.96	<.01
Courses	1	7.46	<.01
Teachers	1	6.95	.01

For all four constructs, principals who had been at a school where a new agricultural education program had been started had higher mean scores. Although, all perceptions were high, the principals who had been at schools where a new agricultural education program was started, had significantly more positive perceptions than principals who had not ever been at a school where a new agricultural education program had been started (Table 4-19).

Table 4-19. Summary of Means for principals who had and had not been at a school where a new agricultural education program was started

Construct	Started	<i>f</i>	Mean	Standard Deviation
	New Ag. Program			
Student Benefits	1	9	4.43	.31
	2	59	3.92	.60
Community	1	9	4.53	.41
	2	60	3.75	.62
Courses	1	9	4.27	.39
	2	59	3.78	.51
Teachers	1	9	4.57	.36
	2	54	4.00	.63

Note: In Started New Ag. Program, 1=Yes, 2=No.

An ANOVA was calculated to compare the perceptions of principals based on the geographic region that the school was located in as designated by the principal. Schools were categorized into the following groups: urban (n=15), suburban (n=15), town (n=12), and rural (n=26). Significant differences were found between the groups with a  $p < .01$  for “Student Benefits”,  $p < .01$  for “Courses”, and  $p = .04$  for “Teachers” (Table 4-20).

Table 4-20. Summary of ANOVA measures for perceptions of principals based on the geographic region of the school

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	6.36	<.01
Community	1	1.38	.25
Courses	1	4.42	<.01
Teachers	1	2.95	.04

In all four constructs, principals of rural schools had higher mean scores than any other group of principals in reference to the geographic location of the school. Additionally, principals of schools in urban areas consistently had the lowest mean scores on all four constructs of any other group in reference to the geographic location of the school (Table 4-21).

Table 4-21. Summary of Means for perceptions of principals based on the geographic region of the school

Construct	Geographic Location	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	15	3.47	.60
	2	15	4.14	.59
	3	12	3.98	.68
	4	26	4.19	.35
Community	1	15	3.65	.52
	2	16	3.80	.71
	3	12	3.78	.75
	4	26	4.05	.61

Table 4-21. Continued

Construct	Geographic Location	<i>f</i>	Mean	Standard Deviation
Courses	1	15	3.47	.55
	2	15	3.87	.44
	3	12	3.83	.57
	4	26	4.05	.43
Teachers	1	13	3.81	.64
	2	13	3.93	.76
	3	11	3.94	.69
	4	23	4.35	.44

Note: In the Geographic Location column, urban is represented by 1, suburban is represented by 2, town is represented by 3, and rural is represented by 4.

An ANOVA was calculated to compare the perceptions of principals in reference to the percentage of students in their school that were eligible for free or reduced lunch as designated by the principal. Categories were formulated by grouping the principal's perceptions by schools that had less than 25% ( $n=7$ ) of their population eligible for free or reduced lunch, 26-50% ( $n=28$ ) of their population eligible for free or reduced lunch, 51-75% ( $n=31$ ) of their population eligible for free or reduced lunch, and 76-100% ( $n=2$ ) of their population eligible for free or reduced lunch. No significant differences were found between groups based on students' eligibility for free or reduced lunch.

An ANOVA was calculated to compare the perceptions of principals in reference to if the principal's school made AYP or did not make AYP as reported by the principal. Only 5.8% ( $n=4$ ) schools made AYP in the previous school year. A significant difference was found of  $p=.01$  on the perceptions of principal regarding the benefits of agricultural education to students (Table 4-22).

Table 4-22. Summary of ANOVA measures for perceptions of principals whose schools did and did not make AYP

Construct	<i>df</i>	<i>F</i>	<i>p</i>
Student Benefits	1	6.12	.01
Community	1	2.69	.10
Courses	1	2.61	.11
Teachers	1	1.34	.25

Principal's whose school did make AYP had much lower perceptions of the benefits to students from agricultural education programs. The mean score for principals whose school did make AYP was 3.29 (SD=.60) and 4.02 (SD=.57) for principals whose school did not make AYP (Table 4-23).

Table 4-23. Summary of Means for perceptions of principals whose schools did and did not make AYP

Construct	AYP	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	4	3.29	.60
	2	63	4.02	.57
Community	1	4	3.33	.13
	2	64	3.88	.65
Courses	1	4	3.43	.20
	2	63	3.86	.53
Teachers	1	3	3.66	.57
	2	59	4.12	.64

Note: In AYP, 1=Yes, 2=No.

Descriptive statistics were calculated for demographic characteristics and views toward agricultural education programs as reported by superintendents. Descriptive statistics were calculated in relation to the following demographic characteristics for superintendents: if the superintendent was elected or appointed, gender, previous subject taught, if the superintendent took an agricultural education class when in high school, if the superintendent's child took an agricultural education class when in high

school, if the superintendent had any work experience in the field of agriculture, if a new agricultural education program had ever been started in the superintendent's school system, and if an agricultural education program had ever been discontinued in the superintendent's school system.

Descriptive statistics were calculated regarding the perceptions of superintendents in reference to whether the superintendent was elected versus appointed. Only 33.33% ( $n=15$ ) superintendents were appointed in the population of superintendents. Overall, superintendents who were appointed had more positive perceptions of agricultural education programs (Table 4-24).

Table 4-24. Summary of Means for whether the superintendent was elected or appointed

Construct	Elected or Appointed	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	30	4.02	.47
	2	15	4.29	.39
Community	1	30	3.94	.66
	2	15	4.18	.46
Courses	1	30	3.84	.45
	2	15	4.12	.44
Teachers	1	30	3.91	.60
	2	15	3.97	.51

Note: In the Elected or Appointed column, 1=Yes and 2=No.

Descriptive statistics were calculated regarding the perceptions of superintendents in reference to gender. Only 35.55% ( $n=16$ ) superintendents were female. Female superintendents had higher perceptions of the quality of agricultural education programs on all four constructs. Male superintendents had lower perceptions of agricultural education programs on all four constructs (Table 4-25).

Table 4-25. Summary of Means for gender of superintendents

Construct	Gender	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	29	4.02	.46
	2	16	4.27	.42
Community	1	29	3.82	.46
	2	16	4.13	.40
Courses	1	29	3.93	.67
	2	16	4.18	.44
Teachers	1	29	3.83	.51
	2	16	4.11	.63

Note: In Gender, 1=Male and 2=Female.

Descriptive statistics were calculated regarding perceptions of superintendents based on the subject that they taught prior to going into administration. Categories were comprised of superintendents who previously taught math or science, agricultural education, and other subjects such as English or social studies. Only 9% (n=3) superintendents taught agricultural education, 39.39% (n=13) taught math or science, and 51.51% (n=17) taught another subject. Overall, former agricultural educators had the highest means on all four constructs. Both former math and science as well as other former teachers had positive perceptions of agricultural education programs (Table 4-26).

Table 4-26. Summary of means for the subject taught prior to going into administration

Construct	Subject Taught	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	13	4.00	.43
	2	3	4.50	.33
	3	17	4.08	.48
Community	1	13	3.84	.76
	2	3	4.46	.41
	3	17	3.94	.55

Table 4-26. Continued

Construct	Subject Taught	<i>f</i>	Mean	Standard Deviation
Courses	1	13	3.80	.44
	2	3	4.20	.43
	3	17	3.94	.49
Teachers	1	13	3.89	.62
	2	3	4.13	.11
	3	17	3.88	.65

Note: In Subject Taught, 1=Math or Science Teachers, 2= Ag. Teachers, and 3=Other Teachers.

Descriptive statistics were calculated regarding perceptions of superintendents based on whether or not the superintendent had taken an agricultural education class while in high school. Only 23.25% (n=10) superintendents had taken an agricultural education class while in high school. Superintendents that had taken an agricultural education class had more positive perceptions regarding the agricultural education program to the community. Superintendents who had taken agricultural education classes in high school had more positive perceptions of the quality of agricultural education teachers. Superintendents who had not taken agricultural education classes in high school had more positive perceptions of the student benefits and courses in agricultural education programs (Table 4-27).

Table 4-27. Summary of means of whether or not the Superintendent had taken an agricultural education course when in high school

Construct	Ag Ed Class	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	10	4.08	.50
	2	33	4.10	.44
Community	1	10	4.20	.50
	2	33	3.95	.63
Courses	1	10	3.86	.41
	2	33	3.94	.47
Teachers	1	10	4.02	.47
	2	33	3.87	.58

Note: In Ag Ed Class, 1=Yes and 2=No.

Descriptive statistics were calculated regarding the perceptions of superintendents based on whether or not the superintendent's child had taken an agricultural education class while in high school. Only 32.55% ( $n=14$ ) of superintendents' children had taken an agricultural education class while in high school. No major differences were observed between the two groups (Table 4-28).

Table 4-28. Summary of means for whether the superintendent's child had taken an agricultural education class in high school

Construct	Child Taken Ag Ed Class	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	14	4.10	.56
	2	29	4.09	.40
Community	1	14	4.18	.60
	2	29	3.92	.60
Courses	1	14	3.86	.50
	2	29	3.95	.44
Teachers	1	14	3.90	.76
	2	29	3.91	.44

Note: In Child Taken Ag Ed Class, 1=Yes and 2=No

Descriptive statistics were calculated regarding the perceptions of superintendents based on whether or not the superintendent had work experience in the field of agriculture. A total of 46.51% ( $n=20$ ) superintendents had work experience in the field of agriculture. Superintendents who had work experience in the field of agriculture had more positive perceptions of agricultural education programs on the student benefits construct, the community construct, and the teachers construct. Superintendents who did not have work experience in the field of agriculture had more positive perceptions on the courses construct (Table 4-29).

Table 4-29. Summary of means for whether the superintendent had work experience in the field of agriculture

Construct	Ag Work Experience	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	20	4.12	.49
	2	23	4.08	.42
Community	1	20	4.04	.71
	2	23	3.97	.52
Courses	1	20	3.90	.46
	2	23	3.94	.46
Teachers	1	20	3.97	.65
	2	23	3.85	.46

Note: In Ag Work Experience, 1=Yes and 2=No.

Descriptive statistics were calculated regarding the perceptions of superintendents based on whether or not a new agricultural education program had ever been started in the superintendent's school district. Only 20.93% ( $n=9$ ) superintendents had ever had an agricultural education program start in their school district. No major differences were observed between the two groups (Table 4-30).

Table 4-30. Summary of means for if an agricultural education program had ever been started in their school district.

Construct	Ag Program Started	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	9	4.11	.30
	2	34	4.13	.50
Community	1	9	4.15	.34
	2	34	3.97	.66
Courses	1	9	4.04	.36
	2	34	3.91	.50
Teachers	1	9	3.86	.37
	2	34	3.94	.62

Note: In Ag Program Started, 1=Yes and 2=No

Descriptive statistics were calculated regarding the perceptions of superintendents based on whether or not an agricultural education program had ever been discontinued in the superintendent's school district. Only 11.36% (n=5) superintendents had ever had an agricultural education program discontinued in their school district.

Superintendents who had been in a school system where the agricultural education program had been discontinued had less positive perceptions of agricultural education programs on all four constructs than those superintendents who had never had an agricultural education program discontinued in their school system (Table 4-31).

Table 4-31. Summary of means for if an agricultural education program had ever been discontinued in their school system.

Construct	Ag Program Discontinued	<i>f</i>	Mean	Standard Deviation
Student Benefits	1	5	3.82	.41
	2	39	4.15	.46
Community	1	5	3.64	.51
	2	39	4.07	.61
Courses	1	5	3.75	.44
	2	39	3.97	.47
Teachers	1	5	3.60	.50
	2	39	3.97	.57

Note: In Ag Program Discontinued, 1=Yes and 2=No

**Objective 6: Understand the Items that Florida Principals and Superintendents Take into Consideration when Making Program Funding Decisions.**

One open-ended question was asked to assess how principals and superintendents make decisions regarding the funding of programs. Five major themes emerged from both principals and superintendents. The five themes were summarized and grouped as student achievement, student interest, funding, state and federal mandates, and local needs and community interest.

Principals most frequently mentioned student achievement and what was in the best interest of their students. Questions like, “Does it improve academic achievement?” and “Will it lead to student achievement?” were very common throughout all principal responses. The next most frequent response was student interest. Student demand for the courses and the number of students in the program were a major consideration of principals when making decisions regarding programs. The next most common response was funding availability. Much of the funding was dependent of Perkins money and the total cost of the program. State mandates were a common response. State and federal mandates were mentioned in the form of the Florida Comprehensive Assessment Test (FCAT), Annual Yearly Progress (AYP) goals, class size requirements, reinforcement of standards, and graduation requirements. Local needs and community interest were taken into consideration by principals when making decisions. Questions such as, “Is it related to the current local job market?” or “Are there careers in post secondary for students who complete the program?” were common among principal responses. Additionally, one principal commented that “FFA is similar to football, certain students would be drop-outs if it were not for the National FFA Program at my school”.

Superintendents had the same five themes but mentioned them at different frequencies than principals. The most common theme among superintendents was also student achievement. Questions such as “Will it help students succeed?” and “What is best for our students and their future?” were common among superintendents. The next most common theme among superintendents was funding. Many superintendents mentioned both the total program cost and the cost-per-student as being important.

Some superintendents mentioned that funding sources must be available. The next most common theme was state and federal mandates. Superintendents mentioned more specific aspects of funding such as school grade. Student interest was mentioned by superintendents as being something to take into consideration when making program funding decisions. The number of students served by the program as well as participation in the program was mentioned by superintendents. Additionally, community and local industry needs were important to superintendents when making decisions regarding program funding.

### **Summary**

This chapter outlined the findings of this quantitative descriptive survey design. An n of 71 principals as well as an N of 45 superintendents participated in this study. Non-response error was addressed by comparing early and late respondents on both the online form and the paper form of the questionnaire, as well as comparing the online answers to the paper answers. Post hoc reliability was determined by using Cronbach's Alpha and all principal constructs were deemed reliable. Superintendent constructs were deemed reliable with the exception of the "Community" construct. Both principals and superintendents had high mean scores on all four constructs when ranking agricultural education programs. No significant differences were found between principal and superintendent perceptions of agricultural education programs. Significant differences were found on all four constructs between principals who had an agricultural education program at their school versus principals who did not have agricultural education programs at their schools. Principals with agricultural education programs at their schools had higher perceptions of agricultural education programs. ANOVAs were used to examine any relationships between demographic characteristics and views

toward agricultural education and many significant differences were found when comparing groups based on demographics.

## CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

### Overview

#### Purpose and Objectives

This study was designed to determine the perceptions of Florida secondary school principals and superintendents regarding agricultural education. Perceptions were sought from Florida secondary school principals with and without agricultural education programs to determine if a relationship existed between perceptions based on the absence of an agricultural education program. Perceptions of Florida public school superintendents and Florida secondary school principals were compared. The following objectives were investigated to accomplish the purpose of this study:

- Determine the perceptions of Florida public school superintendents toward secondary agricultural education programs.
- Determine the perceptions of Florida public school principals toward secondary agricultural education programs.
- Compare the perceptions of Florida public school superintendents and principals toward secondary agricultural education programs.
- Determine the influence of the presence of a local secondary agricultural education program on the perceptions of principals.
- Examine the relationships between demographic characteristics and views toward secondary agricultural education programs as reported by principals and superintendents.
- Understand the items that Florida principals and superintendents take into consideration when making program funding decisions.

#### Methods

This quantitative study used a descriptive survey design. A modified questionnaire originally designed by Kalme and Dyer (2000) was used to ascertain the perceptions of principals and superintendents toward agricultural education. Both web-based and

mailed questionnaires were distributed to determine perceptions. Threats to internal validity were addressed. Threats to internal validity including history, selection, statistical regression, attrition and maturation, instrumentation, experimenter effects, and subject effects were controlled for when possible. Demographic data was collected as well as means scores of perceptions of agricultural education programs. The results were analyzed using SPSS Version 17.0 and ANOVAs were calculated to determine relationships between demographics and mean scores.

### **Summary of Findings**

#### **Objective 1: Determine the Perceptions of Florida Public School Superintendents toward Secondary Agricultural Education Programs.**

Overall, superintendents seem to be supportive of agricultural education programs and value their place in the community. Superintendents view agricultural education programs as beneficial for students. Additionally, superintendents were supportive and had a positive opinion regarding the courses that are being offered to students as well as the teachers that are teaching the courses.

#### **Objective 2: Determine the Perceptions of Florida Public School Principals toward Secondary Agricultural Education Programs.**

Overall, Principals' had positive opinions of agricultural education programs. Principals believed that agricultural education teachers were of high quality. Additionally, principals had positive views of the courses being taught in agricultural education. Principals were positive of the benefits for students enrolled in agricultural education programs. Principals believed that agricultural education programs were positive forces in their communities.

**Objective 3: Compare the Perceptions of Florida Public School Superintendents and Principals toward Secondary Agricultural Education Programs.**

No significant differences were found between principals and superintendents on any of the four constructs measuring perceptions of agricultural education programs.

**Objective 4: Determine the Influence of the Presence of a Local Secondary Agricultural Education Program on the Perceptions of Principals.**

All constructs demonstrated a significant difference between the two groups of principals. When analyzing the means of principals with and without a local agricultural education program at their school, all means were significantly higher for principals with agricultural education programs at their school.

**Objective 5: Examine the Relationships between Demographic Characteristics and Views toward Secondary Agricultural Education Programs as Reported by Principals and Superintendents.**

**Principals**

ANOVAs were calculated in relation to the following demographic characteristics for principals. No significant differences were found between the following groups: gender, school size, whether or not an agricultural education program had been discontinued, and students' eligibility for free or reduced lunch. Significant differences were found between the following groups: previous subject taught, racial breakdown of the school, if the principal had taken an agricultural education class when in high school, if the principals child had taken an agricultural education class, if the principal had work experience in the field of agriculture, if the principal had been at a school where a new agricultural education program had been started, the geographic region of the school, and if the school made AYP last year.

A significant difference was found between the three groups on the "Courses" construct. Former agricultural educators ranked the quality of courses the highest of the

three groups. Former science and math teachers ranked the quality of agricultural education classes next highest and other former teachers ranked the quality of agricultural education courses lowest. Overall, the principals who were former agricultural educators had the highest mean score for all four constructs. Science and math teachers had the second highest mean score for the three categories with mean scores that demonstrated positive regard for agricultural education programs. Principals who taught other subjects ranked all four constructs lower than any other group.

A significant difference was found between groups in reference to the racial breakdown of the principal's school. The principals with the schools that had the highest percentage of minorities had the lowest perceptions of the quality of agricultural education courses. However, this trend was not consistent as the percentage of minorities decreased through the categories. The group with the highest perceptions of the quality of agricultural education courses was the group with 51-75% white population.

A significant difference was found between groups of principals who had and had not taken an agricultural education class in high school. Principals who had taken an agricultural education class in high school had more positive perceptions when ranking the quality of agricultural education classes compared to principals who had not taken an agricultural education class.

Significant differences were found when comparing groups of principals whose child had and had not taken an agricultural education class. Principals whose child had taken an agricultural education course had the highest means on all four constructs,

whereas principals whose child had not taken an agricultural education class had overall lower mean scores on all four constructs.

Significant differences were found between groups of principals who had and didn't have work experience in the field of agriculture. Principals with work experience in the field of agriculture had higher perceptions of agricultural education programs. Principals without work experience in the field of agriculture had overall lower perceptions of agricultural education programs.

Significant differences were found on all four constructs when comparing the perceptions of principals who had and had not been at a school where a new agricultural education program had been started. For all four constructs, principals who had been at a school where a new agricultural education program had been started had higher mean scores. Although, all perceptions were high, the principals who had been at schools where a new agricultural education program was started, had significantly more positive perceptions than principals who had not ever been at a school where a new agricultural education program had been started.

Significant differences were found between the groups of principals based of the geographic region of their school. In all four constructs, principals of rural schools had higher mean scores than any other group of principals in reference to the geographic location of the school. Additionally, principals of schools in urban areas consistently had the lowest mean scores on all four constructs of any other group in reference to the geographic location of the school.

A significant difference was found between groups in reference to whether or not the principals school had made AYP the previous school year. Principal's whose school

did make AYP had much lower perceptions of the benefits to students from agricultural education programs.

### **Superintendents**

Descriptive statistics were calculated in relation to demographics characteristics of superintendents in the following areas: whether the superintendent was elected versus appointed, in reference to gender, based on the subject that they taught prior to going into administration, whether or not the superintendent had taken an agricultural education class while in high school, whether or not the superintendent's child had taken an agricultural education class while in high school, whether or not the superintendent had work experience in the field of agriculture, whether or not a new agricultural education program had ever been started in the superintendent's school district, and whether or not an agricultural education program had ever been discontinued in the superintendent's school district.

Overall, superintendents who were appointed had more positive perceptions of agricultural education programs. Male superintendents had lower perceptions of agricultural education programs on all four constructs. Former agricultural educators had the highest means on all four constructs. Both former math and science as well as other former teachers had positive perceptions of agricultural education programs. Superintendents that had taken an agricultural education class had more positive perceptions regarding the agricultural education program to the community. Superintendents who had taken agricultural education classes in high school had more positive perceptions of the quality of agricultural education teachers. Superintendents who had not taken agricultural education classes in high school had more positive perceptions of the student benefits and courses in agricultural education programs. No

major differences were observed between the two groups based on whether or not the superintendent's child had taken an agricultural education class in high school. Superintendents who did not have work experience in the field of agriculture had more positive perceptions on the courses construct. No major differences were observed between the two groups based on whether a new agricultural education program had been started in the superintendents' school district. Superintends who had been in a school system where the agricultural education program had been discontinued had less positive perceptions of agricultural education programs on all four constructs than those superintendents who had never had an agricultural education program discontinued in their school system.

**Objective 6: Understand the Items that Florida Principals and Superintendents Take Into Consideration When Making Program Funding Decisions.**

Five overall themes were found for both principals and superintendents in reference to how principals and superintendents make decisions regarding funding of programs. Principals and superintendents indicated that they take the following items into consideration when making program funding decisions: student achievement, student interest, funding, state and federal mandates, and local needs and community interest.

**Conclusions**

Based on the comparison of early and late respondents in principals' perceptions of agricultural education programs, the findings and conclusions can be generalized to the entire population of Florida principals. Based on the comparison of early and late respondents in superintendents' perceptions of agricultural education programs, the findings and conclusions can be generalized to the entire population with the exception

of the construct “Student Benefits” therefore should not be generalized beyond the population of Florida superintendents. The following conclusions were drawn from the results of this study.

1. Florida superintendents have positive perceptions of agricultural education programs.
2. Florida principals have positive perceptions of agricultural education programs.
3. The presence of a local secondary agricultural education program influences the perceptions of Florida secondary school principals.
4. The subject that was previously taught influences principals’ perceptions of agricultural education programs.
5. The racial breakdown of a school influences the principal’s perceptions of agricultural education courses.
6. Perceptions of agricultural education programs are influenced by whether principals took an agricultural education class in high school.
7. Perceptions of agricultural education programs are influenced by whether a principal’s child took an agricultural education class.
8. Perceptions of agricultural education programs are influenced by whether a principal had work experience in the field of agriculture.
9. Perceptions of agricultural education programs are influenced by whether a principal had been at a school where a new agricultural education program was started.
10. The geographic region of the school influences principals’ perceptions of agricultural education programs.
11. Principal perceptions of the student benefits of agricultural education programs are influenced by the school status, or whether the school made AYP in the previous school year.
12. Superintendents who were appointed have more positive perceptions of agricultural education programs versus superintendents who were elected.
13. Gender has an influence in superintendents’ perceptions of the quality of agricultural education courses.
14. Superintendents who have been in a school system where the agricultural education program had been discontinued have less positive perceptions of

agricultural education programs than those superintendents who have never had an agricultural education program discontinued in their school system.

15. Student achievement is the main concern of principals and superintendents when making program funding decisions.

### **Discussion and Implications**

**Conclusion 1:** Florida superintendents have positive perceptions of agricultural education programs.

Florida superintendents held positive perceptions of agricultural education programs. Florida superintendents believed that agricultural education programs were beneficial for students, the courses were of high quality, the agricultural educators were of high quality, and that agricultural education programs are important to the community. These results match the findings of Pavelock, Ullrich, Hanagriff, and Baer (2003) who reported that Texas superintendents had positive perceptions of agricultural education programs. These results also match the findings of Pavelock, Vaughn, and Kieth (2001) who determined that, overall, Texas superintendents had positive perceptions of agricultural education programs. This study reflected the findings of previous studies regarding perceptions of agricultural education programs.

**Conclusion 2:** Florida principals have positive perceptions of agricultural education programs.

Florida principals held positive perceptions of agricultural education programs. Florida principals believed that agricultural education programs were beneficial for students, the courses were of high quality, the agricultural educators were of high quality, and that agricultural education programs are important to the community. This matches the results of Kalme and Dyer's (2000) study that found that Iowa principals have positive perceptions of agricultural education programs, courses, and teachers.

**Conclusion 3:** The presence of a local secondary agricultural education program influences the perceptions of Florida secondary school principals.

When an agricultural education program was present in the principal's school, they had much higher and more positive perceptions of the student benefits of agricultural education programs, the quality of the courses, the quality of the agricultural educators, and the importance of agricultural education programs to the community. This finding is consistent with the conceptual model of this study which was based in Fishbein & Ajzen's model of the prediction of specific intentions and behaviors. The perceptions of principals without agricultural education programs were much lower than those of principals who did have an agricultural education program at their school. One would conclude that the principal's perceptions influence whether or not an agricultural education program exists at a school.

**Conclusion 4:** The subject that was previously taught influences principals' perceptions of agricultural education programs.

This study indicated that principals who were former agricultural educators had the highest regard for all four constructs, science and math teachers had the second highest regard for the agricultural education programs, and principals who taught other subjects ranked all four constructs lower than any other group. However, all groups ranked agricultural education programs high. This corresponds with the findings of Barnett's study (1984) that found that principals who had taught in vocational areas held more positive perceptions of vocational education. Additionally, this study matched the results of Pavelock, Ullrich, Hanagriff, and Baer (2003) which found that regardless of

their area of teaching when teaching high school, Texas superintendents perceived agricultural education positively.

**Conclusion 5:** The racial breakdown of a school influences the principal's perceptions of agricultural education courses.

Principals of schools who had 25% or less white population had the lowest perceptions of agricultural education programs. However, this finding should be analyzed with caution because there was only an *n* of four for principals with 25% or less white population. However, this group only had moderately positive views of agricultural education programs.

**Conclusion 6:** Perceptions of agricultural education programs are influenced by whether principals took an agricultural education class in high school.

In this study, principals who had taken an agricultural education class in high school had more positive perceptions when ranking the quality of agricultural education classes compared to principals who had not taken an agricultural education class. This matches the results of Pavelock, Ullrich, Hanagriff, and Baer's (2003) study that indicated that the superintendents who had more experience with agricultural education believed that agricultural education courses are less vocational and more academic. However, this differed from Kalme's (1998) study that reported that there was no correlation between higher perceptions in Iowa principals and being enrolled in an agricultural education class when the principal was in high school, compared to principals who had never taken an agricultural education class.

**Conclusion 7:** Perceptions of agricultural education programs are influenced by whether a principal's child took an agricultural education class.

In this study, principals whose child had taken an agricultural education course had the most positive perceptions of agricultural education, whereas principals whose child had not taken an agricultural education class had overall lower perceptions. This did not match the findings of Kalme (1998) who indicated that principals whose child had been enrolled in agricultural education did not have higher perceptions of agricultural education programs than principals whose children had not been enrolled in agricultural education classes.

**Conclusion 8:** Perceptions of agricultural education programs are influenced by whether a principal had work experience in the field of agriculture. However, this differed from Kalme's (1998) study which indicated that experience in the agriculture industry did not directly correlate with higher perceptions of agricultural education programs in Iowa.

**Conclusion 9:** Perceptions of agricultural education programs are influenced by whether a principal had been at a school where a new agricultural education program was started.

Principals who had been at a school where a new agricultural education program had been started had very positive perceptions of agricultural education programs. This study concludes that principals who have been at schools where new agricultural education programs have been started are more supportive of agricultural education programs. This ties into the conceptual model of this study that indicated that principals' perceptions influenced the existence of an agricultural education program at the school.

**Conclusion 10:** The geographic region of the school influences principals' perceptions of agricultural education programs.

In this study, principals of rural schools had higher mean scores than any other group of principals in reference to the geographic location of the school. This study had similar findings to Pavelock's (2000) study which indicated that superintendents from larger areas did not agree to the high level that superintendents in smaller schools did, that agricultural education programs are useful in helping at-risk students stay interested in school.

**Conclusion 11:** Principal perceptions of the student benefits of agricultural education programs are influenced by the school status, or whether the school made AYP in the previous school year.

In this study, principal's whose school did make AYP had much lower perceptions of the benefits to students from agricultural education programs. Analysis of this finding should be conducted with caution because of the 71 responses from principals in this study, only four schools made AYP last school year. This finding is consistent with literature from Martin, Fritzsche, and Ball (2006) which indicated that the expert panelists agreed that because CTE courses are not included in NCLB mandates, that these programs have the potential to be lowered in priority when decision makers have to make hard choices. The influence of school status should be further investigated to determine if a higher *n* of school's making AYP would influence the results.

**Conclusion 12:** Superintendents who were appointed have more positive perceptions of agricultural education programs versus superintendents who were elected.

In this study, superintendents who were appointed had more positive perceptions of agricultural education programs versus superintendents who were elected. It is

possible that superintendents who were appointed had more experience with agricultural education. This study concludes that appointed superintendents are more favorable towards agricultural education program. More research is needed in this area to determine if appointed superintendents consistently have more positive perceptions.

**Conclusion 13:** Gender has an influence in superintendents' perceptions of the quality of agricultural education courses.

In this study, female superintendents had higher perceptions of the quality of agricultural education courses than male superintendents. However, when analyzing the mean scores, the results may have been statistically significant but the difference in means was not practically significant. This finding matches a study conducted by Dyer and Osborne (1999) which indicated that male guidance counselors perceived agricultural education to be a more traditional type of course than females. However, this same study found that male counselors ranked the competency of agricultural educators as very high, whereas female counselors only ranked the competency of agricultural educations as high (Dyer & Osborne, 1999). Gender influences should be further investigated to determine if a consistent difference exists.

**Conclusion 14:** Superintendents who have been in a school system where the agricultural education program had been discontinued have less positive perceptions of agricultural education programs than those superintendents who have never had an agricultural education program discontinued in their school system.

In this study, superintendents who had been in a school system where an agricultural education program had been discontinued had much less positive perceptions of agricultural education programs. It is possible that the superintendent

had something to do with discontinuing the agricultural education program in their school system thus decreasing their perceptions of agricultural education programs. This study concludes that if an agricultural education program has been discontinued in their school systems that superintendents have less positive perceptions of agricultural education programs. More research is needed in this area to determine if this finding is indicated in further studies.

**Conclusion 15:** Student achievement is the main concern of principals and superintendents when making program funding decisions.

In this study, when asked what factors are taken into consideration when making program funding decisions, both superintendents and principals mentioned most frequently student achievement and the need for the program to boost student achievement. This matches commentary from Jason Leahy of the Illinois Principal Association which stated that the programs that support student achievement are the programs that tend to stick around. This study concludes that student achievement is the most important factor that principals and superintendents consider when making program funding decisions.

## **Recommendations**

### **Recommendations for Practice**

Based on the findings and conclusion, the following recommendations for practice should be considered.

1. Because superintendents and principals reported that their number one concern was student achievement, when promoting agricultural education programs, agricultural educators should focus on the specific aspects of the program that enhance student achievement.
2. Agricultural educators and state agricultural education staff should promote the aspects of agricultural education programs that specifically enhance student

achievement and the quality of agricultural education programs to principals who do not currently have agricultural education programs at their schools.

3. Materials highlighting the specific aspects of agricultural education programs that enhance student achievement, specifically in the reinforcement of academic concepts should be created and distributed to other teachers in the school who may become principals or superintendents one day.
4. The profession should prepare agricultural educators for leadership positions as administrators. Of the 116 total responses from superintendents and principals, only 6 (5%) of respondents reported being former agricultural education teachers.
5. Greater attempts at inclusion of minority students, as well as urban students should be made. Past research has made it clear that this has been an issue, yet greater efforts are needed to truly reach out to this population of students.
6. A unified voice from the profession is needed to advertise how the total program of agricultural education enhances student achievement. Administrators view the three components of agricultural education as one entity, therefore the student achievement provided by the total program should be advertised, not each individual component.

Recommendation for practice 1: Because superintendents and principals reported that their number one concern was student achievement, when promoting agricultural education programs, agricultural educators should focus on the specific aspects of the program that enhance student achievement.

Since other researchers (Kalme & Dyer, 2000; Pavelock, Ullrich, Hanagriff, & Baer, 2003; Pavelock, Vaughn, and Kieth, 2001) have concluded that administrators have positive perceptions of agricultural education programs, agricultural educators should continue to promote the positive benefits of agricultural education to students. As proposed in the conceptual model, if administrators continue to have positive perceptions of agricultural education, then agricultural education should have a place in public education for years to come. However, agricultural educators have long focused on what they perceive to be the student benefits of their programs. Administrators had a clear voice when stating the factors that they considered when making decisions, and

student achievement was the number one theme. Agricultural educators should focus on specific aspects of their programs that enhance student achievement. Ricketts, Duncan, and Peake (2006) found that students who took agricultural education classes scored higher on the science portion of the Georgia High School Graduation Test. If agricultural education can help students score higher on State mandated tests, student achievement is enhanced, placing agricultural education in a positive position with administrators.

Materials should be created that focus on student achievement in agricultural education. Agricultural educators should focus on the aspects of student benefits that boost student achievement when promoting programs. Short yet concise information regarding the reinforcement of academic material which boosts student test scores should be emphasized when promoting programs. Additionally, practical and applied understanding of scientific and math concepts should be advertised as boosting student achievement when promoting programs. Only after principals and superintendents can see the clear link between agricultural education programs and student achievement should the profession advertise all the other student benefits of agricultural education programs such as leadership skill development and scholarships. Additionally, the profession should figure out how to get more administrators involved in agricultural education programs. Inviting administrators to agricultural education program functions, asking them to be guest judges for a local agriscience fair, and letting administrators know what is going on in the program is a great place to start. However, agricultural educators should reach out further to administrators to allow them to become more involved in agricultural education programs.

Recommendation for practice 2: Agricultural educators and state agricultural education staff should promote the aspects of agricultural education programs that specifically enhance student achievement as well as the quality of agricultural education programs to principals who do not currently have agricultural education programs at their schools.

Specific materials should be created to point out the aspects of agricultural education programs that enhance student achievement. Since student achievement is the number one priority of principals with and without agricultural education programs, the profession should center its' message and promotional materials to focus directly on student achievement in agricultural education. Model programs could be displayed to principals who are not familiar with agricultural education programs or have had a negative experience with agricultural education programs. If perceptions of principals can influence the existence of agricultural education programs, than serious effort should be placed in promoting more positive perceptions of agricultural education programs to principals who do not currently have programs at their schools.

Representatives from model programs could attend conferences that are frequented by principals so that these principals can see evidence of the benefits of agricultural education to students. Tremendous outreach through targeted high power marketing tools should be utilized in this area for growth of agricultural education programs nationwide and particularly in Florida.

Recommendation for practice 3: Materials highlighting the specific aspects of agricultural education programs that enhance student achievement, specifically in the

reinforcement of academic concepts, should be created and distributed to other teachers in the school who may become principals or superintendents one day.

Since principals generally come from the pool of teachers at a school, agricultural educators should make sure that other teachers at their school are aware of the quality of their programs, particularly how academic concepts are reinforced in the agricultural education classroom. This could be accomplished through teacher collaboration especially in academic subjects that would demonstrate how academic concepts can be reinforced in the agricultural education classroom. Additionally, these materials should cover the standards that are addresses in agricultural education that correlate the standards for academic areas to demonstrate the cohesive nature of agricultural education curriculum and academic curriculum. Research that points out that students involved in agricultural education courses score higher on state tests should also be broadcasted to academic teachers. Listing specific subject areas in which agricultural education can provide hands on and applied knowledge to academic subjects should be demonstrated to teachers in academic areas to prove that agricultural education can provide a more meaningful understanding of academic concepts.

Recommendation for practice 4: The profession should prepare agricultural educators for leadership positions as administrators.

The profession should provide professional opportunities that would prepare agricultural educators for leadership positions. Of the 116 total responses from superintendents and principals, only 6 (5%) of respondents reported being former agricultural education teachers. For continued support of agricultural education programs, more agricultural educators should consider going into leadership positions.

It is important to have the experience of a former agricultural educator at the table when making decisions. This could be provided through workshops at local, state, and national meetings.

Recommendation for practice 5: Greater attempts at inclusion of minority students, as well as urban students should be made. Past research has made it clear that this has been an issue, yet greater efforts are needed to truly reach out to this population of students.

Dyer and Breja (2003) stated that agricultural education programs have typically struggled recruiting minority students. Talbert and Edwin (2008) recommended that University teacher preparation programs require more classes to prepare future teachers to teach in a culturally diverse environment. Past research has indicated that the profession should work on including minority students. However, as indicated by principals, the profession has not quite reached the goal of involving more minorities and urban students. Greater attempts at inclusion should be made because agricultural education programs are beneficial for all students regardless of where they live or their race. Students in urban areas can benefit just as much as rural students from agricultural education programs. Additionally, minorities can benefit just as much as white students from agricultural education programs. If principals see that student achievement is enhanced from minority involvement in agricultural education, they may have more positive perceptions of agriculture education programs.

Research claims that building relationships with students is crucial for success (Darling-Hammond & Bransford, 2005). Agricultural educators should make a greater effort to build relationships with minority students. In getting to know minority students,

agricultural educators should discover the future aspirations of students and help design a plan for how agricultural education can help them reach their goals. There is no one-size-fits-all approach to reaching individual students besides getting to know them and helping them reach their own goals. Agricultural education can offer every student a bright future, but this is on an individual basis. If more minorities are to become involved in agricultural education, greater efforts on behalf of agricultural educators should be made to get to know minority students on an individual basis to draw them into the program.

Recommendation for practice 6: A unified voice from the profession is needed to advertise how the total program of agricultural education enhances student achievement. Administrators view the three components of agricultural education as one entity, therefore the student achievement provided by the total program should be advertised, not each individual component.

Administrators used the terms agricultural education and FFA interchangeably and do not seem to have a distinction between the three components. Because FFA and agricultural education are viewed positively, the distinction is not necessary when seeking support from administrators. A unified voice stating the total program of agricultural education promotes student achievement is necessary to enhance support of agricultural education programs. A new conversation should be started in the profession to really demonstrate how student achievement is enhanced through agricultural education programs. If the profession begins to refocus its marketing strategies on the basis of student achievement, will perceptions of agricultural education programs become more positive?

## Recommendations for Further Inquiry

Based on the results and conclusion of this study, the following recommendations for future inquiry should be reviewed.

1. A larger study with more participants should be conducted.
2. More in depth analysis as to why principals without agricultural education programs at their school had much lower perceptions of agricultural education programs.
3. Gender influences should be further investigated to determine if a consistent difference exists.
4. The influence of school status should be further investigated to determine if a higher *n* of school's making AYP would influence the results.
5. A study analyzing message framing of the promotion of agricultural education should be conducted.

Recommendations for further inquiry 1: A larger study with more participants should be conducted.

Due to response rate, this study did not have enough participants to make some correlations due to the low number in certain subgroups. A larger study could add to the understanding of how agricultural education programs are viewed by people in decision making positions. Additionally, a larger study could provide more information into how certain demographics influence perceptions of agricultural education programs.

Recommendations for further inquiry 2: More in depth analysis as to why principals without agricultural education programs at their school had much lower perceptions of agricultural education programs.

A qualitative study with a quantitative follow-up would be an interesting addition to this data set. It would be interesting to understand if principals without agricultural education programs simply do not have much experience with agricultural education or

if they have had a bad experience in the past with agricultural education programs. Additionally, it would be interesting to discover if the demonstration of a model program would change their perceptions of agricultural education programs.

Recommendations for further inquiry 3: Gender influences should be further investigated to determine if a consistent difference exists.

More data is needed to discover if there is a consistent difference between male and female regarding their perceptions of agricultural education. Several studies indicated inconsistent findings regarding gender. Additionally, in this study, only one construct demonstrated a significant difference and only on superintendents. Therefore, more information is needed to make a decision as to whether gender shows a consistent difference.

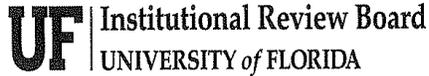
Recommendation for further inquiry 4: The influence of school status should be further investigated to determine if a higher  $n$  of school's making AYP would influence the results.

Very few schools in this study actually made AYP last year. If more schools could be located that actually made AYP, an interesting study would be to see if any significant differences were found with a high  $n$ .

Recommendation for further inquiry 5: A study analyzing message framing of the promotion of agricultural education should be conducted.

Administrator's number one concern is student achievement. If the message of agricultural education becomes one of promoting student achievement, will perceptions of agricultural education programs improve?

APPENDIX A  
IRB APPROVAL



PO Box 112250  
Gainesville, FL 32611-2250  
352-392-0433 (Phone)  
352-392-9234 (Fax)  
irb2@ufl.edu

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DATE: September 2, 2010

TO: Adrienne Gentry  
PO Box 110540  
Campus

FROM: Ira S. Fischler, PhD, Chair   
University of Florida  
Institutional Review Board 02

SUBJECT: Approval of Protocol #2010-U-780

TITLE: Perceptions of Florida Secondary School Principals and Superintendents toward Agricultural Education

SPONSOR: None

I am pleased to advise you that the University of Florida Institutional Review Board has recommended approval of this protocol. Based on its review, the UFIRB determined that this research presents no more than minimal risk to participants, and based on 45 CFR 46.117(c), An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either: (1) *That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern;* or (2) *That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.*

The IRB authorizes you to administer the informed consent process as specified in the protocol. If you wish to make any changes to this protocol, **including the need to increase the number of participants authorized**, you must disclose your plans before you implement them so that the Board can assess their impact on your protocol. In addition, you must report to the Board any unexpected complications that affect your participants.

This approval is valid through **August 30, 2011**. If you have not completed the study by this date, please telephone our office (392-0433), and we will discuss the renewal process with you. It is important that you keep your Department Chair informed about the status of this research protocol.

ISF:dl

Dear Principal:

I am a graduate student at the University of Florida. As part of my Masters Thesis I am conducting a questionnaire, the purpose of which is to determine the perceptions of principals towards agricultural education. Participants will be asked to answer questions on a web-based questionnaire that will take no longer than 10-15 minutes. You will not have to answer any question you do not wish to answer. Your identity will be kept confidential to the extent provided by law. No personal information will be shared and results will only be shared in summary form. No names will be connected to responses so the data will be anonymous

There are no anticipated risks, compensation or other direct benefits to you as a participant in this study. You are free to withdraw your consent to participate and may discontinue your participation in the questionnaire at any time without consequence. However, your input is invaluable in helping us gain a clearer picture of how agricultural education programs are perceived by people in leadership positions.

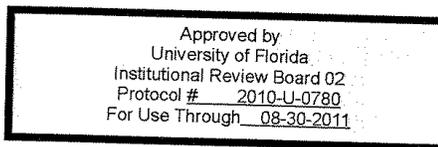
If you have any questions about this research protocol, please contact me at 352-392-0502 Ext. 244 or my faculty supervisor, Dr. Brian Myers, at 352-392-0502 Ext.236. Questions or concerns about your rights as a research participant rights may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611; (352) 392-0433.

Thank you for your anticipated help in this effort. As a principal, we know that you are very busy, but your participation is important, and greatly appreciated! Thank you again for your time and effort!

Sincerely,

Adrienne Gentry

Graduate Assistant  
University of Florida  
Department of Agricultural Education and Communication  
[agentry@ufl.edu](mailto:agentry@ufl.edu)



Or

Brian E. Myers, PhD  
Associate Professor/Associate Chair  
Department of Agricultural Education and Communication  
[bmyers@ufl.edu](mailto:bmyers@ufl.edu)

Agreement:

I have read the procedure described. I voluntarily agree to participate and understand that by clicking "I agree" below, I am consenting to participate in this study. If I choose not to participate, I will exit the survey.

Dear Superintendent:

I am a graduate student at the University of Florida. As part of my Masters Thesis I am conducting a questionnaire, the purpose of which is to determine the perceptions of superintendents towards agricultural education. Participants will be asked to answer questions on a web-based questionnaire that will take no longer than 10-15 minutes. You will not have to answer any question you do not wish to answer. Your identity will be kept confidential to the extent provided by law. No personal information will be shared and results will only be shared in summary form. No names will be connected to responses so the data will be anonymous.

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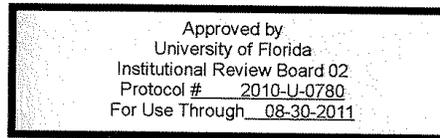
If you have any questions about this research protocol, please contact me at 352-392-0502 Ext. 244 or my faculty supervisor, Dr. Brian Myers, at 352-392-0502 Ext.236. Questions or concerns about your rights as a research participant rights may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611; (352) 392-0433.

Thank you for your anticipated help in this effort. As a superintendent, we know that you are very busy, but your participation is important, and greatly appreciated! Thank you again for your time and effort!

Sincerely,

Adrienne Gentry

Graduate Assistant  
University of Florida  
Department of Agricultural Education and Communication  
[agentry@ufl.edu](mailto:agentry@ufl.edu)



Or

Brian E. Myers, PhD  
Associate Professor/Associate Chair  
Department of Agricultural Education and Communication  
[bmyers@ufl.edu](mailto:bmyers@ufl.edu)

Agreement:

I have read the procedure described. I voluntarily agree to participate and understand that by clicking "I agree" below, I am consenting to participate in this study. If I choose not to participate, I will exit the survey.

APPENDIX B  
LETTER TO PARTICIPANTS

Dear Principal:

I am a graduate student at the University of Florida. As part of my Masters Thesis I am conducting a questionnaire, the purpose of which is to determine the perceptions of principals towards agricultural education. Participants will be asked to answer questions on a web-based questionnaire that will take no longer than 10-15 minutes. You will not have to answer any question you do not wish to answer. Your identity will be kept confidential to the extent provided by law. No personal information will be shared and results will only be shared in summary form. No names will be connected to responses so the data will be anonymous

There are no anticipated risks, compensation or other direct benefits to you as a participant in this study. You are free to withdraw your consent to participate and may discontinue your participation in the questionnaire at any time without consequence. However, your input is invaluable in helping us gain a clearer picture of how agricultural education programs are perceived by people in leadership positions.

If you have any questions about this research protocol, please contact me at 352-392-0502 Ext. 244 or my faculty supervisor, Dr. Brian Myers, at 352-392-0502 Ext.236. Questions or concerns about your rights as a research participant rights may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611; (352) 392-0433.

Thank you for your anticipated help in this effort. As a principal, we know that you are very busy, but your participation is important, and greatly appreciated! Thank you again for your time and effort!

Sincerely,

Adrienne Gentry

Graduate Assistant  
University of Florida  
Department of Agricultural Education and Communication  
agentry@ufl.edu

Brian E. Myers, PhD  
Associate Professor/Associate Chair  
Department of Agricultural Education and Communication  
bmyers@ufl.edu

Agreement:

I have read the procedure described. I voluntarily agree to participate and understand that by clicking "I agree" below, I am consenting to participate in this study. If I choose not to participate, I will exit the survey.

Hello Florida Superintendent,

Last week a questionnaire was e-mailed to you because you were randomly selected to help in a study about perceptions of agricultural education programs.

If you have already completed the questionnaire, please accept my sincere thanks. If not, please complete the questionnaire right away. I am especially grateful for your help with this important study.

If you did not receive a questionnaire, please call me today at 352-392-0502, Ext. 244 or e-mail me at [agency@ufl.edu](mailto:agency@ufl.edu) and I will get another one to you today.

Sincerely,  
Adrienne Gentry  
Graduate Assistant  
Department of Agricultural Education & Communication  
408 Rolfs Hall  
(352)392-0502 ext. 244  
[agency@ufl.edu](mailto:agency@ufl.edu)

Please click the survey link below:

Dear Superintendent:

I am a graduate student at the University of Florida. As part of my Masters Thesis I am conducting a questionnaire, the purpose of which is to determine the perceptions of superintendents towards agricultural education. Participants will be asked to answer questions on a web-based questionnaire that will take no longer than 10-15 minutes. You will not have to answer any question you do not wish to answer. Your identity will be kept confidential to the extent provided by law. No personal information will be shared and results will only be shared in summary form. No names will be connected to responses so the data will be anonymous.

There are no anticipated risks, compensation or other direct benefits to you as a participant in this study. You are free to withdraw your consent to participate and may discontinue your participation in the questionnaire at any time without consequence. However, your input is invaluable in helping us gain a clearer picture of how agricultural education programs are perceived by people in leadership positions.

If you have any questions about this research protocol, please contact me at 352-392-0502 Ext. 244 or my faculty supervisor, Dr. Brian Myers, at 352-392-0502 Ext.236. Questions or concerns about your rights as a research participant rights may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611; (352) 392-0433.

Thank you for your anticipated help in this effort. As a superintendent, we know that you are very busy, but your participation is important, and greatly appreciated! Thank you again for your time and effort!

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Brian E. Myers, PhD  
Associate Professor/Associate Chair  
Department of Agricultural Education and Communication  
[bmyers@ufl.edu](mailto:bmyers@ufl.edu)

Agreement:

I have read the procedure described. I voluntarily agree to participate and understand that by clicking "I agree" below, I am consenting to participate in this study. If I choose not to participate, I will exit the survey.

## APPENDIX C INSTRUMENT

Using the scale below, please indicate the degree to which you agree or disagree with these statements by circling the appropriate number as follows:

- 1 = Strongly Disagree (SD)**  
**2 = Disagree (D)**  
**3 = Uncertain (U)**  
**4 = Agree (A)**  
**5 = Strongly Agree (SA)**  
**6 = No Opinion (N/O)**

	SD	D	U	A	SA	N/O
1. High school agriculture courses are beneficial for high achievers.	1	2	3	4	5	6
2. College bound students should take agricultural education courses.	1	2	3	4	5	6
3. Students who take agricultural education courses tend to be less academically able.	1	2	3	4	5	6
4. High school agriculture courses are beneficial for low achievers.	1	2	3	4	5	6
5. Students are becoming more interested in enrolling in agricultural education courses.	1	2	3	4	5	6
6. Students enrolled in agricultural education courses seem to enjoy these courses.	1	2	3	4	5	6
7. There are numerous opportunities for employment in the field of agriculture.	1	2	3	4	5	6
8. The image of agriculture is improving.	1	2	3	4	5	6
9. Because of increased graduation requirements, there is little time for students to enroll in agricultural education courses.	1	2	3	4	5	6
10. Agricultural education courses should be offered in technical schools/centers rather than in high school.	1	2	3	4	5	6
11. Agricultural education courses reinforce learning in academic courses.	1	2	3	4	5	6
12. Agricultural education courses are easier than other courses.	1	2	3	4	5	6
13. Agricultural education courses encourage students to apply knowledge and skills to real-life problems	1	2	3	4	5	6
14. Other elective courses are more valuable to college bound students than are agricultural education.	1	2	3	4	5	6
15. Agricultural education courses provide little for students' intellectual development.	1	2	3	4	5	6
16. Agricultural education courses reinforce academic concepts in an applied setting.	1	2	3	4	5	6
17. Agricultural education programs are a positive force in the community.	1	2	3	4	5	6
18. High school agricultural education courses should be offered primarily in rural areas.	1	2	3	4	5	6
19. FFA promotes leadership develop that is beneficial for students enrolled in agricultural education.	1	2	3	4	5	6
20. FFA is a highly supported organization in my community.	1	2	3	4	5	6
21. Involvement in FFA detracts from student learning in agricultural education.	1	2	3	4	5	6
22. Agricultural education teachers have positive professional relationships with administrators.	1	2	3	4	5	6
23. Agricultural education teachers collaborate with other teachers to integrate other subjects into	1	2	3	4	5	6

- agricultural education courses. 1 2 3 4 5 6
24. Agricultural education teachers integrate other academic subjects into their lessons regularly. 1 2 3 4 5 6
25. Agricultural education teachers utilize many community members/resources in their class topics. 1 2 3 4 5 6
26. The agricultural education teacher keeps the agricultural education program current to meet higher educational needs. 1 2 3 4 5 6

**Superintendent Characteristics:** Please fill in the following questions based on how they apply to you and your school/school system.

27. My position is: (check one)

\_\_\_\_\_ elected \_\_\_\_\_ appointed

28. What is your gender? (check one)

\_\_\_\_\_ Male  
 \_\_\_\_\_ Female

29. How many high schools are there in your school district?

\_\_\_\_\_ Number of schools  
 How many of the high schools have agricultural education programs? \_\_\_\_\_

30. How many years, including this year, have you:

\_\_\_\_\_ been a Superintendent  
 \_\_\_\_\_ Where Agricultural Education was offered?  
 \_\_\_\_\_ Taught  
 Subject(s): \_\_\_\_\_  
 \_\_\_\_\_ Other (describe)  
 \_\_\_\_\_

31. During your tenure as a superintendent, have you been in a school system where a brand new agricultural education program was started?

\_\_\_\_\_ Yes  
 \_\_\_\_\_ No

32. During your tenure as a superintendent, have you ever been in a school system where the agricultural education program was discontinued?

\_\_\_\_\_ Yes  
 \_\_\_\_\_ No



Using the scale below, please indicate the degree to which you agree or disagree with these statements by circling the appropriate number as follows:

- 1 = Strongly Disagree (SD)**
- 2 = Disagree (D)**
- 3 = Uncertain (U)**
- 4 = Agree (A)**
- 5 = Strongly Agree (SA)**
- 6 = No Opinion (N/O)**

	<b>SD</b>	<b>D</b>	<b>U</b>	<b>A</b>	<b>SA</b>	<b>N/O</b>
1. High school agriculture courses are beneficial for high achievers.	1	2	3	4	5	6
2. College bound students should take agricultural education courses.	1	2	3	4	5	6
3. Students who take agricultural education courses tend to be less academically able.	1	2	3	4	5	6
4. High school agriculture courses are beneficial for low achievers.	1	2	3	4	5	6
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23. Agricultural education teachers collaborate with other teachers to integrate other subjects into	1	2	3	4	5	6

- agricultural education courses. 1 2 3 4 5 6
24. Agricultural education teachers integrate other academic subjects into their lessons regularly. 1 2 3 4 5 6
25. Agricultural education teachers utilize many community members/resources in their class topics. 1 2 3 4 5 6
26. The agricultural education teacher keeps the agricultural education program current to meet higher educational needs. 1 2 3 4 5 6

**Principal Characteristics:** Please fill in the following questions based on how they apply to you and your school/school system.

27. What is your gender? (check one)

- Male  
 Female

28. What is the geographic background of your school or school system? (check one)

- Urban  
 Suburban  
 Town  
 Rural

29. How many years, including this year, have you:

- been in Administration  
 → \_\_\_\_\_ Where Agricultural Education was offered?
- Taught  
 → Subject(s): \_\_\_\_\_
- Other (describe)  
 → \_\_\_\_\_

30. Have you ever been at a school where a brand new agricultural education program was started?

- Yes  
 No

31. Have you ever been at a school where the agricultural education program was discontinued?

- Yes  
 No

32. Do you have a son or daughter who has completed one or more high school agriculture courses?

- Yes [what was the quality of their experience]  
 →  Poor  Fair  Good  Excellent  
 No

33. Did you complete one or more agricultural education courses as a high school student?

\_\_\_\_\_ Yes [what was the quality of the experience]

☐→ \_\_\_\_\_ Poor \_\_\_\_\_ Fair \_\_\_\_\_ Good \_\_\_\_\_ Excellent

\_\_\_\_\_ No

34. Do you have any work experience in the field of agriculture?

\_\_\_\_\_ Yes

☐→ Quality of experience: \_\_\_\_\_ Poor \_\_\_\_\_ Fair \_\_\_\_\_ Good \_\_\_\_\_ Excellent

\_\_\_\_\_ No

35. Did your school meet AYP last year?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

36. What is the total number of students enrolled at your high school grades 9-12?

\_\_\_\_\_ Students

37. Is there an agricultural education program at your school?

\_\_\_\_\_ Yes

☐→ What is the total number of students, grades 9-12 enrolled in agricultural education courses this school year?

\_\_\_\_\_ Students

\_\_\_\_\_ No

38. What percentage of students at your school are on free and reduced lunch?

\_\_\_\_\_ percent

39. What is the ethnic breakdown of your school?

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40. When making decisions about program funding, I take the following items into consideration: (Please list)

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**Thank You!**

**Code #** \_\_\_\_\_

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## BIOGRAPHICAL SKETCH

Adrienne Gentry was raised in Southern Georgia. Her family owned a small farm and she learned to love agriculture from her grandparents, Ida and Rudene Gentry. Adrienne was very active in The National FFA Organization growing up and has a love for agricultural education and the FFA. Adrienne graduated from the University of Georgia with a Bachelors of Science in Agriculture, specializing in Agricultural Education and earning a certificate in Leadership and Service. Adrienne received her Master of Science degree from the University of Florida in agricultural education and communication specializing in agricultural education. Adrienne is pursuing a career in Georgia as an agriculture teacher and married to Ian Smith.