AGRICULTURAL EDUCATION IN GEORGIA: DETERMINING TEACHER SUPPLY AND PROGRAMMATIC DEMAND

by

W. JUSTIN SEALY

(Under the direction of Jason Peake)

ABSTRACT

This study identified gender, age, and years of experience demographics for current Georgia agriculture teachers and described the subjects' interest in pursuing either a master's or doctoral degree of Agricultural Leadership from The University of Georgia. The survey population included all middle, high, and adult education (Young Farmer) teachers in Georgia. Survey instruments were distributed during the 2006 Georgia Vocational Agricultural Teachers Association Summer Conference and follow up data collection was conducted at area and regional agriculture teacher meetings. Responses were received from 293 of 389 teachers employed in Georgia (75% response rate). Approximately 74% of respondents were male and 29% were between the ages 22 to 30. Nearly 34% of participating teachers had zero to five years of teaching experience. Of 110 participants responding, nearly 53% revealed "Great Interest" for pursuing a master's of Agricultural Leadership from the University of Georgia. Likewise, 29% of 139 respondents implied "Great Interest" for pursuing a doctoral degree at the University of Georgia.

INDEX WORDS: Agricultural Education, Supply and Demand, Georgia Vocational Agricultural Teachers Association, Teaching Experience, Agricultural Leadership, Doctoral Degree, Master's Degree, Teacher Retention, The University of Georgia

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DEDICATION

I would like to dedicate this body of work to my parents and to my lovely wife. Their love and support have guided me through this process and enabled me to reach life goals once thought unreachable.

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I would be remised if I did not credit my father, Walter Sealy, for inspiring me to become an agricultural teacher. His “glory” stories of the greatest agricultural teacher ever, Mr. M.R. Stewart, have guided me throughout my career. Because of my father, I have been able to make an impact on children’s lives. With that, if I never accomplish another goal, at least I would have had the personal satisfaction of knowing I made a difference in this world.

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CHAPTER 1

INTRODUCTION

According to previous research in agricultural education (Camp, Broyles, & Skelton, 2002; Connors, 1998) a combination of factors including a lack of highly skilled teachers and program expansion could create some pressing issues for the agricultural education profession. According to Camp et al. (2002), "Since 1989, the profession seems to have begun a recovery that has resulted in a fairly steady increase in the number of newly qualified potential teachers to a 14-year high of 857 in 2001, representing a 45.7% increase from the 1989 low" (p. 9). However, Camp et al. (2002) also acknowledged that, "…newly qualified potential teachers fail to take teaching positions even though positions are going to under-qualified people or indeed remaining unfilled" (p. 33). Of the 857 newly qualified potential teachers prepared to enter the Agriculture Education profession in 2001, only 59.4% or 509 individuals decided to teach (Camp et al., 2002).

The "net loss" of agricultural education teachers for 2001 was 798.5 out of a total of 11,189 positions nationwide or 7.1% (Camp et al., 2002).

> The total of newly qualified teachers (n=857) exceeded the net replacements needed (n=798.5). Nevertheless, the number of newly qualified potential teachers actually seeking employment as teachers (n=693) fell far short of the net number of replacements needed in 2001 (Camp et al., 2002, p. 31).

In 2001, 25 newly qualified teachers from the state of Georgia's two public institutions granting degrees in agricultural education (The University of Georgia and Fort Valley State University)

completed their training, but only 15 entered the Agriculture Education profession (Camp et al., 2002, p. 22). The data indicate that only 60% of newly qualified teachers entered the profession in Georgia. When compared to historical data, the national rate has remained around 50% over time, with variances ranging from a low of 40.8% to a high of 64.6% in 1965 (Camp et al., 2002, p. 10). This phenomenon is not new to the profession. According to Camp et al. (2002), there has been an annual shortage of teachers for more than 37 years in the United States. "Agricultural Education remains a field in which the placement rate is relatively high for those who actually want teaching jobs" (Camp et al., 2002, p. 33).

Statement of the Problem

Camp et al. (2002) stated that, "Leaders of the profession need current, accurate estimates of the numbers of and demand for teachers of Agricultural Education to provide for meaningful policy decisions at all levels" (p. 6). Five years have past since the last census study for Agricultural Education was conducted on a nationwide or state level in Georgia. Current data is needed to monitor anticipated retirement trends, potential fluctuations in supply and demand trends in order to identify recruitment and retention methods designed at meeting the needs of the Georgia Agricultural Education program and the teachers it serves.

Purpose

The purpose of this document is two-fold in nature. First, the researcher would like to gain insight into the Agricultural Education profession where demographics are a concern to develop an accurate representation of Georgia agriculture teachers. By conducting a census survey, the researcher could determine factors affecting the supply and demand of agricultural teachers in the state of Georgia. In return, recommendations for the Georgia Agricultural Education profession as a whole regarding retirement trends, teacher recruitment, induction

programs, or professional development strategies benefiting the occupation would be noted. The second purpose of this study would determine a need for advanced degree programs in agricultural education. Data could then be presented to the Agricultural Leadership, Education and Communication Department for the University of Georgia so they may create continuing education models to better serve the needs of their current and future students. And so that, factors contributing to 60% percent of newly qualified teachers entering the agricultural education profession in Georgia could be addressed and significantly increased.

Research Objectives

To accomplish this purpose, the following research objectives were developed:

1. Determine selected demographic characteristics of present agricultural education instructors in Georgia;
2. Determine years of experience and highest degree held for present agricultural education instructors in Georgia;
3. Determine the future continuing education demands of present agricultural education instructors in Georgia; and
4. Determine future retirement trends for agricultural education instructors in Georgia.

Scope of the Study

The population for this descriptive census study included all middle school, high school, and adult agricultural education (young farmer) teachers in the state of Georgia (*N= 389*). Total number of subjects who responded to the survey was 293.

Operational Definitions

- Adult Agricultural Education (Young Farmer) Teacher: A teacher "…who is out of school and whose career objective is to become established and/or more proficient in agricultural

production, agricultural management of an agribusiness occupation" (Georgia Agricultural Education, 2006).

- Agricultural Education Program: "The total structure and content of agricultural education at a school; includes classroom instruction, supervised agricultural experience (SAE) programs, FFA leadership activities and more" (Georgia Agricultural Education, 2006).
- Agricultural Leadership, Education, and Communication (ALEC): Department of Agricultural Leadership, Education, and Communication in the College of Agricultural and Environmental Sciences at the University of Georgia.
- Georgia Vocational Agricultural Teachers Association (GVATA): A professional organization comprised of Georgia's Agricultural Education Teachers. The organization is an affiliate of the National Association of Agricultural Educators (NAAE).
- Master's of Agricultural Leadership (M.A.L.): M.A.L program is offered through the Agricultural Leadership, Education and Communication Department at the University of Georgia. "This master's program is designed to develop future agricultural leaders. The overall objective of the program is to provide graduate-level training for those individuals seeking leadership positions with agricultural agencies, producer groups, government agencies and related businesses" (Agricultural Education, Leadership and Communication, 2006).
- National FFA Organization: "National organization of students enrolled in agricultural education programs that develop students' potential for premier leadership, personal growth and career success through agricultural education" (Georgia Agricultural Education, 2006).

Limitations

The inherent limitations of survey research need to be taken into consideration when viewing these findings. The findings of this study are based on a sample of survey returns with a 75% response rate; while the population was given several opportunities to complete this survey and an analysis of late responders shows no difference between early and late responders there is a possibility that non-responders differ in some way from responders.

The survey instrument used in this study was adopted and modified from earlier studies and there were no indications that this instrument caused subject bias or error. However, unintentional subject bias could have occurred due to the questions and question structure of the survey instrument itself. All self-reported data is limited by the honesty and truthfulness of the subjects who responded. While there are no indications that respondents to this survey were dishonest, subject honesty remains a limitation to this study.

Chapter Summary

An annual shortage of agricultural teachers has existed for more than 37 years in the United States (Camp et al., 2002), even though secondary agricultural education programs are beginning to produce more qualified teachers than positions are available. New trainees are not seeking employment in the education field, thus, forcing school systems to either hire un-certified individuals for those positions or positions are not being filled at all. Other factors contributing to this phenomenon may include teacher retirement trends and high teacher attrition rates.

Chapter two outlines the theoretical framework and reviews the literature on population growth, retirement trends, teacher recruitment, teacher retention, and continuing education for this study.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Chapter one outlines the purpose of this study and provides the following objectives which frame this study:

1. Determine selected demographic characteristics of present agricultural education instructors in Georgia;
2. Determine years of experience and highest degree held for present agricultural education instructors in Georgia;
3. Determine the future continuing education demands of present agricultural education instructors in Georgia; and
4. Determine future retirement trends for agricultural education instructors in Georgia.

The purpose of this chapter is to present a review of the related literature for this study. This review will examine possible factors contributing to the teacher supply and programmatic demand for Agricultural Educators. The review is divided into the following sections: (1) Introduction; (2) Population Growth; (3) Retirement Trends; (4) Teacher Recruitment; (5) Teacher Retention; (6) Continuing Education; (7) Theoretical Framework; (8) Summary.

Population Growth

In the past 35 years, the number of students and teachers in public education in the United States has steadily grown. According to Hussar & Bailey (2006), there were approximately 46.5 million public elementary and secondary students enrolled in 1990: by the

year 2003, that number had risen to 55 million and is projected to reach 58.1 million by 2015. The number of public elementary and secondary school teachers has also increased steadily from 2.8 million in 1990, to 3.4 million in 2003 (Hussar & Bailey, 2004). The number of teachers at the elementary and secondary level will reach four million by 2015 according to Hussar & Bailey data projections (2006). Subsequently, the number of public schools has risen to meet the rising student population in the US. In 1970 there were approximately 91,152; in 2003 there were 99,400 public schools (U.S. Department of Education, 2006).

It has been established that student enrollment, teachers, and public school facilities have increased over time. Still, the United States population is expected to augment by nearly 26.8 million people from 2006 to 2016, possibly creating a need for more schools and teachers (Census Bureau, 2005). Could student population expansion exploit the student to teacher ratio? An average student to teacher ratio in 1985 was 17.9:1 compared to the average ratio in 1999-2000 of 23.6:1 for public secondary schools and 21.1:1 for public elementary schools (U.S Department of Education, 2006). Are large class sizes healthy for educational systems and how do they impact teacher attrition? In support of small classes, Tennessee's Student Achievement Ratio (STAR) project study students enrolled in small classes and noted positive findings evidenced by: 72 percent of participants graduated on time; smaller dropout rates (19 compared to 23 percent for regular classes); and students completed higher level English and math courses (National Education Association(a), n.d.).

In a report from the Education Commission of the States entitled *Efforts to Improve Quality of Teaching Face Numerous Obstacles* the authors stated that, "…there are not enough good teachers in the nation's classrooms, especially in areas of rapid population growth, hard-to-staff schools and high-demand subjects" (2000, p.1). The commission further maintained that,

"Teacher preparation programs may produce a sufficient quantity of graduates, but many of those graduates do not go into teaching, and the attrition rate of those who do is high" (2000, p. 1).

Nearly 2.5 million teachers were surveyed in a 2000-2001 study conducted by Luekens, Lyter, & Fox (2004) where it was determined 8.9% or 43,100 individuals left the teaching profession with only 1 to 3 years of teaching experience. Moreover, Ingersoll and Smith (2003a) reported that nearly 40 to 50 percent of teachers with five years of experience or less leave the profession. According to Luekens et al. (2004), "A higher proportion of public school teachers left the profession between the 1999-2000 and 2000-01 school years compared to the 1990-91 to 1991-92 and 1987-88 to 1988-89 school years" (p. 3). To further establish this crisis, it has been determined that, nearly 50% of new teachers in urban school settings depart within their first five years of entering the profession (National Education Association (b), n.d.). And, nearly 82 percent of urban school districts hire "non-credentialed" teachers to educate because they were unable to employ qualified teachers (Recruiting New Teachers, Inc., 2000).

Retirement Trends

Approximately 76 million individuals were born between 1946 and 1964 creating the "Baby Boom" generation (Gallagher, 2005). The United States Census Bureau (2000) reported that 22 percent of the United States' population was between 45 and 64 years of age in 2000. Moreover, Dohm (2000) maintained that the "Baby Boom" generation "…has largely determined the size and age composition of the labor force for the past 30 years" (p. 17). These statistics obviously note an aging population and draw a parallel to an aging workforce. According to Dohm (2000), "The percentage of workers aged 45 and older will increase from 33 percent of the labor force in 1998 to 40 percent in 2008, adding nearly 17 million workers to this age group" (p.

17). If the original “Baby Boomers” work until their mid-sixties before retiring, then individuals born in 1946 would be 65 years old in year 2011. Consequently, Gallagher (2005) posited that “…between [years] 2008 and 2020 tens of millions of people will leave the work force” and descendants of the Baby Busters (1958-68), Generation X (1961-81), and MTV Generations (1975-85) will be needed to fill the vacated employment opportunities.

Concerning education, the National Education Association (2003) published the *Status of the American Public School Teacher 2000-01* which reported an 11 percent increase in teachers over 50 years of age from 1996 to 2001. Likewise, from 1976 to 2001 the amount of teachers with 20 plus years of full-time teaching experience rose significantly from 14 to 38 percent (NEA, 2003). Therefore a correlation can be drawn between an aging population and workforce placing emphasis on future retirement trends.

Dohm (2000) reported that 418,000 elementary and 378,000 secondary school teachers will be needed to replace retiring teachers between 1998 and 2008. Whitener & Gruber (1997) recognized in their work, *Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey: 1994-95*, that 24.8 percent in 1988-89 and 27.1 percent in 1994-95 of public school teachers leaving the profession did so due to retirement. A mere five years later Luekens, Lyter, & Fox (2004) published *Teacher Attrition and Mobility: Results from the Teacher Follow-up Survey, 2000*-01, which indicated 29.1 percent of public school teachers leaving their profession because of retirement. Of the 29.1 percent reported, 69.1 of teachers had 20 or more years of experience (Luekens et al., 2004). Convincingly, both reports illustrated increases in trends of public school teachers leaving the profession due to retirement.

Murray Gendell’s (2001) research showed a steady decline in the estimated average age at retirement from 1950 to 2000 (p. 14). If teachers begin retiring at earlier ages, then could

teacher retirement trends become a primary factor contributing to teacher shortages? Substantial data from Gendell's (2001) report revealed that men and women were projected to retire at nearly 62.5 years of age. However, if most new teachers begin their teaching careers between the ages of 22 and 27, then they will be able to retire with thirty years of service at ages 52 and 57 respectively. Therefore, a percentage of teachers may leave the profession before they reach the age of 62 or 63. Moreover, Botwinik & Press (2006) stated "Teachers and administrators tend to retire earlier because of pensions and adequate medical coverage" (p. 145). Citing pension plans as a probable cause for leaving the profession at an earlier age.

Teacher Recruitment

Camp et al. (2002) suggested that research was needed in order to increase the number of newly qualified teachers and to identify factors to decrease new teacher attrition rates. In order to increase the number of newly qualified teachers, recruitment programs may be needed to emphasize the importance or availability of education positions. College institutions or school districts may "…employ various strategies…including pre-college orientation and internship opportunities, college scholarship and loan-forgiveness programs, and salary or bonus incentives for teachers" (Education Commission of the States, 2000, p. 1).

Early initiatives focused towards high and middle school students have been established to increase interest for the teaching profession. Duncan (2004) reported that, "School visitations can be a means to building long-standing relationships with secondary educators and it gives their students an opportunity to speak with a representative from the institution" (p. 27). Institution representatives can often be the a significant link between university agriculture departments and other educational programs while attending career fairs, student organizational meetings, or other events established for career exploratory (Duncan, 2004). Further, Duncan

(2004) stated that, "…faculty must cultivate and maintain a relationship for many reasons" (p. 21). Duncan (2004) cited the following reasons: "…career opportunities for university graduates; the development of articulation agreements between secondary schools and universities; and to develop a strong recruiting link between high schools and university programs and departments of agriculture" (Duncan, 2004, p. 21).

Recruitment efforts could potentially increase student awareness for teaching, provide initiatives for students to complete secondary education, and allow students to mentor or shadow in classroom settings (Education Commission of the States, 2000, p. 2-3).

Hirsch (2001) reported that South Carolina initiated several middle and high school programs designed to introduce students to the teaching profession. According to Hirsch (2001), middle school students "enroll in a year-long ProTeam Program that promotes teaching as a career and encourages students to make the necessary academic choices for college entry and success" (p. 7). Students in high school can then choose from three programs: "the Teacher Cadet Program, Teaching Assistant Program, and the Teaching Fellows Program" (Hirsch, 2001, p 7). These programs have been developed to provide "Real-Life" career experiences for students interested in the teaching profession. The "Teacher Cadet Program" currently serves over 2,500 students in 149 schools in South Carolina (Hirsch, 2001). The program has benefited many students. "More than 2,000 former cadets are currently teaching and an average of 35 percent of participants indicate plans to pursue teaching credentials" (Hirsch, 2001, p 8).

Although recruiting middle and high school students into the teaching profession is significantly important, we must recruit individuals eligible to pursue teaching credentials now in order to alleviate the current teacher shortage. The Education Commission of the States (2000) reported that, "Many states, districts and institutions of high education make efforts to recruit

minorities, teachers' aides, local residents, retired military personnel, outstanding college graduates and other target populations" (p. 3). One such example provided by Hirsch (2001), "Connecticut implemented a program in 1998 that provides incentive grants of up to $20,000 to encourage minority students to become teachers" (p. 9). Target populations are inundated with scholarship advertisements, loan-forgiveness programs, and financial incentives as recruitment tools for the teaching profession. Teachers from nearby states or districts are also being targeted with financial incentives. According to the Education Commission of the States (2000), "…states and districts are using various financial incentives to lure teachers, including signing bonuses, housing allowances, moving expenses and salary increases to teach in high-demand subjects or hard-to-staff schools" (p. 3).

North Carolina established a Teaching Fellow Program in 1986 that created $6,500 scholarships per year for four years to students committed to teaching (Hirsch, 2001). Graduates from the Teaching Fellow Program "…currently work in 96 of the state's 100 counties" (Hirsch, 2001, p 9). And to entice teachers wanting a Master's Degree, Mississippi passed legislation in 1998 targeting critical shortage areas and teacher relocation into those fields. According to Hirsch (2001), "In exchange for three years of service, recipients receive tuition scholarships toward completion of a degree program, professional development opportunities, a computer, participation in a mentoring program, home loans, and up to $1,000 for moving expenses" (p. 11).

Another recruitment strategy for alleviating teacher shortages is to target individuals with baccalaureate degrees into the teaching profession through alternative certification. According to Hirsch (2001), "Alternative routes to achieving teacher licensure, often designed to encourage

minorities and mid-career professionals to enter teaching, have grown in popularity in recent years" (p. 9). Feistritzer (2005) stated that:

> "In 2005, 47 states and the District of Columbia reported to the National Center for Education Information (NCEI) that they were implementing alternative routes to teacher certification. Of these, 43 states described 115 actual alternative routes to teacher certification. These state certification routes are being implemented in approximately 485 program sites, most accurately called "alternative teacher certification programs" (p. 1).

What is an alternative teacher certification program? A program enabling individuals with baccalaureate degrees in various degree fields to obtain teacher certification through non-traditional methods. Programs vary, generally within one to two years and with the completion of course work through co-hort programs, individuals can become certified to teach. How administers the program? According to Feistritzer (2005), approximately 50 percent of alternative teacher certification programs are being administered by post-secondary officials, and 21 percent by local school administrators.

According to Hirsch (2001), successful alternative certification programs generally have the following common characteristics: "They are directed to individuals who already have a baccalaureate degree," "Successful candidates have pass rigorous screening," "The programs are based in schools," "The programs include course-work in professional education studies before or during teaching assignments," "Candidates work closely with quality mentor teachers," and "Candidates meet high performance standards for completion of the programs" (Hirsch, 2001, p. 9). And, how successful is the program? According to Feistritzer (2005), "Eighty percent of providers of alternate route programs say completers of their programs receive a full regular teaching certificate" (p. 23). In an article entitled *Alternative Teacher Certification: A State-by-*

State Analysis 2005, which was authored by Feistritzer (2005), 38,519 individuals were alternatively certified to teach in 2003-2004.

Feistritzer (2005) cited Teach for America, The New Teacher Project, and Troops to Teachers as examples of alternative teacher certification programs. Teach for America is a program designed to recruit college graduates of all majors into teaching. Individuals obtaining teacher certification through Teach for America must pass subject-area test, meet and surpass standards set forth by local school districts and licensure agencies, and complete professional course-work. According to the Teach for America (2005) website, "Since 1990, more than 14,000 exceptional individuals have joined Teach for America. They have directly impacted the lives of 12 million students…" (p. 1).

Aside from recruiting new teachers, Walker, Garton, & Kitchel (2004) suggested "the rehiring of retired teachers" to increase the number of qualified teachers (p. 28). According to Hirsch (2001), "In 1999, California, Maryland, Missouri, North Carolina, South Carolina, and Texas passed legislation that created new policies to attract retirees or altered existing regulations that capped returning retiree's salaries" (p. 10). Six more states passed similar legislation in 2000 to combat teacher shortages (Hirsch, 2001). Werneck (2001) stated that, "By offering incentives through restructured pension plans, many states are hoping to lure retirees back to the classroom and to keep retirement-eligible teachers in the classroom for several more years" (p. 1). In the past, teachers eligible for retirement had these options: "…collect pension benefits and stop working, collect pension benefits and draw a salary from a new job, or continue teaching and postpone pension benefits" (Werneck, 2001, p. 1). However, alternative pension plans that allow teachers to defer retirement option plans, draw a salary and pension

concurrently, or alter the pension benefit formula may entice teachers to stay in the profession (Werneck, 2001).

Teacher Retention

The retention of teachers needs to begin during their initial experiences. Heath-Camp and Camp (1992) stated that, "No period is more critical to the success of a beginning teacher than the induction phase" (p. 35). Peiter, Terry, & Cartmell (2005) established that the induction phase for beginning teachers is a time in which they construct critical knowledge, skills sets, and values needed for teaching. The first ten weeks for a teacher, especially if they have low career commitments due to unforeseen opportunities, could have a dramatic impact on their career longevity (Knobloch & Whittington, 2003). New or beginning teachers have little to no teaching experience. "New teachers are learners – in fact, they are on the very steepest part of their learning curves" (*Teacher Success,* 1999, p. 3). Within their first year, new teachers assume the same responsibilities, class loads and duties as more experienced teachers.

Many studies have been conducted to identify the pre-services needs of new teachers in order to better prepare them for the teaching profession. To retain more new or beginning teachers, an understanding of obstacles that beginning teachers' experience and that contribute to job satisfaction will be reviewed since job satisfaction has surfaced as a prevailing factor in teacher retention.

According to Walker, Garton, and Kitchel (2004), "Education researchers have learned that if an individual is not satisfied with his/her job, the likelihood for that individual to remain in the teaching profession is greatly diminished" (p. 29). Greiman, Walker, & Birkenholz (2005) identified the following areas of assistance needed by first year teachers:

> …"more information on filling out state reports," and needed additional assistance with "paper work (purchase orders, resale, etc.)," "how to complete my roster and…order shop supplies," and how to "prepare state degree applications" (p. 99).

Other significant factors creating obstacles for new agricultural teachers were listed by Myers, Dyer, and Washburn (2005): The five major problems were: "…organizing an effective alumni chapter," "organizing an effective advisory committee," "organizing and planning FFA chapter events and activities," "management of student discipline in the classroom," and "recruiting and retaining alumni members" (p. 53). The study also indicated "…managing paperwork and finances, working with parents, teachers, and administrators, time and stress management, lack of resources and management of resources, recruitment of students and alumni, and working with special needs students" as problems (Myers et al., 2005, p. 49).

Greiman et al. (2005) also identified feelings of isolation, classroom management issues, and the need to produce more experiential experiences as concerns for first year teachers. Moreover, Peiter et al. (2005) stated that, "Agricultural education teachers are not only responsible for the activities of a normal subject teacher, but also they are responsible for an entire Agricultural Education program" (p. 12). An Agricultural Education program that may consists of FFA events, Supervised Agricultural Experiences, and contests in the form of Career Development Events. The aforementioned events and isolation issues are relevant, especially considering that many new teachers operate in a single teacher agriculture department. Camp et al. (2002) reported that nearly 48 percent of secondary agricultural education programs in the United States work in single teacher departments. Moreover, nearly 40 percent of agricultural education programs in Georgia were single-teacher departments (Camp et al., 2002).

To address these concerns and to aid teacher retention, many educational institutions have established induction or mentoring programs. According to Peiter et al. (2005), "Induction is the broad process by which beginning teachers are socialized into the profession" (p. 12). Teacher induction programs have been established to ease the transition for beginning teachers into the profession. "These programs often include orientations, formal mentors, peer networking, observations and assessments of instructional practice and classroom management, workshops and seminars" (*Teacher Success,* 1999, p. 2).

According to Howey and Zimpher (1991), an effective teacher induction program that will ease beginning teachers into their profession should include the following elements: (a) continuous support; (b) assessment and feedback on teaching performance and progress; (c) assessable professional development opportunities that will address the individual's needs; and (d) positive socialization into the profession.

Many programs use a mentor. "Mentoring is an effective mechanism for one-on-one professional guidance and for cultivating a teaching culture in which expert teachers serve as an essential resource for new teachers" (*Teacher Success,* 1999, p. 3). According to Joerger and Bremer (2001), "Carefully selected and properly trained mentors are key to the success of

> beginning teachers. Mentors that are part of an in-school induction program should receive appropriate remuneration in the form of release time, reduced loads, stipends, or a combination of these benefits. Not every successful teacher will and can be an effective mentor. Mentors need to be successful teachers who can be supportive and encouraging to new teachers. They need to be empathetic, honest, and sensitive to the personal, professional, and instructional needs of the new teacher. On-going training will help ensure that mentors will be effective on a continual basis. Mentors need to be aware of

> research concerning the needs of beginning teachers, as well as the developmental processes and techniques of coaching" (p. 31).

One such example of mentoring exists in the Louisiana Mentor Program. "The Louisiana Mentor Program is designed to help a new teacher become a confident, competent professional in the classroom as quickly as possible and to offer support and assistance as he/she experiences first-year teaching" (*Teacher Success*, 1999, p. 3). According to a *Teacher Success* (1999) study regarding the Louisiana Mentor Program, "New teachers in the program receive feedback regarding planning, classroom and instructional strategies; in-classroom observations with feedback in relation to the Louisiana Components of Effective Teaching; and attention, support, and encouragement by mentor teachers" (p. 3).

Professional development training, either pre-service or in-service, could serve as a means to increase job satisfaction, initial attitude towards the profession, and may enhance teacher retention statistics. According to Joerger and Bremer (2001), "Workshops should be

> based upon initial and periodic assessments of the needs of the beginning teachers. Information should be obtained from quality assessments that are based upon research, anecdotal evidence, elements of other teacher induction assessments, and the direct participant input. The key is to provide programming that beginning teachers' desire, in formats that are meaningful, and at times and locations that are safe and convenient. Workshops should be offered and structured to address the current and upcoming needs of the teachers. In a program with a large number of participants, multiple offerings in different locations may be warranted. Workshops need to be held during school hours, whenever possible, and feature an appropriate balance between times for sharing, reflection, and direct instruction" (p. 33).

In relation to workshops, Garton and Chung (1997) rated the following criteria as the 12 greatest in-service needs based on a mean weighted discrepancy score:

> …completing reports for local/state administrators (7.4), motivating students to learn (6.O), preparing FFA degree applications (5.7), developing an effective public relations program (5.5), preparing proficiency award applications (5.4), teaching agriscience - integrating science and agriculture (5. l), utilizing a local advisory committee (5.1), developing SAE opportunities for students (4.9), using computers in classroom teaching (4.5), supervising students' SAE programs (4.3), teaching using experiments (4.1), and conducting local FFA chapter activities (4.0) (p. 53-55).

Myers et al. (2005) concluded that "Programs to address these issues could be jointly coordinated by university teacher education faculty, state agricultural education staff, and professional teacher organizations" (p. 54). Regardless as to who coordinates professional development, teachers must be willing to become life-long learners to adapt evolving environments. According to Fullan (1993), "Active learners who continuously seek, assess, apply, and communicate knowledge as reflective practitioners throughout their careers" (p.8).

What are the effects of mentoring and induction programs? According to the U.S. Department of Education study entitled *Teacher Quality: A report on the preparation and qualifications of public school teachers* (1999), 45 percent of the study's participants with less than three years of teaching experience felt that mentors enhanced their teaching strategies. Moreover, Fideler and Haselkorn (1999) evidence between 90 and 100 percent retention in 10 urban-based induction programs in a five-year duration.

Continuing Education

In 2004, Edwards, McLucas, Briers, & Rohs established that 56.7% of 148 Agriculture Teachers in Georgia surveyed were interested in pursuing a graduate degree at a distance. Edwards et al. (2004) reported an increase in salary, nearly 32 percent of respondents, as the primary motivator for achieving additional degrees. “Geographic or scheduling conflicts” were identified by 35.8 percent of respondents as a barrier (Edwards et al., 2004, p. 79). However, the geographic barrier could be overcome with the use of computer technology. The study indicated that 70.3 percent of respondents had computer access and 62.2 percent had internet access at home and work (Edwards et al., 2004).

A similar study conducted by Wilson and Moore (2004) found that 70 percent of survey participants in North Carolina had interests in obtaining an online Master’s degree. Further, the study indicated that 98 percent of agriculture teachers responding had computers at work and 90.5 percent had computer access at home (Wilson & Moore, 2004). Of the respondents, 70.4 percent of agriculture teachers indicated that they would use both home and office computers in a distance education program (Wilson & Moore, 2004). Another important note about the study, nearly 85 percent of agriculture teachers rated themselves either “very capable” or “capable” when related to computer efficacy (Wilson & Moore, 2004).

As a result of Edwards et al. findings, distance education programs from ALEC have been designed so that graduate students can take most of their classes via web based technologies which allows the students to work from their home or office; for classes that have not been converted to a web based format students must attend a location equipped with Georgia Statewide Academic and Medical System (GSAMS) teleconferencing system. In order to stay abreast of changing professional development and continuing education needs of Georgia’s

agriculture teachers' university faculty must continually monitor what those needs are and how they can best be met.

In order to satisfy Georgia agricultural teachers' continuing education needs the University of Georgia's Department of Agricultural Leadership, Education and Communication (ALEC) has established a Master's Degree in Agricultural Leadership for individuals interested in obtaining advanced degrees. Cartmell & Garton (2000) stated that "Agricultural education programs at the university level must continue to diversify to maintain enrollment levels for survival" (p. 531). To attract new students into the program, the following objectives were established to accommodate a variety of under-graduate degree recipients:

> Articulate a philosophy of leadership development based on leadership development theory applied to current issues and trends; Critically evaluate relevant research; Communicate with public concerning agricultural issues; Use interpersonal skills and dynamics related to problem solving; Practice group process, problem solving and team building skills; Conceptualize theories of organizational development related to profit and non-profit agricultural organizations; Research, synthesize and articulate public issues related to agricultural and environmental issues; Work in leadership positions of agribusinesses, state and federal agencies and agricultural commodity commissions and organizations; Develop a personal framework in dealing with ethical issues related to agricultural and environmental sciences; Formulate a plan for conflict resolution, managing and initiating change in groups and organizations (ALEC, 2006).

Currently the program is designed for traditional as well as non-traditional students with courses offered face-to-face and a heavy utilization of distance education courses. The program allows participants to choose either a thesis or non-thesis route. Full-time students can complete the

program within one year while part-time students are scheduled completers within two years. Program completion may vary based on course scheduling.

Theoretical Framework

According to Camp et al. (2002), "The profession's concern for the supply and demand for teachers of Agricultural Education is not a new phenomenon" (p. 4). For decades, the supply of agricultural education teachers has not surpassed the demand of the education workforce. As evidenced by Camp et al. (2002) studies, in 1965 the total number of agricultural education positions on September 1st was 10,378 with as many as 120 positions going unfilled. Nearly four decades later, the total number of agricultural education positions on September 1, 2001 was 11,189 with 67 being unfilled (Camp et al., 2002).

Many researchers have posited issues related to teacher retirement (Dohm, 2000; Gendell, 2001; Werneck, 2001; Botwinik & Press, 2006), teacher retention through induction programs (Howey & Zimpher, 1991; Garton & Chung, 1995; Walker, Garton, & Kitchell, 2004; Myers, Dyer, & Washburn, 2005; Peiter, Terry, & Cartmell, 2005) and teacher recruitment (Hirsch, 2001; Duncan, 2004; Feistritzer, 2005; National Education Association, n.d.) as relative factors affecting the education supply and demand. Other factors review for this study included population growth and continuing education needs for agricultural educators.

As previously mentioned in the literature review, the United States population is expected to augment by nearly 26.8 million people from 2006 to 2016 (Census Bureau, 2005). More people equates to more schools, students, and teachers. But a percentage of newly trained teachers are not pursuing teaching jobs. According to Camp et al. (2002), as of September 1, 2001 only 59.4 percent of 857 newly qualified agricultural education graduates entered into the teaching profession. On the other hand, the onset of the "Baby Boom" generation nearing

retirement, many experienced teachers may be leaving the education workforce. According to Luekens, Lyter, & Fox (2004) data, 29.1 percent of surveyed school teachers retired in 2000-01. Consequently Dohm (2000) stated that, “The percentage of workers aged 45 and older will increase from 33 percent of the labor force in 1998 to 40 percent in 2008, adding nearly 17 million workers to this age group” (p. 17). These issues of population growth, newly trained teachers not taking teaching positions, and an aging workforce nearing teacher retirement create great concern over the future supply and demand of agricultural educators.

In an attempt to address the state of Georgia’s current demand for agricultural educators, a summary of demographics pertaining to age, gender and work related experience, retirement eligibility, and degree advancement coupled with continuing education interests must be evaluated. A study of this sort could then aid Georgia Department of Education officials and teacher education programs in meeting the continuing education demands, designing recruitment initiatives, and overall meeting the demand so that all agricultural education positions in the state of Georgia are filled with qualified personnel.

Chapter Summary

Chapter two provided the literature review and theoretical framework needed to address this study. Relative factors highlighted in this section pertaining to the supply and demand of agricultural educators in Georgia were population growth, retirement trends, teacher retention through induction programs, and meeting the continuing education needs. A framework was established to assess the current demographics of Georgia’s agricultural educators based on gender, age, years of experience, degree advancement and future educational goals, and retirement eligibility.

Chapter three will address the objectives listed in chapter one and how this study was conducted to achieve those objectives. Specifically, the population, procedures, instrumentation, and data analysis will be discussed at length to gain a better understanding of how this research was conducted.

CHAPTER 3

METHODOLOGY

Introduction

Chapter one outlined the purpose of this study and provides the following objectives which frame the study:

1. Determine selected demographic characteristics of present agricultural education instructors in Georgia;
2. Determine years of experience and highest degree held for present agricultural education instructors in Georgia;
3. Determine the future continuing education demands of present agricultural education instructors in Georgia; and
4. Determine future retirement trends for agricultural education instructors in Georgia.

Chapter two provided a review of the literature on population growth, retirement trends, teacher recruitment, teacher retention, continuing education, and outlines the theoretical framework for this study.

This chapter will address the objectives listed in chapter one and how this study was conducted to achieve those objectives. Specifically, the population, procedures, instrumentation, and data analysis will be discussed at length to gain a better understanding of how this research was conducted.

Population

The population for this census study included all middle school, high school, and adult agricultural (Young Farmer) education teachers in the state of Georgia (*N= 389*). At the time of the study (Summer 2006), experienced teachers, novice teachers, retired teachers teaching on 49 percent contracts, and beginning teachers who have not begun their teaching careers were surveyed for this study. All other personnel, Georgia Department of Education officials, college representatives, or industry contacts were asked not to participate in the study.

In all, 293 agricultural educators from Georgia participated in this study, yielding a response rate of 75.3 percent. Thirty four of the 293 survey participants were adult agricultural (Young Farmer) teachers, while 248 of the survey participants taught in either a middle or high school agricultural education capacity. Eleven of the participants did not specify whether they were middle, high, or adult agricultural education teachers. Seventy four percent (n=217) of the teachers surveyed were male. Twenty nine percent (n=85) of the respondents were between the ages of 22 and 30, while slightly more than 52 percent were between the ages of 41 and 59. Of the three geographical regions in Georgia, determined by the Georgia Department of Education as North, Central, and South, 35 percent of survey participants were from both the North and South regions. Nearly 34% of the respondents had from zero to five years of teaching experience.

Procedures

Surveys were distributed and collected at the Georgia Vocational Agriculture Teachers Conference (GVATA) in Savannah, Georgia in July of 2006 during regional (North, Central, and South) teacher meetings. The regional meetings were one hour in length and were conducted by Georgia Department of Education Officials. University representatives distributed the surveys at

the beginning of the meetings and instructed participants to return the surveys at the end of their meetings in a box located in the room. University representatives did not personally collect the survey in order to maintain confidentially.

To further increase survey participation, surveys were also distributed to teachers while attending regional meetings during September, 2006, which were conducted by Georgia Department of Education Officials. Agricultural education teachers not attending the GVATA Summer Teacher Conference were identified by DOE Officials and asked to complete the survey. The surveys were distributed and collected in the same manner. In all, 293 agricultural educators from Georgia participated in this study, yielding a response rate of 75.3%.

Instrumentation

A modified version of a survey designed by Woglom, Morgan, Parr, Peiter, Kitchel, & Kantrovich (2006) to determine the future demand for agriculture teachers in the state of Kentucky was employed to survey the teachers. The instrument (see Appendix) was modified by including questions to determine the geographical location, previous high school FFA experience, and adult (Young Farmer) educators. A panel of experts consisting of Georgia Department of Education Officials, University of Georgia Representatives, and the GVATA Executive Board provided assistance to ensure face and content validity for the instrument. The instrument was modified to reflect the objectives for this study; a total of 34 questions were used. The objectives are: 1) Determine selected demographic characteristics of present agricultural education instructors in Georgia; 2) Determine years of experience and highest degree held for present agricultural education instructors in Georgia; 3) Determine the future continuing education demands of present agricultural education instructors in Georgia; 4) Determine future retirement trends for agricultural education instructors in Georgia.

The survey contained 34 questions with responses varying from “yes” or “no,” use of Likert-type scales, and single-option questions. The instrument data was then aggregated into the following three categories:

1) Personnel demographics pertaining to age, gender, geographical location, and number of years in the agricultural education profession.
2) Degree advancement characteristics through Likert-type scales (0 = no interest, 1 = little interest, 2 = indifferent, 3 = some interest, 4 = great interest).
3) Selective program demographics concerning number of teachers in a program, retirement eligibility, years anticipated to continue in the profession, and degree of interest in becoming an administrator.

Data Analysis

Data collected at the conference was then compared to membership enrollment sheets collected by the Georgia Vocational Agricultural Teachers Association’s Executive Secretary. The total amount of agricultural educators in the state of Georgia (*N=389*) was determined by correspondence through Georgia Vocational Agricultural Teachers Association’s Executive Board of Directors and personnel employed by the Georgia Department of Education.

Collected data were entered into the Statistical Package for the Social Sciences (SPSS) 14.0™. Descriptive statistics were analyzed to determine means, standard deviations, and frequency of demographics based on gender, age, and years of experience, continuing education demands, and future retirement trends for Georgia’s agricultural educators.

Chapter Summary

Chapter three provides the research methodology needed to conduct this study. Chapter three also provides a description of the sample population taken, procedures conducted, and data

pertaining to the instrument used and how the data was analyzed. Chapter four will discuss the findings of this study for each objective.

CHAPTER FOUR

RESULTS

Introduction

Chapter one outlines the purpose of this study and provides the following objectives which frame the study:

1. Determine selected demographic characteristics of present agricultural education instructors in Georgia;
2. Determine years of experience and highest degree held for present agricultural education instructors in Georgia;
3. Determine the future continuing education demands of present agricultural education instructors in Georgia; and
4. Determine future retirement trends for agricultural education instructors in Georgia.

Chapter two provides a review of the literature on population growth, retirement trends, teacher recruitment, teacher retention, continuing education, and outlines the theoretical framework for this study. Chapter three addressed the objectives listed in chapter one and how this study was conducted to achieve those objectives. Specifically, the population, procedures, instrumentation, and data analysis were discussed at length to gain a better understanding of how this research was conducted.

Chapter four will be constructed based on the four pre-stated objectives above. Data for the teacher demographics will first be reported and then years of experience, highest degree held, continuing education demands, and future retirement trends will be reviewed.

Objective 1: Determine selected demographics characteristics of present Agricultural Education instructors in Georgia

To determine selected demographics characteristics of present agricultural education instructors in Georgia, a series of survey questions pertaining to geographical region, gender, age, type of employment, department size, and prior FFA experiences in high school and influence factors persuading individuals to become agricultural educators were analyzed. Of the agricultural teachers in Georgia responding to survey questions (*N=293*), 74 percent (n=217) were male (Table 1). Data reflecting the geographical location of agricultural teachers in Georgia that are employed in North, Central, or South regions of the state is also revealed in Table 1. The largest percentage of teachers participating in the survey were employed in the South Region (35.15 percent, n=103). Of the 102 participants employed in the North Region, 69 were male and had a mean age of 38.59 (SD=10.89). Eighty-five participants were employed in the Central Region, 61 were male.

Table 1: *Geographic and gender characteristics of agricultural educators in Georgia (N=293).*

Characteristic	*N*	*%*	*Gender*		*Age*	
Geographical Region of Employment			Male	Female	M	SD
North	102	34.81	69	33	38.59	10.89
Central	85	29.01	61	24	38.04	10.63
South	103	35.15	87	16	40.02	11.04
No Response	3	1.02		1		
Total	293	100	217	74	38.94	10.86

The mean age for the total sample population was 38.94 years (SD=10.86), and 289 of the 293 participants reported their age (Table 2). The overall mean age for male participants was 41 years (SD=10), and the mean age for females was 32.11 years (SD=9.15). Twenty-nine percent (n=85) of the respondents were between the ages of 22 and 30, 43 were male, with a

mean age of 26.22 years (SD=2.12). Eighty-five participants were between the ages of 41 and 50 (M=45.91, SD=2.77), and 68 were male.

Table 2: *Age characteristics of agricultural educators in Georgia (N=293).*

Characteristic	*N*	*%*	*M*	*SD*	*Male*	*Female*
Age (Grouped)						
22-30	85	29.01	26.22	2.12	43	42
31-40	73	24.91	35.3	3.18	61	12
41-50	85	29.01	45.91	2.77	68	17
51-59	39	13.31	54.51	2.33	38	1
60+	6	2.05	63.33	2.66	6	0
No Response	4	1.37			1	1
Total	293	100	38.94	10.86	217	74

**The overall mean age for male participants was 41 years (SD=10), and the mean age for females was 32.11 years (SD=9.15)*

Approximately 12 percent (n=34) of agricultural educators in Georgia were employed as Adult Agricultural Educators (Young Farmer Teachers) and 33 were identified as male (Table 3). Nearly 85% of participants were either middle or high school agricultural educators in the state of Georgia. Seventy-two of the middle or high school agricultural educators were female and 176 were identified as male. Position type was then aggregated into size of agricultural departments and gender. Thirty-nine percent (n=110) of survey participants taught in a single-teacher department, 40 were female teachers. Thirty percent taught in a two teacher department (n=85) and 70 were male. Fourteen percent (n=40) of participants taught in a three teacher program. Nearly 15 percent (n=44) of Georgia agricultural educators taught in a department with four teachers or more. Further, single teacher (n=40) and four teacher (n=9) departments were comprised of 36 percent female teachers.

Table 3: *Characteristics of agricultural educators' teaching positions in Georgia (N=293).*

Characteristic	*n*	*%*	*male*	*female*
Adult Agricultural Educators (Young Farmer Teacher)	34	11.6	33	1
Middle or High School Agricultural Educators	248	84.64	176	72
No Response	11	3.75	8	1
Total	293	100	217	74
Number of Teachers in Department				
Single Teacher Department	110	39.43	70	40
Two Teacher Department	85	30.47	70	15
Three Teacher Department	40	14.34	35	5
Four Teacher Department	25	8.96	16	9
Five Teacher Department	13	4.66	10	3
Six Teacher Department	3	1.08	3	0
Seven Teacher Department	1	0.36	1	0
Eight Teacher Department	2	0.72	2	0
Total	279	100	207	72

To build a connection between becoming an agricultural educator in Georgia and factors influencing the participants' decision to become an agricultural educator, participants were asked a series of questions pertaining to prior FFA experience. Specifically, they were asked to indicate years of high school FFA experience, experience as a chapter FFA officer in high school, or experience as a regional or state FFA officer in high school (Table 4). One hundred-forty (48.11 percent) agricultural educators teaching in Georgia reported at least four years of high school FFA experience. On the other hand, nearly 26 percent (n=75) had zero FFA experience and 34 of the 75 were female. Nearly 54 percent (n=158) of agricultural educators in Georgia served as a chapter FFA officer in high school, 80 percent of those respondents were male. An additional 34 participants, 26 being male, also serves as a regional or state FFA officer while in high school.

Table 4: *Agricultural educators teaching in Georgia with high school FFA experience (N=293).*

Characteristic	*n*	*%*	*male*	*female*
How many years of HS FFA did you complete?				
Zero	75	25.60	41	34
One	17	5.80	13	4
Two	21	7.17	14	7
Three	26	8.87	19	7
Four	140	47.78	118	22
Five	5	1.71	5	0
Six	2	0.68	2	0
Seven	1	0.34	1	0
No Response	6	2.05	4	0
Total	293	100	217	74
Were you a chapter FFA Officer in high school?				
No	131	44.71	89	42
Yes	158	53.92	127	31
No Response	4	1.37	1	1
Total	293	100	217	74
Were you a Regional or State FFA Officer in High School?				
No	255	87.03	190	65
Yes	34	11.60	26	8
	4	1.37	1	1
Total	293	100	217	74

To determine the main factor influencing agricultural educators in Georgia to become an Agricultural educator, participants were asked to choose one of the following factors: High school agriculture teacher, parents/grandparents, a job position was available, another teacher/administrator, college professor/teacher educator, or other. Nearly 41 percent (n=120) of participants cited a high school agricultural teacher as their main influence to becoming an agricultural teacher (Table 5). Ninety-nine of the 120 participants for this factor were male. Twenty females cited a college professor or teacher educator as their influence, making this characteristic the most significant influence for women entering the agriculture education field.

Thirty participants fail to choose one factor and responded by marking two or more factors. Thirteen participants did not respond.

Table 5: *Factors influencing agricultural educators in Georgia to become a teacher (N=293).*

Characteristic	*N*	*%*	*Male*	*Female*
High School Ag Teacher	120	40.96	99	21
Parents / Grandparents	18	6.14	12	6
A Job Position was Available	20	6.83	17	3
Another Teacher or Administrator	21	7.17	13	8
College Professor / Teacher Educator	40	13.65	20	20
Other	31	10.58	23	8
Combination of Responses	30	10.24	22	8
No Response	13	4.44	11	0
Total	293	100	217	74

Objective 2: Determine years of experience and highest degree held for present Agricultural Educations instructors in Georgia

To determine years of experience, three factors were considered: years of experience in agricultural education, years of experience in other subjects, and total years of experience. Data was then aggregated by age groups, gender, certification in fields other than agricultural education, certification to teach agricultural education in any other states, problems with getting certified to teach agricultural education in Georgia, years of service to the Georgia Vocational Agricultural Teachers' Association (GVATA), and alternative certification.

Survey responses indicated that 36.86 percent (n=108) of participants had zero to five years of experience in agricultural education (Table 6). The mean for this group was 2.28 years (SD=1.56). Overall, 67 participants, nearly 23 percent, had between 21 and 30 plus years of experience in agricultural education. Ninety percent (n=264) of participants had zero to five years of experience in other subjects. The mean for this group was .25 years (SD=.88), which indicated that participants had very little experience teaching in other subject fields. The term

"other subjects" refers to any educational field other than agricultural education. Five participants had from six to 10 years (M=7.6, SD=1.14) and four participants had from 16 to 20 years (M=18, SD=1.83) of experience in other subjects. The mean experience for the 279 participants responding to the question was 1.09 years (SD=4.05). Fourteen individuals did not respond to this question.

Ninety-nine participants (33.79 percent) had a total of zero to five years of teaching experience with a mean of 2.29 years (SD=1.61). Nearly 27 percent of participants have 21 to 30 plus total years of experience. The mean of total years of experience is 12.9 years (SD=10.43). In all, years of experience in agricultural education are very comparable to total years of experience, thus indicating that the majority of the teacher teaching agricultural education in the state of Georgia have little experience (M=1.09) teaching other subjects.

Table 6: *Experience characteristics of agricultural educators in Georgia (N=293).*

Characteristic		*n*	*%*	*M*	*SD*
Years of Experience (Ag Ed)					
	0-5	108	36.86	2.28	1.56
	6-10	48	16.38	7.81	1.35
	11-15	38	12.97	13.29	1.43
	16-20	29	9.90	18.04	1.29
	21-25	27	9.22	23.19	1.62
	26-30	27	9.22	27.83	1.5
	30+	13	4.44	32.62	2.4
	No Response	3	1.02		
	Total	293	100	11.88	9.94
Years of Experience (Other Subjects)					
	0-5	264	90.10	0.25	0.88
	6-10	5	1.71	7.6	1.14
	11-15	2	0.68	13	1.41
	16-20	4	1.37	18	1.83
	21-25	3	1.02	22.67	2.08
	26-30	0	0.00	0	0
	30+	1	0.34	34	0

Table 6 (cont'd): *Experience characteristics of agricultural educators in Georgia (N=293).*

Characteristic	*n*	*%*	*M*	*SD*
No Response	14	4.78		
Total	293	100	1.09	4.05
Total Years of Experience				
0-5	99	33.79	2.29	1.61
6-10	46	15.70	7.78	1.25
11-15	36	12.29	13.36	1.48
16-20	28	9.56	17.86	1.33
21-25	31	10.58	23.26	1.57
26-30	31	10.58	27.53	1.55
30+	17	5.80	33.76	3.95
No Response	5	1.71		
Total	293	100	12.9	10.43

Data aggregated based on years of agricultural education experience for agricultural educators in Georgia (*N=293*) and age groups are reported in Table 7. Eighty-five participants (29.01 percent) were between the ages of 22 and 30 with a mean of 2.63 years of experience in agricultural education (SD=1.88). Twenty-nine percent (n=85) of participants were between the ages of 41 and 50 with a mean of 15.93 years of experience in agricultural education (SD=8.78). Forty-five of 293 participants were between the ages of 51 and 60 plus, with a mean of 23.72 years for 51-59 age group and mean of 28.17 years for the 60 plus age group.

Table 7: *Experience characteristics of agricultural educators in Georgia (N=293) based on age groups.*

Characteristic	*n*	*%*	*M*	*SD*
Years of Experience (Grouped by Age) **Ag Ed Experience*				
22-30	85	29.01	2.63	1.88
31-40	73	24.91	9.93	4.8
41-50	85	29.01	15.93	8.78
51-59	39	13.31	23.72	9.18
60+	6	2.05	28.17	10.23
No Response	5	1.71		
Total	293	100	11.78	9.91

Data pertaining to years of experience for agricultural educators in Georgia (*N=293*) and gender were aggregated and reported in Table 8. Seventy-four percent (n=217) of participants were male and had a mean of 13.96 years (SD=9.92) of agricultural education teaching experience. Seventy-three participants were female and had a mean of 5.72 years (SD=7.06) of agricultural education teaching experience. The mean agricultural education experience for the entire survey population was 11.88 years (SD=9.94).

Table 8: *Experience characteristics of agricultural educators in Georgia (N=293) based on gender groups.*

Characteristic	*n*	*%*	*M*	*SD*
Years of Experience (Gender)				
**Ag Ed Experience*				
Male	217	74.06	13.96	9.92
Female	73	24.91	5.72	7.06
No Response	3	1.02		
Total	293	100	11.88	9.94

Years of experience within the agricultural education profession and other subjects have been established. The phrase “Other Subjects” refers to any subject taught other than agricultural education. Survey participants were asked to respond to the following questions to determine if agricultural educators in Georgia are certified to teach other subjects: *Are you certified to teach any other subjects?* Forty-six participants, 12 being female, were certified to teach subjects other than agricultural education (Table 9). Nearly 81 percent (n=235) were not certified to teach in fields other than agricultural education. Of the respondents indicating certification in other fields, 38 percent (n=19) were certified to teach science. The term “Science” could include but not be limited to, biology, chemistry, middle grades science, etc. Twenty-two percent (n=11) were certified to teach vocational studies. Vocational studies refers to, but not limited to, construction, family and consumer science, drafting, and business education. The “Other” characteristic refers to Cisco Networking, Driver Education, Math, and many others.

Table 9: *Alternative certification fields for agricultural educators in Georgia (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
Are you certified to teach any other subjects?	Yes	46	15.81	34	12
	No	235	80.76	174	61
	No Response	10	3.44	9	1
	Total	291	100	217	74
If yes, what subjects?	Science	19	38.00	11	8
	Administration	5	10.00	5	0
	Leadership	3	6.00	2	1
	Vocational Studies	11	22.00	10	1
	Special Education	2	4.00	2	0
	Other	10	20.00	8	2
	Total	50	100	38	12

**Totals for subjects may exceed "Yes" responses due to individuals obtaining multiple certifications.*

To determine agricultural education certification characteristics for agricultural educators in Georgia, survey participants were asked the following questions: 1.) *Are you certified to teach Ag Ed in any other states?; and 2.) Did you experience any problems getting certified to teach Ag Ed in Georgia?*. Eighty percent (n=233) of participants were not certified to teach agricultural education in any other state (Table 10). On the other hand, 47 (16.15 percent) participants, 36 being male, were certified to teach agricultural education in other states. Ninety-one percent (n=265) of participants did not experience any problems while getting certified to teach agricultural education in Georgia. However, of the 14 participants experiencing problems, six were female.

Further, to determine membership in the Georgia Vocational Agricultural Teachers' Association (GVATA), survey participants were asked to respond to the following question: *How many years have you been a member of GVATA?*. The data was then aggregated into groups. Nearly 39 percent (n=113) of participants have been a GVATA member between zero

and five years, 46 participants being female. Likewise, a total of 42 participants have been GVATA members between 21 and 30 years. Only four of the 42 participants were female.

Table 10: *Select certification characteristics and GVATA membership demographics for agricultural educators in Georgia (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
Are you certified to teach Ag Ed in any other states?	Yes	47	16.15	36	11
	No	233	80.07	170	63
	No Response	11	3.78	11	0
	Total	291	100	217	74
Did you experience any problems getting certified to teach Ag Ed in Georgia?	Yes	14	4.81	8	6
	No	265	91.07	198	67
	No Response	12	4.12	11	1
	Total	291	100	217	74
How many years have you been a member of GVATA?	0 - 5	113	38.83	67	46
	6 - 10	52	17.87	38	14
	11 - 15	37	12.71	34	3
	16 - 20	27	9.28	24	3
	21 - 25	20	6.87	18	2
	26 - 30	22	7.56	20	2
	30+	7	2.41	7	0
	No Response	13	4.47	9	4
	Total	291	100	217	74

To determine select employment characteristics of agricultural educators in Georgia, survey participants were asked the following questions: 1.) *Were you alternatively certified to teach?; 2.) At any point in your career did you leave and return to the profession?; 3.) Did you work at another full-time profession after college for more than 1 year before entering the teaching profession?; 4.) Would you teach if you could start your career over again?.*

Eighty-one percent (n=235) of Georgia's agricultural educators participating were not alternatively certified to teacher (Table 11). Of the 45 participants alternatively certified to teach agricultural education, 17 were female teachers and 44 responded by stating the type of

Bachelor's degree they obtained. Bachelor's degrees were categorized by the following groups: Agriculture, Business, and Other. The term "Other" refers to education, criminal justice, and biological science degree listed. Thirty seven (84.09 percent) of participants obtain a bachelor's degree in the field of agriculture.

Nearly 15 percent (n=43) of participants have left the agriculture education profession and later returned to teach agriculture education, 36 of those being male. Seventy percent (n=205) of participants did not work a full-time profession after college for more than one year before entering the teaching profession. Conversely, 79 participants (27.15 percent) did enter into another profession for more than one year before entering the agricultural education profession and 23 of the respondents were female. Almost 80 percent (n=232) stated they would teach if they could start their career over again. Thirty-six participants did respond by saying "No," 12 of those being female.

Table 11: *Select employment characteristics of agricultural educators in Georgia (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
Were you alternatively certified to teach?	Yes	45	15.46	28	17
	No	235	80.76	181	54
	No Response	11	3.78	8	3
	Total	291	100	217	74
If yes, which Bachelor's Degree do you hold?	Agriculture	37	84.09	21	16
	Business	2	4.55	2	0
	Other	5	11.36	4	1
	Total	44	100	27	17
At any point in your career did you leave and return to the profession?	Yes	43	14.78	36	7
	No	238	81.79	171	67
	No Response	10	3.44	10	0
	Total	291	100	217	74

Table 11 (cont'd): *Select employment characteristics of agricultural educators in Georgia (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
Did you work at another full-time profession after college for more than 1 year before entering the teaching profession?	Yes	79	27.15	56	23
	No	205	70.45	154	51
	No Response	7	2.41	7	0
	Total	291	100	217	74
Would you teach if you could start your career over again?	Yes	232	79.73	178	54
	No	36	12.37	24	12
	No Response	23	7.90	15	8
	Total	291	100	217	74

To determine the highest degree held, participants were asked to indicate where they completed their bachelor's, master's, or post master's degree programs. Data denotes that 117 participants (39.93 percent) have completed only their bachelor's degree (Table 12). An additional 104 participants (35.49 percent) have completed their master's degree and 69 participants (23.55 percent) have completed a post master's degree program. In all, 175 of the 289 participants responding have completed either a master's or post master's degree program.

Table 12: *Highest degree held by agricultural educators in Georgia (N=293).*

Characteristic	*n*	*%*
Highest Degree Held		
Bachelor	117	39.93
Master	104	35.49
Post Master's	69	23.55
No Response	3	1.02
Total	293	100

Data was then aggregated to designate the college or university participants attended to obtain their degree(s) (Table 13). Of the 274 responses, the three institutions identified the most for bachelor's degrees were Auburn University, Fort Valley State University, and the University of Georgia. Nearly 64 percent (n = 174) of participants obtained their bachelor's degree from the University of Georgia. Other colleges or universities listed by participants, but not revealed for

bachelor's degree were: Berry College, Clemson University, Florida State University, University of Florida, Georgia College and State University, Mississippi State University, Purdue University, University of Tennessee, and many others.

Data implies that 93 of 161 participants completing a master's degree attended the University of Georgia. Auburn University, Clemson University, and Troy State University were each attended by three percent of the participants. Other colleges or universities attended were: Alabama State, University of Florida, Georgia Southern University, Georgia College and State University, and many others. Sixty participants indicated where they obtained their post master's degree(s), with 50 percent (n = 30) of participants attending the University of Georgia. Other colleges or universities attended were: Texas A&M, Clemson University, Columbus State University, Alabama A&M, and many others.

Table 13: *College or University attended by agricultural educators in Georgia to obtain degree (N=293).*

Characteristic	*n*	*%*
Location for Bachelor		
Auburn	18	6.57
Fort Valley State University	22	8.03
University of Georgia	174	63.50
Other	60	21.90
Total	274	100
Location for Master's		
Auburn	5	3.11
Clemson University	6	3.73
Troy State University	5	3.11
Valdosta State University	7	4.35
University of Georgia	93	57.76
Other	45	27.95
Total	161	100
Location for Post Master's		
Auburn	3	5.00
Lincoln Memorial	7	11.67
Valdosta State University	6	10.00

Table 13 (cont'd): *College or University attended by agricultural educators in Georgia to obtain degree (N=293).*

University of Georgia	30	50.00
Other	14	23.33
Total	60	100

Objective 3: Determine the future continuing education demands of present Agricultural Instructors in Georgia

To determine future continuing education needs for the teachers in the field of agricultural education, participants were asked to indicate the highest degree earned to this point in their career. Approximately 40% (n=117) of the respondents indicated that the bachelor's degree was the highest level of education that they had attained (Table 13). Participants were then asked: *If you have not started a Master's Degree, do have any plans to do so in the near future?*. Nearly 30 percent (n=87) responded with a "Yes," with 55 of those being male and 32 being female teachers (Table 14). The participants who had only completed the bachelor's degree were then asked to indicate their level of interest in pursuing a master's degree from the Department of Agricultural Leadership, Communication and Education (ALEC) in Agricultural Leadership at the University of Georgia. Fifty-six respondents then indicated that they had "Great Interest," and 19 participants (21.84 percent) had "Some Interest." Eighty-five of the 87 participants responded to the survey question.

Table 14: *Participants level of interest in pursuing a master's degree (n=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
If you have not started a Master's Degree, do have any plans to do so in the near future?	Yes	87	29.90	55	32
	No	23	7.90	19	4
	No Response	181	62.20	143	38
	Total	291	100	217	74

Table 14 (cont'd): *Participants level of interest in pursuing a master's degree (n=293).*

If you answered yes, please indicate your level of interest in pursuing a Master's of Agricultural Leadership at the University of Georgia.	Level of Interest				
	No Interest	1	1.15	1	0
	Little Interest	2	2.30	0	2
	Indifferent	7	8.05	4	3
	Some Interest	19	21.84	11	8
	Great Interest	56	64.37	37	19
	No Response	2	2.30	2	0
	Total	87	100	55	32

**0 = No Interest, 1 = Little Interest, 2 = Indifferent, 3 = Some Interest, 4 = Great Interest*

Participants were surveyed concerning their interest in obtaining a doctoral degree in the future (Table 15). Sixty-eight participants indicated that they intended to begin a doctoral degree in the near future, while 38 participants (55.88 percent) indicated "Great Interest" in pursuing a doctoral degree from the Department of Agricultural Leadership, Communication and Education at the University of Georgia.

Table 15: *Participants level of interest in pursuing a doctoral degree (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
If you have completed a Master's Degree, are you interested in pursuing a PhD?	Yes	68	23.37	50	18
	No	71	24.40	60	11
	No Response	152	52.23	107	45
	Total	291	100	217	74
If you are interested in pursuing your PhD, please indicate your level of interest in pursuing a PhD from the University of Georgia.	Level of Interest				
	No Interest	2	2.94	2	0
	Little Interest	2	2.94	1	1
	Indifferent	9	13.24	7	2
	Some Interest	12	17.65	10	2
	Great Interest	38	55.88	27	11
	No Response	5	7.35	3	2
	Total	68	100	50	18

**0 = No Interest, 1 = Little Interest, 2 = Indifferent, 3 = Some Interest, 4 = Great Interest*

To determine if becoming a school administrator influenced agricultural educators in Georgia to obtain their master's or doctoral degrees in Agricultural Leadership from ALEC at the University of Georgia, the following survey items were presented: 1.) *Do you plan to enter an*

administrative post in the future?; 2.) Are you certified as a school administrator?. Twenty-one percent (n=62) of the participants planned to enter an administrative post in the future. Forty-eight of the 62 participants were male (Table 16). Seventy-two percent (n=210) responded with a "NO." However, 15 percent (n=44) were already certified as a school administrator. Thirty-nine of the 44 were male. Nearly 83 percent (n=240) were not already certified as a school administrator. This data would suggest that obtaining additional degrees to become an administrator is not of concern for almost 75 percent of Georgia's agricultural educators responding to this survey.

Table 16: *Characteristics reflecting administrative interest for agricultural educators in Georgia (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
Do you plan to enter an administrative post in the future?	Yes	62	21.31	48	14
	No	210	72.16	158	52
	No Response	19	6.53	11	8
	Total	291	100	217	74
Are you certified as a school administrator?	Yes	44	15.12	39	5
	No	240	82.47	171	69
	No Response	7	2.41	7	0
	Total	291	100	217	74

Objective 4: Determine future retirement trends for Agricultural Education instructors in Georgia

To determine future retirement trends for agricultural education instructors in Georgia, teachers were asked to state how many years they anticipated to continue to teach from the day they completed the survey (Table 17). Of the 255 individuals responding, 54 (18.56 percent) indicated they would teach between zero and five years, while 46 (15.81 percent) stated they anticipated to teach between 26 and 30 years. Ninety-eight of 291 participants (32.68 percent) anticipate teaching between zero and ten years. Teachers were then asked to indicate the number of years until they would be eligible to retire from teaching. Nearly 20 percent (n=53) could

retire within zero to five years, 48 of those being male teachers. Sixty-three participants (21.65 percent) could be eligible for retirement in 26 to 30 years (Table 17). Nearly 29 percent (n=54) of participants could be eligible for retirement within zero to ten years.

Table 17: *Years participants anticipate teaching (N=293).*

Statement	*Characteristic*	*N*	*%*	*Male*	*Female*
How many years do you anticipate you will continue to teach from today?	0 - 5	54	18.56	43	11
	6 - 10	44	15.12	38	6
	11 - 15	39	13.40	31	8
	16 - 20	29	9.97	24	5
	21 - 25	42	14.43	34	8
	26 - 30	46	15.81	28	18
	30+	1	0.34	0	1
	No Response	36	12.37	19	17
	Total	291	100	217	74
In how many years will you be eligible to retire from teaching?	0 - 5	53	18.21	48	5
	6 - 10	31	10.65	29	2
	11 - 15	42	14.43	34	8
	16 - 20	32	11.00	26	6
	21 - 25	49	16.84	38	11
	26 - 30	63	21.65	32	31
	30+	0	0.00	0	0
	No Response	21	7.22	10	11
	Total	291	100	217	74

Chapter Summary

Chapter four described the sample population related to determining selected demographic characteristics, years of experience and highest degree held, future continuing education demands, and future retirement trends for present agricultural education instructors in Georgia. Chapter five will provide a conclusion of the study and provide suggestions for future research in monitoring the supply and demand of Georgia's agricultural educators.

CHAPTER 5

CONCLUSIONS

Introduction

Chapter one outlined the purpose of this study and provides the following objectives which frame the study:

1. Determine selected demographic characteristics of present agricultural education instructors in Georgia;
2. Determine years of experience and highest degree held for present agricultural education instructors in Georgia;
3. Determine the future continuing education demands of present agricultural education instructors in Georgia; and
4. Determine future retirement trends for agricultural education instructors in Georgia.

Chapter two provided a review of the literature on population growth, retirement trends, teacher recruitment, teacher retention, continuing education, and outlines the theoretical framework for this study. Chapter three addressed the objectives listed in chapter one and how this study was conducted to achieve those objectives. Specifically, the population, procedures, instrumentation, and data analysis were discussed at length to gain a better understanding of how this research was conducted. Chapter four reported the data for selected demographics based on age, gender, years of experience, continuing education demands, and future retirement trends.

Objective 1: Determine selected demographics characteristics of present Agricultural Education instructors in Georgia

The purpose of objective one was to describe selected demographics characteristics of present agricultural education instructors in the state of Georgia. Data pertaining to this objective help determine age, gender, and geographical location of current agricultural educators. These findings are significant when considering teacher retirement and attrition rates. One example evidenced by Luekens, Lyter, & Fox (2004) study pertaining to attrition rates, from nearly 2.5 million teachers surveyed, 8.9 percent left the teaching profession with only 1 to 3 years of teaching experience. Thus, targeting age characteristics are key indicators in determining future supply and demand trends for the agricultural education profession.

Of the 389 agricultural teachers in Georgia, 293 responded to the survey, 74 percent (n=217) were male. The largest percentage of teachers participating in the survey were employed in the South Region (35.15 percent, n=103), 102 were employed in the North Region, and 85 were employed in the Central Region. The mean age for the total population was 38.94 years (SD=10.86). The male mean age was 41 years (SD=10) and for females 32.11 years (SD=9.15).

Eighty-five (29.01 percent) participants were between 22 and 30 years old, with 43 being male and 42 being female. Nearly 85 percent (n=248) of survey participants are employed either as a middle or high school agricultural educator. Of the participants, 110 (39.43 percent) taught in a single teacher department. One hundred-forty (48.11 percent) agricultural educators teaching in Georgia reported at least four years of high school FFA experience. On the other hand, nearly 26 percent (n=75) had zero FFA experience and 34 of the 75 were female. Nearly 41 percent (n=120) of participants cited a high school agricultural teacher as their main influence to becoming an agricultural teacher.

Objective 2: Determine years of experience and highest degree held for present Agricultural Education instructors in Georgia

Survey responses indicated that 36.86 percent (n=108) of participants had zero to five years of experience in agricultural education. Overall, 67 participants, nearly 23 percent, had between 21 and 30 plus years of experience in agricultural education. Ninety percent (n=264) of participants had zero to five years of experience in other subjects. Eighty-five participants (29.01 percent) were between the ages of 22 and 30 with a mean of 2.63 years of experience in agricultural education (SD=1.88). Forty-five of 293 participants were between the ages of 51 and 60 plus, with a mean of 23.72 years for 51-59 age group and mean of 28.17 years for the 60 plus age group.

Forty-six participants, 12 being female, were certified to teach subjects other than agricultural education (Table 9). Nearly 81 percent (n=235) were not certified to teach in fields other than agricultural education. Of the respondents indicating certification in other fields, 38 percent (n=19) were certified to teach science. Nearly 39 percent (n=113) of participants have been a GVATA member between zero and five years.

Objective 3: Determine the future continuing education demands of present Agricultural Education instructors in Georgia

The highest degree earned by nearly 40 percent of the survey population was a bachelor's degree. More than 79 percent of the 110 respondents who indicated that they held no degree higher than the baccalaureate level intended on pursuing a master's degree. Of the same respondents, a combine total of 86.21 percent had at least "Some Interest" (21.84 percent) to "Great Interest" (64.37 percent) for pursuing the master's degree in the Department of Agricultural Leadership, Education and Communication at the University of Georgia. Sixty-eight

respondents intended to pursue a doctoral degree, of those individuals 55.88 percent had “Great Interest” in pursuing a Ph D. in the Department of Agricultural Leadership, Education and Communication at the University of Georgia.

Objective 4: Determine future retirement trends for Agricultural Education instructors in Georgia

Of the 255 individuals responding, 54 (18.56 percent) indicated they would teach between zero and five years, while 46 (15.81 percent) stated they anticipated to teach between 26 and 30 years. Ninety-eight of 291 participants (32.68 percent) anticipate teaching between zero and ten years. Nearly 20 percent (n=53) could retire within zero to five years, 48 of those being male teachers. Sixty-three participants (21.65 percent) could be eligible for retirement in 26 to 30 years. Nearly 29 percent (n=54) of participants could be eligible for retirement within zero to ten years.

Discussion

This study has provided evidence that agriculture teacher education programs in the state of Georgia have several challenges to face in the near future. One such challenge is that nearly 34 percent (n=98) of participants are eligible to retire within the next ten years. Walker, Garton, & Kitchel (2004) suggested “the rehiring of retired teachers” to increase the number of qualified teachers (p.28). In order to resolve the current teacher shortage, Georgia’s agricultural education policy makers may need to redesign current policies so that retired teachers can re-enter the workforce without pension plans being penalized which would lead to more experienced teachers.

Increased numbers of retiring professionals place increasing demands for the preparation of qualified instructors to fill these positions, but there is a large portion of newly trained

teachers not entering the agricultural education profession. Camp et al. (2002) stated that, "…newly qualified potential teachers fail to take teaching positions even though positions are going to under-qualified people or indeed remaining unfilled" (p. 33). Further, of the 857 newly qualified teachers prepared to enter the agriculture education profession in 2001, only 59.4 percent or 509 individuals decided to teach (Camp et al., 2002). To provide a short-term solution to this problem, Georgia officials will need to monitor supply and demand trends for other states and encourage newly trained professionals from other states with an abundance of supply to relocate to Georgia. Additionally, Georgia's teacher education programs will need to publicize and recruit individuals for alternative certification.

Another issue stems from teachers who are in the "critical" entry phase of their career. Currently, nearly 40 percent of Georgia's agricultural educators have less than five years of experience. Combine the trends identified in this Georgia study with findings that indicated that 8.9% leave between one and three years (Luekens, Lyter, & Fox, 2004), and that 50% of new teachers in urban school settings departed within their first five years of entering the profession (National Education Association (b), n.d.) and there seems to be a crisis. Furthermore, this crisis is expected to worsen based upon projected population growth (Census Bureau, 2005), retirement trends (Gallagher, 2005), and initiatives such as the one proposed by the National Council for Agricultural Education (n.d.) which is to have 10,000 quality agricultural education programs by the year 2015.

Teacher education programs share the responsibility of construction recruitment programs and mentoring these teachers to provide them with support needed to be successful as a new teacher. Recruitment programs should focus on middle and high school students. As evidenced by Duncan (2004), "School visitations can be a means to building long-standing

relationships with secondary educators and it gives their students an opportunity to speak with a representative from the institution" (p. 27). And, Hirsch (2001) found that students in South Carolina exposed to programs, such as the Teacher Cadet Program, designed to spark students' interest in the teaching profession had an average of 35 percent of participants wanting to enter the teaching profession. Recruitment models of this sort could pay dividends to alleviating the agricultural education teacher shortages in Georgia, especially considering that 41 percent (n=120) of survey participants in this study were influenced by their agricultural teacher to enter the profession.

This study has also revealed the high demand for advanced degrees in agricultural education among agriculture teachers in Georgia. The majority of the participants in this study already held at least a master's degree and most of those who did not did intend to pursue on in the near future. This demand can partially be attributed to the monetary reward associated with advanced degrees from local school systems. As the Master of Agricultural Leadership degree evolves within the Department of Agricultural Leadership, Education and Communication at the University of Georgia much thought must be applied to providing a degree that will serve to not only provide teachers with a means to a monetary reward but also an induction experience that will help them be successful and remain in the profession.

If professional development training, either pre-service or in-service, could serve as a means to increase job satisfaction, initial attitude towards the profession, and enhance teacher retention (Myers, et al., 2004), imagine what focused and formal graduate instruction in Agricultural Leadership, Education and Communication could do for the teacher shortage. Agricultural Education must continue to seek new and innovative ways to offer more teachers the chance to complete the masters and/or doctoral degree in Agricultural Leadership. Teacher

educators could actually strengthen the profession while participants are completing these degrees by addressing stated areas of need (i.e. completing reports for administrators or organizing an effective advisory committee) (Garton & Chung, 1997, Myers, et al., 2005).

Recommendations

As previously stated, Camp et al. (2002) suggested that research is needed in order to increase the number of newly qualified teachers, identify factors to decrease new teacher attrition rates, and promote agricultural education to states without agricultural education training programs. Consequently, the following recommendations are offered:

1) A longitudinal study should be conducted to monitor the teacher attrition rates for Georgia's agricultural teachers for their first five years in the profession.
2) Further research is needed to determine the needs of pre-service and in-service teachers for Georgia to adequately prepare them for the teaching profession.
3) A longitudinal study should be conducted for completers of the graduate programs offered by the University of Georgia to determine the attrition rate of program completers

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APPENDIX

Georgia Agricultural Education
Supply and Demand Study

Please complete the following questions.

1). Your Region: _____

2). Circle: Male Female

3). Your Age: _____

4). Total # of years you have been teaching Ag Ed _____

5). Total # of years you taught another subject other than Ag Ed _____

6). Total # of years in the teaching profession _____

7). Have you taught out of state? Yes No How many years? _____

8). Where did you complete your:
Bachelors Degree _____
Masters Degree _____
Post Masters Degree _____
Teacher Certifying Institute_____

9). If you haven't started a Masters degree, do you have any plans to do so in the near future?

10). If you answered yes to #9, please circle your level of interest in pursuing a Masters of Agricultural Leadership at UGA (0 = None, 1, 2, 3, 4 = very interested).

11). If you have completed a Masters degree, are you interested in pursuing a PhD?

12). If you answered yes to #11, please circle your level of interest in pursuing a PhD at UGA (0 = None, 1, 2, 3, 4 = very interested)

13). Are you a Young Farmer Teacher: Yes No

14). Are you a middle or high school teacher? Yes No

15). # of Agriculture Teachers in Your Program? _____

16). How many years of HS FFA did you complete? _____

17). Were you a Chapter FFA Officer in HS? Yes No

18). Were you a Regional or State FFA Officer in HS? Yes No

Please continue on the back side of this page

19). What was the State & County of the high school that you attended?
State _____ County _____

20). In how many years will you be eligible to retire from teaching? _____

21). How many years do you anticipate you will continue to teach from today? _____

22). Are you certified to teach any other subjects? Yes No
If yes, what subjects? _____

23). Do you plan to enter an administrative post (principal, etc) in the future? Yes No

24). Are you certified as a school administrator? Yes No

25). Are you certified to teach Ag Ed in any other states? Yes No

26). Did you experience any problems getting certified to teach Ag Ed in GA? Yes No

27). How many years have you been a member of GVATA? _____

28). Were you alternatively certified to teach? Yes No

29). If you answered yes to #28, which BS degree do you hold? _____

30). At any point in your career did you leave and return to the profession? Yes No

31). Did you work at another full-time profession after college for more than 1 year before entering the teaching profession? Yes No

32). Would you teach if you could start your career over again? Yes No

Please circle the one main factor that influenced you to become an Ag Ed teacher:

HS Ag Teacher	Another teacher or administrator
Parents/Grandparents	College Professor/Teacher Educator
A job was open	Other: _____

Please circle each of the following areas that are offered in your program:

Greenhouse	AgriBiology	Ag Science / Production
Ag Mechanics	Wildlife	Ag Communications
Environmental Science	Animal Science	Plant/Soil Science

Thank you for your assistance in this study