

WHAT MAKES THEM TEACH? SECONDARY EDUCATION EXPERIENCE  
CONTRIBUTIONS TO TEACHING SELF EFFICACY AND DECISION TO TEACH  
AMONG AGRICULTURAL EDUCATION MAJORS

by

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(Under the Direction of John C. Ricketts)

ABSTRACT

Teacher self efficacy is directly tied to teacher longevity. The researcher conducted a casual comparative study to determine self efficacy in three domains: classroom, FFA, SAE and compared them with various demographic characteristics. This study was conducted on undergraduate agricultural education majors at the University of Georgia that have not student taught. Self efficacy was highest among the SAE domain and lowest among the classroom domain.

INDEX WORDS: Agricultural Education, Self Efficacy, Education

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## DEDICATION

This thesis is dedicated to those who struggled with the fear of the unknown, including career choices

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## TABLE OF CONTENTS

		Page
ACKNOWLEDGEMENTS.....		v
LIST OF TABLES.....		ix
LIST OF FIGURES.....		x
CHAPTER		
1	INTRODUCTION.....	1
	Statement of Problem.....	4
	Purpose of Study.....	5
	Justification of Study.....	5
	Limitations of Study.....	6
	List of Terms.....	7
	Summary.....	8
2	LITERATURE REVIEW.....	9
	Social Cognitive Theory.....	9
	Expectancy Theory.....	11
	Social Cognitive Career Theory.....	11
	Self Efficacy Theory.....	13
	Sources of Self Efficacy.....	13
	Teacher Self Efficacy.....	13

	Measuring Teacher Self Efficacy.....	15
	Agricultural Education Self Efficacy.....	15
	Demographic Characteristics Related to Teacher Self Efficacy.....	16
	Teachers Perceptions Preparations and Importance.....	17
	Factors Affecting Decision to Teach.....	17
	Summary.....	18
3	METHODS AND PROCEDURES.....	19
	Population and Sample Selection.....	19
	Procedures.....	20
	Instruments.....	20
	Data Analysis.....	21
	Summary.....	21
4	RESULTS.....	22
	Results of Objective 1.....	23
	Results of Objective 2.....	27
	Results of Objective 3.....	34
	Summary.....	35
5	SUMMARY AND RECOMMENDATIONS.....	36
	Summary of Objective 1.....	36
	Summary of Objective 2.....	37
	Summary of Objective 3.....	38
	Recommendations for Objective 1.....	38

Recommendations for Objective 2.....	39
Recommendations for Objective 3.....	40
Summary.....	41
REFERENCES.....	42
APPENDICES	
A CONTACT SCRIPT.....	49
B QUESTIONARE AND COVER LETTER.....	51

## LIST OF TABLES

	Page
Table 4.1: Where you an FFA Member.....	24
Table 4.2: If you were an FFA member, what was the highest degree you received?.....	24
Table 4.3: If you were an FFA member, where you an officer?.....	25
Table 4.4: If You Were Offered a Suitable Agricultural Science Teaching Position in a Community of Your Choice, Would you take it?.....	26
Table 4.5: What work experiences have you had related to agriculture?.....	26
Table 4.6: What are your plans upon graduation?.....	27
Table 4.7: Summated Means of the Domains (Classroom, FFA, SAE).....	28
Table 4.8: Teacher Self-Efficacy of the Classroom Domain.....	29
Table 4.9: Teacher Self-Efficacy of the FFA Domain.....	31
Table 4.10: Teacher Self Efficacy of the SAE Domain.....	33
Table 4.11: Correlation between Teacher Self Efficiency and Decision to Teach.....	34

LIST OF FIGURES

	Page
Figure 2.1: Social Cognitive Theory Model.....	10
Figure 2.2: Career Modeling.....	10
Figure 2.3: Expectancy Theory Model.....	11
Figure 2.4: Career Choice Model.....	12

## Chapter 1

### INTRODUCTION

Agriculture is often associated with a negative image by students who are unfamiliar with the course of study or industry. Students are also required to adhere to more strenuous academic requirements that are needed to graduate by individual states, which limit the number of elective courses they may take during high school (Hoover, 1991; Reis, 1997, Georgia Department of Education, 2009). This examination was completed to determine the factors that help or hinder students from entering agriculture education as a profession and to determine if teaching self efficacy is a strong factor in that decision.

Because of the 1917 Smith-Hughes Vocational Education Act (Prentice Hall, n.d.,para 1)schools were provided the ability to offer vocational education. This legislation allowed many students to learn trades while in high school that will be beneficial to them in their career upon graduation (Prentice Hall, n.d.,para 1; Priest, 2008). Although agriculture is more than farming, it is essential that students have a basic understanding of the origins of their food, clothes and other amenities that they enjoy. In order to instill this basic understanding, teachers may provide that knowledge. One of the main goals of the FFA and agricultural education is to prepare students for the work force (Phillips & Osborne, 1998), but what sectors of the agriculture industry do we prepare students for?

Given the present teacher shortage, it is apparent that agricultural education, nor any other entities for that matter, have helped students of agricultural education go into the teaching workforce. From 1984, until the early 90's, the number of students that

entered into teaching vocational agriculture decreased (Georgia FFA, 2009). During this decade, there are consistent job shortages every year. According to Wolf (2008), there is a dramatic shortage of agricultural educators on a national level as well. In 2007, Kantrovich estimated the agricultural educator deficit to be 38.5 percent. Due to this shortage approximately 40 agricultural programs closed in 2007 (Kantrovich, 2007). Perhaps most concerning and/or exciting is the fact leaders of education want to add more programs, thus seemingly enhancing the teacher shortage problem. According to Team AgEd's 10x15 initiative has the goal of 10,000 quality agricultural education programs by 2015 (Team AgEd, 2007). Exactly, where is the breaking point?

The question must be asked, "Why does there exist such a shortage of agriculture teachers?" Ingersoll (2001) states that more than one-third of beginning teachers leave during the first three years, and almost half of teachers leave within the first five years, but why? Research has previously stated problems facing agricultural educators include; classroom management, FFA responsibilities, organizing support groups, developing curriculum and time management (Garton & Chung, 1996; Mundt & Connors, 1999; Myers, Dyer, & Washburn, 2005). Novice teachers typically have more difficulty in the classroom because they lack experience, which leaves them feeling confused, frustrated, and isolated (Croom, 2003). If those same teachers had higher teacher self efficacy they would find more satisfaction within their career choice and they would ultimately be better teachers too (Bandura, 1994). While the question of retention is an important one for bridging the teacher shortage divide, this study will focus on the other part of the problem – attracting talented and experienced students to the career of agricultural education.

There are numerous reasons why agricultural educators choose their profession. If a person has a good experience with their agricultural educator they may choose the same profession. Research has been conducted on what makes an effective agricultural educator one who: encourages, counsels and cares for students, has a sound knowledge of their program, and is dedicated (Roberts & Dyer, 2004).

A possible reason for choosing the agricultural education profession may lie in a person's belief in themselves to do a good job in an area that has provided such productive and enjoyable experiences. This self-belief to do well is called self-efficacy. Specifically, Bandura (1986) defines self-efficacy as a "person's belief in their own ability to be successful" (p. 77). Teacher self-efficacy means, "that person must have a true belief that they can affect a student's life and have an impact" (Bandura, 1997, p. 77). In order to increase teacher self-efficacy it is important that students have successful experiences which increase self confidence. By giving future teachers a better perspective of teaching and how their students will learn and behave they will have a better teaching self efficacy (Darling-Hammond & Bransford, 2005). Student teaching plays a large role in teacher self-efficacy (Woolfolk, 2000), but high school agricultural education experiences also contribute (Priest, 2008).

Confident future teachers sometimes choose agricultural education because of the familiarity of the FFA portion of the total program, but there are so many parts and phases of a successful agriculture program, the ability to be efficacious about all areas can be overwhelming. In fact, everything an agriculture teacher must do can be overwhelming to even a veteran teacher. Imagine how a novice teacher must feel. An agricultural educator has many responsibilities such as livestock shows or Career

Development Events (Talbert, Camp, & Heath-Camp, 1994). In the absence of organized events, a successful agriculture teacher is typically preparing their students for the next event, which often leads to long working days as well (Croom, 2003).

The work of an agricultural educator also has great benefits. Students and their parents find the value of agricultural education. They believe that scientific principles can be found and taught in agricultural education (Ball, 2008). Students and parents believe that agriculture can be a viable career opportunity. Agricultural education programs are high in quality with regards to the education that it offers (Osborne & Dyer, 2000). Agriculture is essential to daily lives and it is vital that agricultural educators continue to teach its importance. This study will determine factors contributing to agriculture teacher self-efficacy and decision to teach. By determining these factors, perhaps the teacher shortage can be diminished via more decisions to teach and developing strategies to improve teaching self-efficacy in agricultural education.

### **Statement of the Problem**

There is currently a shortage of interest in agricultural education as a career choice. Because of this shortage programs have had to close over the past few years (Kantrovich, 2007). Some programs have even had an agricultural educator that went back and forth between two schools. According to research in 2007 there was a shortage of 38.5% throughout the United States in agricultural education (Kantrovich, 2007). Although Team Ag Ed's plan is to have 10,000 agricultural programs by 2015, this may not be possible because of the shortage of students going into agricultural education (Team AgEd, 2007).

Teachers within their first three years of teaching usually face the most problems. Some of the problems that agricultural educators face include; classroom management, deficient facilities, managing FFA, and administrative support (Mundt, 1991). Teachers that have a higher teacher self efficacy have more staying power and typically have higher job satisfaction (Woolfolk Hoy, 2000).

In order to retain agricultural educators they must have a high teacher self efficacy (Wolf, 2008). By determining why a person chose agricultural education as a major may assist in determining what will keep their teacher self efficacy. Sometimes teacher self efficacy may be affected by what they are passionate about, therefore, maintaining a high perceived level of self efficacy. This study will determine what factors, including self efficacy, played a role in choosing agricultural education as a major.

### **Purpose of Study**

The purpose of this study was to increase the understanding of why undergraduates choose agricultural education as a career. Objectives of the study are the following:

1. Describe demographic characteristics that may play a key role in career choice;
2. Describe the perceived teacher self efficacy of undergraduate agricultural education majors;
3. Describe the how an undergraduates learning experience, personal experience and environment play a role in their self-efficacy and;

### **Justification of Study**

The results of this study can better enable agriculture teachers and agricultural professors to determine the restraints of recruitment. It will further add to research on

teacher self efficacy. If professors understand the recruitment issues that agriculture teachers face they can better prepare current students going through agriculture teacher training. The social cognitive career theory state that learning activities, personal characteristics, and a person's environment will influence a person's self efficacy which can affect a person's career choice (Lent & Brown, 1996; Lent, Brown, & Hackett, 1994).

The results of this study should add additional research to the subject on self-efficacy of undergraduate agricultural education major. The study will also shed light on the problems that undergraduate students face and the fears they have about teaching. Not only will the information in this study help agricultural teachers with recruitment but it will also assist professors in recruiting students into the agricultural education program.

Research is needed to better define teacher self efficacy and how job related tasks affect self efficacy (Friedman & Kass, 2002). It is specifically needed for agricultural education according to Friedman and Kass (2002). The results of this study will be used to determine any perceived ideas between self efficacy and job related factors.

### **Limitations of Study**

One of the main limitations to this study would be the limited amount of current undergraduates that plan on becoming an agricultural educator. This study will be a census study of the University of Georgia and Middle Tennessee State University undergraduates in agricultural education. Therefore this study cannot be used to generalize agricultural educators in other states or other professions.

### List of Terms

- **Agricultural Education**-Program which prepares students for careers in all areas of agriculture utilizing three components; classroom/lab, FFA involvement and Supervised Agricultural Experience program. (National FFA, 2009)
- **Career Decision Self-Efficacy (CDSE)**-A person's belief that they can complete tasks that will assist them in making a decision about a career. (Betz & Taylor, 2006)
- **Career Development Events (CDE's)**-Competitions based on in the classroom learning which is then applied to real life skills for FFA members.
- **Career Success**- Demonstrating skills necessary to be successful in a profession or a career (Croom, 2003)
- **National FFA Organization**-An organization, also known as Future Farmers of America, that develops premier leadership, personal growth and career success through agricultural education. (National FFA, 2009)
- **Smith Hughes Act of 1917**- An act that established vocational education throughout public school which lead to the creation of the National FFA Organization.
- **State and National Convention**- Gatherings of FFA members of a yearly basis which includes a voting business meeting, awards and degree presentations and guest speakers.
- **Supervised Agricultural Experience (SAE)**-an after school project that encompasses "learning by doing" that gives students hands on training through goal setting, planning, and record keeping. (National FFA, 2009)
- **Perceived teacher self efficacy**- Judgment about a teachers capability to bring about an outcome of student engagement and the ability for students to learn (Tschannen-Moran & Woolfolk Hoy, 2001)

## **Summary**

The purpose of this study was describe preservice agricultural education majors' teacher self efficacy. Additionally it sought to identify what areas/tasks in the total program of agricultural education that undergraduates view themselves as capable and incapable of performing. Chapter one provided a summary of the study. The guiding objectives were discussed. This study sought to describe the areas in which future teachers view as difficult.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The purpose of this study was to increase knowledge about what causes people to choose teaching agriculture as a profession. This chapter is dedicated to describing related theories and related literature as it pertains to this topic. In addition, theory and findings related to teacher self-efficacy and decision to teach were reviewed. According to Bandura (1994), if a person has a high teacher self efficacy they will have the ability to withstand more, resulting in their retention in the profession. Self efficacy in classroom management is directly related to teacher burn out (Croom, 2003; Wolf, 2008). Teacher self efficacy has directly been correlated with student motivation, classroom management and teacher evaluations (Woolfolk, 2000).

#### **Social Cognitive Theory**

The Social Cognitive Theory explains how people acquire and maintain certain behaviors (Bandura, 1986). There are four core features according to Bandura. They are intentionality, forethought, self-reflectiveness, and self-reactiveness (Bandura, 2004). Figure 2.1, shows how behavioral, personal, and environmental factors influence one another bi-directionally (Bandura, 1986). If choosing to teach or choosing to remain teaching is a behavior, then cognitive beliefs about teaching or environmental events such as secondary agricultural education experience ought to influence decision to teach.

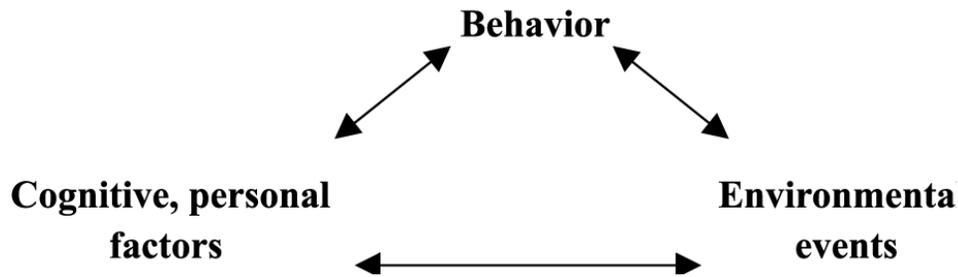


Figure 2.1: Conceptual model of triadic reciprocity in Social Cognitive Theory. (Bandura, 1986)

According to Bandura there are several sources of information that shape self-efficacy beliefs; personal performance accomplishments, learning through others, social pressure (ie. support and encouragement), physiological states and/or reactions (Bandura, 1977, 1986). Typically, personal experiences and the success of that experience leads to stronger self-efficacy (Bandura, 1986; Niles & Harris-Bowlsbey, 2005).

In Figure 2.2, Park and Rudd establish that an agriscience teacher has an effect on a student's career choice by combining the Social Cognitive Theory and Expectancy Theory. Because students spend more time with agricultural educators they are exposed to career choices which the teacher influences (Park & Rudd, 2005). Agricultural educators also have higher expectations of their students which may encourage student career decision (Park & Rudd, 2005).

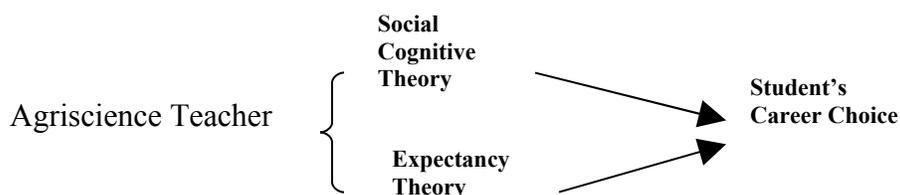


Figure 2.2: Influence of Agriscience Teacher's Career Modeling and Expectations on Career Choice (Park & Rudd, 2005)

## Expectancy Theory

Vroom's (1964) expectancy theory is based on a person's motivation to finish a task based on their views of that task. The theory suggested that people consciously choose an activity based on previous encounters with that task, for example when a baby touches something hot they are less likely to repeat that mistake. The expectancy theory assumes that attaining pleasure from an experiences allows you to continue doing that task. Thus, if a person enjoys their job they, according to the expectancy theory, will continue to do the job as long as they are getting pleasure from it (Vroom, 1964). Figure 2.3 presents an example of the layout of the expectancy theory which assumes if a person puts forth effort and is rewarded they will reach their goals and have higher motivation.

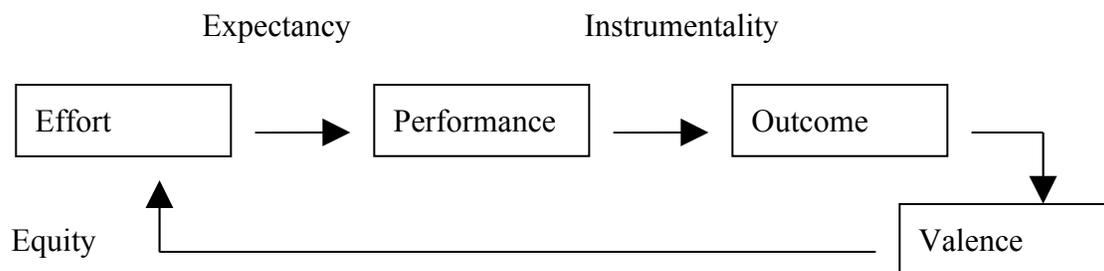


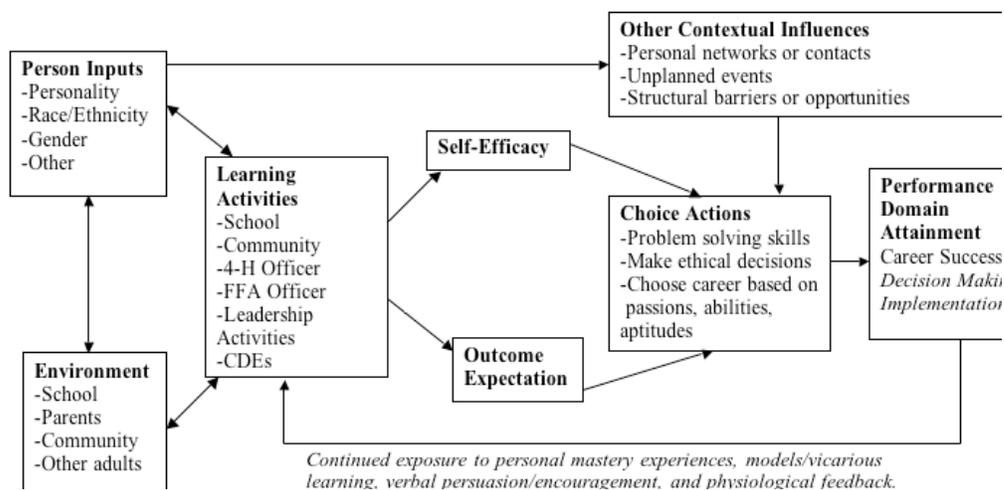
Figure 2.3 Expectancy Theory (Robbins, 2001, p. 171).

## Social Cognitive Career Theory

The social cognitive career theory was developed by Lent, Brown and Hackett and it represents the joining of multiple theories as they pertain to career development (Lent & Brown, 1996). This theory was derived primarily from Bandura's (1986) social cognitive theory and builds upon Krumboltz's (1976) hypothesis that cognitive factors play an essential role in career development and decision making behavior and the difference between choice goals and choice actions. (Mitchell & Krumboltz, 1990; Priest,

2008). The framework provides a basic understanding of how people choose a career based on what their interests centered around and what career they will choose and how they will achieve success in that career (Lent & Brown, 1996, Priest, 2008).

The model of career choice (as seen in Figure 2.4) theorizes that when a person is or feels effective then they expect to have a positive outcome and by doing so will form goals to increase that activity (Lent & Brown, 1996; Lent et al., 1996; Priest, 2008). The social cognitive career theory model displays three interlocking models (Lent et al., 1994). “The model explains how personal characteristics, learning experiences (activities) and contextual factors interact bi-directionally to affect self efficacy and outcome expectation” (Priest, 2008, p. 35).



*Figure 2.4: Proposed Model career decision-making for students in agricultural education(Priest, 2008)*

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### **Self Efficacy Theory**

Self efficacy can be the strongest predictor of human behavior and motivation (Wolf, 2008). When a person believes that they can do well they typically do. People who tend to have high self efficacy typically exhibit desirable traits including motivation, self confidence and control (2008). People that have lower self efficacy are on the other end of the spectrum. Lack of self efficacy can cause a person to avoid conflict or situations and to not recover from their failures (Bandura, 1994). Self efficacy and self esteem should not be used interchangeably (Wolf, 2008). Self esteem is one's opinion of a person's self worth (Woolfolk, 2007).

### **Sources of Self Efficacy**

According to Bandura a person can achieve self efficacy by mastering a situation or task (1994). Once a person feels a sense of self efficacy they will continue to master that task. However, once a person fails at a task, it may have an adverse affect on that person's self efficacy (Wolf, 2008). Failure is easier to manage if that person has high self efficacy (Wolf, 2008).

A person's self efficacy can also be affected by the way a person feels about something or a past experience that is related (Bandura, 1997). If a person allows stress or negative connotations to affect their performance then that person may lower their self efficacy (Bandura, 1994). Some people may have a higher self efficacy after modeling someone. According to Bandura, if a person sees someone who is similar to them

complete a task then they may be more apt to complete that task with higher self efficacy (1997).

### **Teacher Self Efficacy**

Several researchers (Johnson & Wardlow, 2004; Rocca & Washburn, 2006; Johnson & Lester, 2000) have addressed teacher self efficacy in their research and tried to create their own definition based on Bandura's original explanation. Tschannen-Moran and Woolfolk Hoy (2001) defined it as "a person's ability to create a certain outcome concerning student learning and engagement, even with those difficult students" (p.1). It has also been described as a teacher's perception of student achievement and understanding of the material covered (Woolfolk, 2007). Other researchers have stated that it is invaluable to have teacher self efficacy because of the lasting affects (Woolfolk Hoy & Hoy, 2009). Teachers that have high self efficacy can reach those students who are unreachable. These teachers create lessons that engage students (Bandura, 1997).

Teacher self efficacy is typically based on what someone does not learn in a classroom and is typically what teachers struggle the most with; classroom management, creativeness, and commitment (Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). Teachers that have high teacher self efficacy can face difficult situations (Bandura, 1997). Classroom discipline also affects teacher self efficacy which directly affects the classroom environment (Friedman & Kass, 2002). A teacher's physiological and emotional state is influenced through their interactions with their students which can add or delete self efficacy (Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). Teacher burnout is also directly related to teacher self efficacy as is emotional exhaustion (Brouwers & Tomic, 2000).

According to Bandura (1994), a person can watch someone and vicariously attain a higher self efficacy. This higher self-efficacy for teaching is increased based on how closely the person relates to the one they are modeling (Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). This situation usually occurs while a teacher is student teacher and is using the cooperating teacher as a model. The student teaching experience should directly affect a teacher's self efficacy (Woolfolk Hoy & Burke-Spero, 2005). This study, however did not evaluate the contribution of the student teaching experience as agricultural education researchers have already determined that the student teaching experience indeed influences teaching self-efficacy (Stripling, Ricketts, Roberts, & Harlin, 2008).

### **Measuring Teacher Self Efficacy**

Teacher self efficacy is measured with various instruments based on the Social Cognitive Theory (Bandura, 1986) and the Social Learning Theory (Rotter, 1966). Perhaps the most accepted teacher self-efficacy measure is the Gibson and Dimbo Teacher Efficacy Scale (Gibson & Dimbo 1984). Each of these instruments has three factors: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement (Wolf, 2008). Secondary agricultural educator teacher self efficacy has been measured by using the Teacher Sense of Efficacy Scale by Tschannen Moran and Woolfolk Hoy (2001), but it has also been measured with other scales. Duncan and Ricketts (2006) used simple summated rating scale items to measure teachers self-perceived abilities in areas of technical agriculture content, FFA/leadership/SAE, teaching and learning, and program management. Wolf (2008) adapted her survey form Ricketts, et al. and others to reflect a full range of agriculture

teacher self-efficacy. Wolf's survey was the one used to measure self-efficacy in this study.

### **Agricultural Education Self Efficacy**

Agricultural education has contributed many teaching self-efficacy examples. Self efficacy in agricultural education was evaluated by Rodriquez in 1997. Rodriquez determined that that personal self efficacy was higher than general teaching efficacy in preservice and beginning agricultural teachers. Knobloch released a study in 2001 on the influence of peer teaching on self efficacy. In 2003 Knobloch and Whittington conducted research on the self efficacy of students during student teaching through teachers in their first three years. The only group that showed an increase in teacher self efficacy was the student teacher group. If a beginning teacher has high self efficacy then they are more likely to remain in the profession. Education, experience and support are some of the many things that help beginning teachers stay in the profession longer (Knobloch & Whittington, 2003).

Career decision is a factor that may affect teacher self efficacy (Knobloch & Whittington, 2003a). Research has further proved that teachers that have long term career goals have a higher teacher self efficacy (Knobloch & Whittington, 2003). In another study researchers determined the self efficacy of student teacher in agricultural education throughout their student teaching experience. The researchers found that the overall teaching self efficacy score varied throughout their entire experience (Roberts, Harlin & Ricketts, 2006). Research has analyzed teaching self-efficacy of traditionally certified and alternatively certified teachers with no identifiable differences noted (Rocca & Washburn, 2006).

### **Demographic Characteristics Related to Teacher Self Efficacy**

Teacher self efficacy varies from situation to situation (Wolf, 2008). Bandura (1996 as cited in Wolf, 2008) says however that self efficacy is based on past experiences. Those experiences may develop in one's youth while participating in a student organization (Wolf, 2008; Priest, 2008). Gender may also play a role in teacher self efficacy females with higher degrees typically have higher teacher self efficacy (Ross, Cousins and Gadalla (1996) Education also affects self efficacy (Wolf, 2008). Higher degrees are directly correlated with higher levels of self efficacy (Hoover-Dempsey, Bassler & Brissie 1987).

### **Teachers Perception of Preparation and Importance**

The quality of teacher preparation is directly related to teacher self efficacy (Knobloch & Whittington, 2002). If a student feels prepared they have a higher level of teacher self efficacy (Ross, Cousins & Gadalla, 1996). One study found that gender plays no role with teacher self efficacy however, teacher experience plays a large role in ones self efficacy (Roberts, Mowen, Edgar, Harlin, and Briers 2007). Agricultural education student teachers from the University of Georgia complete 12 weeks of student teaching experience (Ricketts, 2009).

### **Factors Affecting Decision to Teach**

Different teachers use different methods to recruit FFA members which may also assist them in recruiting agricultural educators. There is no wrong or right way to encourage students to join the FFA or to be an agricultural educator. Some suggestions have been to have written materials to pass out, to have technology-assisted recruitment in the classroom and/or to use student role models (Hoover & Scanlon, 1991). Other

items that teachers rarely use because they are time consuming are visiting one-on-one with prospective students and updating content (Hoover & Scanlon 1991). Several programs have closed or teachers have lost extended/supplemental contracts because of lack of membership (Myers, Breja & Dyer, 2004). Myers, et al. (2004) created a table of issues and solutions on recruitment issues. One of the issues was teacher quality and commitment and their solution was that if teachers were more prepared in their teacher preparation they would be more effective in recruiting students. Narrow recruitment was also an issue; recruiters should focus on expanding the recruitment to all groups (Parker & Rudd, 2005)

### **Summary**

This study focuses around Bandura's (1986) Social Cognitive Theory and Bandura's (1997) Self Efficacy Theory. Vroom's (1964) Expectancy Theory explains that if a person is rewarded for doing something then they will continue doing that task. Park and Rudd (2005) explains how agricultural teachers affect career decision and Priest (2008) explains what other factors affect career choice. Teacher self efficacy is vital to the success of education. If teachers feel success they will continue to teach.

## **CHAPTER 3**

### **METHODS AND PROCEDURES**

#### **Purpose and Objectives**

The purpose of this study was to determine the factors that affect the college student with an agricultural education major to teach and their teacher self-efficacy. The results of this study will afford current agricultural educators and college professors the knowledge to combat the teacher shortage in agricultural education. This chapter will discuss the design of the research, give an overview of the population that was studied, describe the instrument that was used, and explain the data collection process.

#### **Research Design**

The study was a descriptive survey and was a census of all University of Georgia and Middle Tennessee State University agricultural education undergraduates (N = 63) who were taking classes in the fall of 2009 semester. Because the study was a census, the results may not be generalized beyond the population. However, pre-service agricultural education majors are very similar from one teacher education institution to another, therefore generalization with caution may contribute to the knowledge base and more importantly teacher recruitment/retention issues beyond the state of Georgia.

#### **Population and Sample Selection**

The target population for this study is all students enrolled in agricultural education at the University of Georgia. Participants were obtained from courses taught Agricultural Education majors at the University of Georgia and Middle Tennessee State University. There were 55 respondents out of 63 with a response rate of 87%.

### **Procedures**

Data was collected by professors in Agricultural Education. Students not responding the first time the instrument was administered were asked on numerous occasions if they would be willing to participate. Approval from the Institutional Review Board was sought, and was approved October 5, 2009.

The survey was given to agricultural educator majors from the University of Georgia and Middle Tennessee State University. University of Georgia and Middle Tennessee State University professors distributed the surveys to all of the students listed as an agricultural education major. The simplistic approach to the survey was significant due to the difficulty that college students face (Henderson & Nieto, 1991). Emails, phone calls, and in some cases face to face visits were made with the non-respondents of the initial survey.

Data from the 55 respondents was entered into Microsoft Excel where the identifiers were removed. Data was collected until October 30, 2009.

### **Instruments**

The teacher self-efficacy instrument (Appendix B) was provided by Dr. Kattlyn J. Wolf of the University of Idaho. This instrument was chosen because it seemed to do the best job of reflecting the different areas involved in being a teacher of agriculture. The instrument by Wolf divides teacher self-efficacy into the domains of classroom, FFA, and SAE. In addition to the self-efficacy instrument, a demographic/experience survey was utilized.

Dr. Wolf's instrument, which was specifically designed for agricultural educators was developed from a variety of sources in agricultural education (Duncan & Ricketts,

2006; Duncan, Peake, Ricketts, & Uessler, 2005; Garton & Chung, 1996; Joerger, 2002; Myers, Dyer, & Washburn, 2005; Roberts & Dyer, 2004) as well as the general education community (Wolf, 2008; Tschannen-Moran & Woolfolk Hoy, 2001).

The instrument was scaled based on the *Teachers Sense of Efficacy Scale* which has a nine point summated rating scale (Wolf, 2008; Tschannen-Moran & Woolfolk Hoy, 2001). Subjects responded to the items based on their level of capability ranking from 1-None to 9-A great deal of capability. The instrument asked subjects their perceived self efficacy on specific tasks (Wolf, 2008). Wolf's reported reliability for each scale was: overall 7.05, classroom 7.15, FFA 7.05, SAE 6.96. The demographic data did not require reliability reports.

### **Data Analysis**

The data was analyzed using the Statistical Package for Social Sciences (SPSS v. 17). Frequencies, means, standard deviations, Pearson's r correlations were the statistics used for reporting.

Descriptive parameters were used to answer research question one: describe agricultural education majors' perceptions of decision to teach and demographic characteristics that may play a key role in career choice; describe the perceived teacher self efficacy of undergraduate agricultural education majors; and describe the relationship between agricultural teaching self-efficacy and decision to teach.

### **Summary**

Chapter three explained the methods and procedures conducted in this quantitative study regarding teacher self efficacy among undergraduate students at the University of Georgia and Middle Tennessee State University. The casual-comparative

research methods employed the use of Dillman's (2002) *Tailored Design Method* for the internet and mail surveys. Threats to validity were discussed. Methods and procedures were outlined. Descriptions of the instrument were reported, data was collected and analyses were described. Chapter four will provide a detailed report of the data and a discussion of the results.

## CHAPTER 4

### RESULTS

Chapter One introduced the problem, and Chapter Two presented the theoretical framework and additional literature related to this study. Chapter Three detailed the methods and procedures, and in this chapter the results will be presented. Each of the objectives will be evaluated and demographics of agricultural education majors will be established. A valid and reliable instrument (Wolf, 2008) was used to collect agriculture teacher self-efficacy data.

Results for Objective 1: Describe undergraduate agricultural education majors' perceptions of career choice/decision to teach and characteristics that may influence career choice.

The subjects that submitted this survey were all undergraduate agricultural education majors at a major university. The age of the subjects ranged from 19-43 with the average age of 21. All of the individuals that completed the survey had no teaching experience other than practice teaching,. Thirty two (58%) of the respondents were female while twenty three (42%) were male. All of the respondents were white. Eighty seven percent of the respondents were FFA members (Table 4.1), and the 34 percent received their State FFA Degree while 20 percent received their American FFA Degree (Table 4.2). Of the 87 percent of FFA members 62 percent were FFA Officers, (Table 4.3).

Table 4.1.: Were you an FFA member?

	<i>f</i>	P
Was not an FFA member	7	13
Was an FFA member	48	87

Note: *f*=frequency, *P*= percentage, Students who were involved in the National FFA Organization (N=55)

Table 4.2.: If you were an FFA member, what was the highest degree you earned?

	<i>f</i>	P
No Degree	8	15
Greenhand Degree	4	7
Chapter Degree	6	11
State Degree	19	35
American Degree	11	20

Note: *f*=frequency, *P*= percentage, Students who were involved in the National FFA Organization (N=55)

Table 4.3.: If you were an FFA member, were you an officer?

	<i>f</i>	P
I was not an FFA officer	14	26
I was an FFA Officer	34	62

Note: *f*=frequency, *P*= percentage, Students who were involved in the National FFA Organization (N=55)

Fifty five percent of the respondents said that if they were offered an agricultural science position in an upstanding community that they would take the job, as seen in Table 4.4. Although, 38% of respondents said that they did not plan on teaching agricultural after graduation but wanted to continue to graduate school, Table 4.6. All of the respondents were white. Twenty three percent of the respondents had at least a part time job revolving around agriculture while 36% had a full time job in agriculture, Table 4.5.

Table 4.4. *If You Were Offered a Suitable Agricultural Science Teaching Position in a Community of Your Choice, Would you take it?*

	<i>f</i>	P
Definitely Yes	30	55
Yes	9	16
Probably Yes	9	16
Unsure	6	11
No	1	2

Note: *f*=frequency, *P*= percentage, Students who were involved in the National FFA Organization (N=55)

Table 4-5.: *Work Experience in Agriculture Prior to Graduate*

	<i>f</i>	P
1.00	4	7.3
2.00	7	12.7
3.00	13	23.6
4.00	11	20.0
5.00	20	36.4

Note: *f*=frequency, *P*= percentage, Work experience related to agriculture (N=55)

Table 4-6.: Plans after graduation

	<i>f</i>	P
Teach Agricultural Science	21	38.2
Go to Graduate School	14	25.5
Unsure	9	16.4
Other Employment	4	7.3
Teach Agriculture and Go to Graduate School	7	12.7

Note: *f*=frequency, *P*= percentage, Students who were involved in the National FFA Organization (N=55)

Results for Objective 2: Describe the self-efficacy of agricultural education job-related factors of undergraduate students;

Teacher self efficacy in agricultural education was assessed using an instrument created by Kattlyn Wolf. Three domains were established within the instrument: Classroom, FFA, and SAE (Table 4.7). Respondents in this study indicated that they had a high self efficacy on most items. The summated mean for teacher self efficacy in agricultural education was 7.12

Table 4.7: *Summated Mean of Domains: Classroom, FFA, SAE*

	<i>f</i>
Classroom Self Efficacy	6.96
FFA Self Efficacy	7.14
SAE Self Efficacy	7.27
Overall Self Efficacy	7.12

Table 4.3: *Summated Mean of Domains: Classroom, FFA, SAE: f/P (N=55)*

Note: *f*=frequency, *P*= percentage, Low = 1-3, Moderate = 4-6, High = 7-9. 1= No Capability, 3 = Very Little Capability, 5 = Some Capability, 7 = Quite a Bit of Capability, 9 = Great Deal of Capability

#### Perceived teacher self efficacy in the classroom domain

In the classroom domain (Table 4.8), teachers indicated they had high capability on most items. The summated mean for the classroom domain was 6.96 (Table 4.7). Teachers reported the lowest levels of teacher self efficacy in the classroom domain when compared to the FFA and the SAE domains.

Over 75 percent of the teachers reported high levels of capability on three items: implementing alternative strategies, conducting field trips, utilizing multimedia in the classroom. However, most teachers reported moderate or low levels of capability for two items: managing a horticulture laboratory/greenhouse (low= 9%), and managing a agricultural mechanics laboratory (low= 16%).

Table 4.8: *Teacher Self-Efficacy in Classroom Domain*

<i>What is your level of capability to:</i>	<i>Low</i>	<i>Moderate</i>	<b>High</b>
Use a variety of teaching techniques	0	16/29	41/75
Provide alternative explanations when students are confused	0	17/31	42/76
Respond to difficult questions from my students	1/1	20/36	38/69
Utilize computers in my teaching	3/5	14/25	41/75
Implement a curriculum in agriculture	3/5	20/36	36/65
Evaluate student learning	1/1	26/47	32/58
Motivate students to learn	0	20/36	36/65
Utilize multimedia in my teaching	2/3	27/49	36/65
Create lesson plans for instruction	0	21/38	34/62
Use a variety of assessment strategies	0	20/36	38/69
Craft good questions for my student	0	18/33	39/71
Effectively conduct field trips	2/3	11/20	46/84
Implement alternative strategies in my classroom	1/1	12/22	37/67
Teach students to think critically	1/1	16/29	32/58
Manage student behavior	0	23/42	32/58
Teach students with special needs	2/3	19/35	36/65
Provide appropriate challenges for very capable students	2/3	15/27	42/76
Manage an agricultural mechanics laboratory	9/16	14/25	36/65
Manage a horticulture laboratory/greenhouse	5/9	18/33	39/71
Adjust my lessons to proper level for individual students	2/3	18/33	40/73

Table 4.8: *Teacher Self-Efficacy in Classroom Domain: f/P (N=55)*

Note: *f*=frequency, *P*= percentage, Low = 1-3, Moderate = 4-6, High = 7-9. 1= No Capability, 3 = Very Little Capability, 5 = Some Capability, 7 = Quite a Bit of Capability, 9 = Great Deal of Capability

### Perceived teacher self efficacy in the FFA domain

In the FFA domain (Table 4.9), teachers indicated they had high capability on most items. The summated mean for the FFA domain was 7.14 (Table 4.7).

Over 89 percent of the teachers reported high levels of capability on three items: assist students in planning FFA Banquets, supervising students during FFA trips and activities, and train a chapter FFA officer team. However, most teachers reported moderate or low levels of capability for two items: Utilizing FFA Alumni (low= 7%), and coach leadership based teams (low= 11%).

Table 4.9: *Teacher Self-Efficacy in FFA Domain*

<i>What is your capability to:</i>	<i>Lo</i>	<i>Moderate</i>	<b>High</b>
Assist students in planning FFA banquets	0	7/12	51/93
Assist students in facilitating FFA fundraising activities	2/3	14/23	45/82
Supervise students during FFA trips and activities	1/1	15/27	45/82
Advise FFA Meetings	2/3	9/16	50/91
Assist students in planning FFA chapter activities	4/7	6/10	49/89
Assist students in developing community service projects	3/5	6/10	50/91
Recruit new FFA members	3/5	10/18	44/80
Coach leadership based (Eg. Speaking, Parliamentary Procedure etc.) CDE teams	6/11	19/35	34/62
Train a chapter officer team	4/7	8/33	38/69
Assist students in recruiting new FFA members	7/12	12/22	40/73
Assist students in developing an effective public relations program for the FFA chapter	4/7	14/25	41/75
Assist students in preparing a Program of Activities	2/3	10/20	47/85
Coach skills based (Eg, Evaluation, Ag. Mechanics etc.) CDE teams	3/5	18/33	38/60
Assist students in preparing FFA degree applications	3/5	6/11	50/91
Assist students in preparing FFA proficiency applications	3/5	8/15	50/91
Utilize FFA Alumni	4/7	7/12	44/80
Utilize a Program Advisory Board	3/5	6/11	49/89

Table 4.9: *Teacher Self-Efficacy in FFA Domain: f/P (N=55)*

Note: *f*=frequency, *P*= percentage, Low = 1-3, Moderate = 4-6, High = 7-9. 1= No Capability, 3 = Very Little Capability, 5 = Some Capability, 7 = Quite a Bit of Capability, 9 = Great Deal of Capability

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### Perceived teacher self efficacy in the SAE domain

In the SAE domain (Table 4.10), teachers indicated they had high capability on most items. The summated mean for the SAE domain was 7.27 (Table 4.7). Teachers reported the highest levels of teacher self efficacy in the SAE domain when compared to the FFA and the classroom domains.

Over 83 percent of the teachers reported high levels of capability on three items: provide career explorations for students, develop SAE's for students, and make recommendations on student's SAE projects.. However, most teachers reported moderate or low levels of capability for two items: motivate students to have SAE's projects (low= 12%), and conducting SAE home visits (low= 5%).

Table 4.10: *Teacher Self-Efficacy in SAE Domain*

<i>What is your level of capability to:</i>	<i>Lo w</i>	<i>Moderat e</i>	<b>High</b>
Assist students in receiving recognition for SAE projects	2/3	7/12	50/91
Provide career exploration opportunities for students	2/3	6/10	51/93
Conduct home/SAE visits	3/5	11/20	45/82
Supervise student placement SAE programs	4/7	11/20	44/80
Show students the value of SAE programs	3/5	13/24	44/80
Assist students in keeping SAE records	3/5	17/31	39/71
Supervise student entrepreneurship SAE programs	3/5	14/25	42/76
Make recommendations for students' SAE projects	4/7	11/20	44/80
Supervise student production SAE programs	5/9	9/16	45/82
Utilize resources to make recommendations to students' SAE projects	3/5	10/18	46/84
Motivate students to have an SAE program	7/12	10/18	43/78
Utilize the community to develop SAE opportunities for students	5/9	7/12	46/84
Develop SAE opportunities for students	4/7	8/15	47/85

Table 4.10: *Teacher Self-Efficacy in SAE Domain: f/P (N=55)*

Note: *f*=frequency, *P*= percentage, Low = 1-3, Moderate = 4-6, High = 7-9. 1= No Capability, 3 = Very Little Capability, 5 = Some Capability, 7 = Quite a Bit of Capability, 9 = Great Deal of Capability

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Results for Objective 3: Describe the relationship between agriculture teacher self efficacy and career choice/decision to teach.

The differences in the summated means of overall teacher self efficacy and the three domains (Classroom, FFA, SAE) are based on nominal demographic characteristics. Conventions were used to describe the relationships: .01 to .09 = negligible association, .10 to .29 = low association, .30 to .49 = moderate association, .50 to .69 = substantial association, .70 or higher = very strong association. There was a positive correlation but a moderate to low association with each of the domains.

Table 4.11: Correlation between Teacher Self Efficacy and Decision to Teach.

	1	2	3	4
<b>Decision to Teach1</b>		<b>.20</b>	<b>.35**</b>	<b>.31*</b>
<b>Self-efficacy</b>			<b>.43**</b>	<b>.35**</b>
<b>Classroom2 Self-efficacy FFA3</b>				<b>.80**</b>
<b>Self-efficacy SAE4</b>				

### **Summary**

Chapter four presented results related to the study's three research objectives: a) describe undergraduate agricultural education majors' perceptions of career choice/decision to teach and characteristics that may influence career choice; b) describe the self-efficacy of agricultural education job-related factors of undergraduate students; and c) describe the relationship between agriculture teacher self efficacy and career choice/decision to teacher self efficacy. Chapter five will offer additional analysis and discussion of the data, as well draw conclusions and make recommendations based on the results.

## CHAPTER 5

### SUMMARY AND RECOMMENDATIONS

The frame for this study was students enrolled as agricultural education majors at the University of Georgia. The program identified 62 students who met this criteria. This number was cross referenced throughout the Department of Agricultural Leadership, Education and Communication at the University of Georgia. The final frame for this study was 63; the number of respondent's was 55.

Data for this study was collected using an instrument developed from Kattlyn Wolf for a similar study performed at Ohio State University in 2009. "The development of a reliable and valid instrument, that is specific to agricultural education, is a step forward in understanding teacher self efficacy" (Wolf, 2009). The instrument included domains in the following areas created by Dr. Wolf: Classroom, FFA and SAE (Phipps, Osborne, Dyer & Ball, 2008; Wolf, 2009). The three domains were a comprehensive list of job related tasks of agricultural educators (Wolf, 2009; Duncan & Ricketts, 2006; Duncan, Ricketts, Peake & Usseler, 2005; Garton & Chung, 1996; Joerger, 2002; Myers, Dyer, & Washburn, 2005; Phipps, Osborne, Dyer, & Ball, 2008; Roberts & Dyer, 2004). The instrument was created specifically to address concerns of Bandura for agricultural educators on a general measurement of teacher self efficacy (1996; Wolf, 2009).

Summary of Conclusion for Objective 1 Describe undergraduate agricultural education majors' perceptions of career choice/decision to teach and characteristics that may influence career choice.

All respondents were undergraduate agricultural majors from the University of Georgia. Respondent's ages ranged from 19 to 43. 48 percent of the respondents were enrolled in agricultural education. 48 percent of the respondents said "If offered a job in

the community of their choice they would take it” however, only 38 percent planned on teaching upon graduating with their bachelor’s degree.

The researcher concluded based on these findings that the average age of the undergraduate agricultural education student is 21 and the majority of them participated in the National FFA Organization. It is also concluded that the majority of the undergraduate agricultural education major will not go into teaching upon graduating with their B.S but will continue to further their education. It was also shown that 13 percent of the respondents were not involved with the FFA but still had intentions on becoming an agricultural educator.

#### Summary of Conclusions for Objective 2: Describe the perceived teacher self efficacy of undergraduate agricultural education majors

Undergraduate agricultural education majors perceived themselves to be successful. Respondents reported the lowest level of teacher self efficacy in the classroom domain, and the highest in the SAE domain. Respondents in this study indicated they had high levels of capability on most items in the classroom domain. Two items had noticeably lower ratings in the following areas: the management of a horticulture laboratory/greenhouse and the management of an agricultural mechanics laboratory.

The FFA domain, respondents reported the middle level of capability. The highest items consisted of: planning FFA banquets, supervise students while on FFA trips and, train the FFA officers. The items that recorded lowest were: completing proficiency applications and working/utilizing an advisory board and alumni. In the SAE domain, respondents had high levels of self efficacy in the following areas: provide career

explorations, develop SAE opportunities for students, and make recommendations for student projects. The items that were reported the lowest were: supervise SAE programs and conduct home visits.

It was concluded that the average undergraduate student in this study was more efficient in the SAE domain and less in the classroom domain.

Summary of Conclusions for Objective 3: Describe the relationship between agriculture teacher self efficacy and career choice/decision to teach.

There was a strong relationship between all three domains of agricultural teacher self efficacy and decision to teach. Undergraduates that were involved with agricultural education previously had a higher self efficacy within the FFA domain. Undergraduates that planned to teach had a higher teacher self efficacy. The biggest concern with the future teachers is within the classroom domain and managing horticultural laboratory/greenhouse and agricultural mechanics laboratory.

All independent variables including demographics were entered into a multiple regression formula to determine what contributes to decision to teach beyond teacher self-efficacy, and none of the independent variables contributed to decision to teach.

Recommendations for Objective 1: Describe undergraduate agricultural education majors' perceptions of career choice/decision to teach and characteristics that may influence career choice.

The majority of the respondents said that they wanted to teach agricultural science upon graduation although the majority of the respondents want to continue their education before teaching. The quality of previous experiences, FFA involvement, FFA Degrees and being an FFA Officer, had a positive relationship with overall teacher self efficacy. It was a recommendation of Wolf's (2008) study for schools to focus on

providing training assistance and professional development for teachers that are within the first year of teaching. It is imperative to recruit additional students into the University of Georgia Department of Agricultural Leadership Education and Communication to insure that agricultural education positions are filled each year. Approximately, 70 percent of qualified candidates become teachers nationally (Kantrovich, 2007), 35 percent in the Wolf (2008) study as compared to the 38 percent within this study. This study shows that when that 38 percent graduate and become teachers they will have a high self efficacy.

Further it is important to recruit a diverse student body. The majority of the respondents were female and all respondents are white. A goal of the National FFA Organization (2009) is to have a diverse population and to insure that we should have a diverse population of educators.

#### Recommendations for Objective 2: Describe the perceived teacher self efficacy of undergraduate agricultural education majors

The majority of the undergraduate agricultural education students at the University of Georgia and Middle Tennessee State University have a high teacher self efficacy. The classroom domain was the lowest while SAE was the highest. Having high teacher self efficacy has been directly tied to success in the classroom. Perhaps having more time practice teaching would assist in the respondents having a higher teacher self efficacy. The average practice teaching time prior to student teaching was 17 percent. The higher the self efficacy the less likely a teacher is to leave the profession which would result in raising the turnover rate. Due to the added stress of an agricultural educator it is important to have a high teacher self efficacy to insure longevity.

Many of the respondents do not feel comfortable in lab situations therefore, more time working in lab situations will increase teacher self efficacy. Within the SAE domain respondents did not feel comfortable doing home visits or motivating students to have an SAE. The agricultural education revolves around the model that each, FFA, SAE, and Class/lab are vital to student success. Therefore, if prospective agricultural educators are not comfortable with these areas it may be in the best interest for professors to focus on these areas. Within the FFA domain, respondents did not feel comfortable working with alumni or an advisory board. Again, with working with alternative resources it may be beneficial for respondents to work with these groups throughout their time as an undergraduate.

Recommendations for Objective 3: Describe the relationship between agriculture teacher self efficacy and career choice/decision to teach.

The respondents that said they planned to teach upon graduation had a high teacher self efficacy. Unfortunately, that was only 38 percent of the population. The other 48 percent either planned to pursue higher education or pursue another career opportunity. It is important to raise the 38 percent of people who plan on going to teach upon graduation. If the trend continues for people to pursue higher degrees then the shortage of agricultural educators will continue to decrease. Perhaps the University of Georgia and Middle Tennessee State University should offer an advanced degree in agricultural education.

### **Summary**

The majority of undergraduates at the University of Georgia and Middle Tennessee State University have a high teacher self efficacy. Unfortunately, not all of those students plan to teach upon graduation. It is imperative that educators prepare future agricultural educators to insure the longevity of the agricultural education program. Because the classroom domain shows the most need for improvement the focus of teacher educators should insure that these prospective teachers are ready to be in the classroom. Further research should be conducted to determine what other factors may affect decision to teach.

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**APPENDIX A**  
**CONTACT SCRIPTS**

**CONTACT SCRIPT ONE:**

Dear Student:

I am a graduate student under the direction of Dr. John Ricketts in the Department of Agricultural Leadership, Education and Communication at The University of Georgia. I am inviting you to participate in my research study entitled "Why They Teach? Secondary Education Experience Contributions to Teaching Self Efficacy in Agricultural Education Majors." The purpose of this study is to contributions while in high school and how they contribute to your self efficacy. Your voluntary participation will involve a ten to fifteen minute survey.

The survey will be handed to you shortly. Please remember that this is voluntary and is in no way related to your grade. Also take into consideration that this survey is anonymous.

Please complete the survey during this class.

If you have any questions about this research project, please feel free to send an e-mail to [catrinakennedy@gmail.com](mailto:catrinakennedy@gmail.com). Thank you for your participation. Please see the attached informational survey for more details.

Sincerely,  
Catrina Kennedy

**APPENDIX B**  
**QUESTIONARE AND COVER LETTER**

Dear Potential Agricultural Educator,

You are being asked to voluntarily participate in a research study. This research study is intended to assess your perceptions as a beginning agriculture teacher. Your response to this questionnaire will greatly assist in improving teacher preparation and teacher induction programs. The questionnaire will take approximately 15 minutes to complete. There are no known risks to your participation in completing this questionnaire. Your participation is voluntary. You may answer some or none of the questions. Your results will be kept confidential.

Thank you for your time!

Catrina L. Kennedy  
Agricultural Leadership

Please respond to the following questions related to your capabilities in the following items and how important those items are in your program.

**For Example:** If you feel that you have 'Some Capability' regarding, "Include the school principal in your program", circle the number 5 on the scale to the left of the item. If you feel that it is 'Slightly Important' to "Include the school principal in your program", circle the number 3 on the scale to the right of the item.

No Capability	Very Little Capability	Some Capability	Quite a Bit of Capability	A Great Deal of Capability		Not Important	Slightly Important	Fairly Important	Important	Very Important								
1	2	3	4	5	6	7	8	9	Include the school principal in your program	1	2	3	4	5	6	7	8	9

Respond using this scale to indicate your **capability** relative to each item

Respond using this scale to indicate your perception of the **importance** relative to each item

No Capability	Very Little Capability	Some Capability	Quite a Bit of Capability	A Great Deal of Capability	<p><b>Please complete both ends of the scale</b></p>	Not Important	Slightly Important	Fairly Important	Important	Very Important								
What is your level of <b>capability</b> to:						How <b>Important</b> is it to:												
1	2	3	4	5	6	7	8	9	Motivate students to learn	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	Manage student behavior	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	Use a variety of teaching techniques	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	Teach students to think critically	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	Create lesson plans for instruction	1	2	3	4	5	6	7	8	9

Respond using this scale to indicate your **capability** relative to each item

Respond using this scale to indicate your perception of the **importance** relative to each item

No Capability Very Little Capability Some Capability Quite a Bit of Capability A Great Deal of Capability										Please complete both ends of the scale										Not Important Slightly Important Fairly Important Important Very Important									
What is your level of capability to:										How Important is it to:																			
1	2	3	4	5	6	7	8	9	Respond to difficult questions from my students	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Craft good questions for my students	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Adjust lessons for individual students	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Evaluate student learning	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Use a variety of assessment strategies	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Provide alternative explanations when students are confused	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Implement alternative strategies in my classroom	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Provide appropriate challenges for very capable students	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Teach students with special needs	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Utilize computers in my teaching	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Utilize multimedia in my teaching	1	2	3	4	5	6	7	8	9											

Respond using this scale to indicate your **capability** relative to each item

Respond using this scale to indicate your perception of the **importance** relative to each item

No Capability Very Little Capability Some Capability Quite a Bit of Capability A Great Deal of Capability										Please complete both ends of the scale										Not Important Slightly Important Fairly Important Important Very Important									
What is your level of capability to:										How Important is it to:																			
1	2	3	4	5	6	7	8	9	Manage a horticulture laboratory/greenhouse	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Implement a curriculum in agriculture	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Manage an agricultural mechanics laboratory	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Effectively conduct field trips	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Advise FFA meetings	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Train a chapter officer team	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Assist students in planning FFA chapter activities	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Assist students planning FFA banquets	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Assist students in facilitating FFA fundraising activities	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Assist students in preparing FFA degree applications	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Assist students in preparing FFA proficiency applications	1	2	3	4	5	6	7	8	9											
1	2	3	4	5	6	7	8	9	Assist students in preparing a Program of Activities	1	2	3	4	5	6	7	8	9											

Respond using this scale to indicate your **capability** relative to each item

Respond using this scale to indicate your perception of the **importance** relative to each item

Please complete both sides	
What is your level of <b>capability</b> to:	How <b>Important</b> is it to:
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Coach leadership based (Eg. Speaking, Parliamentary Procedure etc.) CDE teams	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Coach skills based (Eg. Evaluation, Ag. Mechanics, etc.) CDE teams	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Utilize the FFA Alumni	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Utilize a Program Advisory Board	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Recruit new FFA members	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Assist students in recruiting new FFA members	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Assist students in developing an effective public relations program for the FFA chapter	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Supervise students during FFA trips and activities	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Assist students in developing community service projects	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Provide career exploration opportunities for students	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Develop SAE opportunities for students	

Respond using this scale to indicate your **capability** relative to each item

Respond using this scale to indicate your perception of the **importance** relative to each item

Please complete both sides	
What is your level of <b>capability</b> to:	How <b>Important</b> is it to:
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Motivate students to have an SAE program	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Supervise student entrepreneurship SAE programs	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Supervise student placement SAE programs	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Supervise student production SAE programs	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Conduct home/SAE visits	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Make recommendations for students' SAE projects	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Utilize resources to make recommendations to students' SAE projects	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Assist students in keeping SAE records	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Utilize the community to develop SAE opportunities for students	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Show students the value of SAE programs	
1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9
Assist students in receiving recognition for SAE projects	

## Personal Information

1. If you were offered a suitable agricultural science teaching position in a community of your choice, would you take it?
 

A. Definitely Yes	E. Probably No
B. Yes	F. No
C. Probably Yes G. Definitely No	
D. Unsure	
  
2. What are your plans after graduation?
 

A. Teach Agricultural Science	D. Teach another subject
B. Continue education (grad school)	E. Other employment (including military)
C. Unsure	
  
3. Are you currently a/an?
 

A. undergraduate	B. postgraduate seeking <b>only</b> certification
C. postgraduate seeking certification <b>and</b> second undergraduate degree	
E. graduate student seeking certification, <b>but not</b> a graduate degree	
F. graduate student seeking certification <b>and</b> graduate degree	
  
4. Race/Ethnicity
 

A. American Indian or Alaskan Native	D. Asian
B. Black or African American	E. Hispanic/Latino
C. Native Hawaiian or Other Pacific Islander	F. White
  
5. Besides your formal education, which would best describe your agricultural work experience?
 

A. None	B. Mostly avocational (e.g., assisting a friend "feeding cows" on an occasional weekend, planting and caring for a garden)
C. Part-time employment (e.g., working at the local feed store after school and on weekends)	
D. Full-time temporary employment, one or more summers, in a production or agribusiness setting	
E. Full-time employment, for more than six months, in agricultural industry	
  
6. Current University \_\_\_\_\_
  
7. Gender    Male \_\_\_\_\_                      Female \_\_\_\_\_
  
8. Age \_\_\_\_\_
  
9. While in high school were you an FFA Member?    Yes \_\_\_\_\_                      No \_\_\_\_\_
  
10. If you answered yes to 9, what was the highest FFA degree received?
 

A. Greenhand	C. State
B. Chapter	D. American
  
11. If you answered yes to 9, were you an FFA Officer? Yes \_\_\_\_\_, How many years \_\_\_\_\_                      No \_\_\_\_\_
  
12. How many hours did you have practice teaching prior to student teaching? \_\_\_\_\_