AGRICULTURE TEACHERS OF TEXAS: WHO WILL STAY AND WHO WILL GO?

by

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ABSTRACT

This study focused on the factors that affect the retention of agriculture teachers in the state of Texas. Results of the study concluded that the key reasons agriculture teachers are staying in the teaching profession revolve around job satisfaction, student success and the FFA organization success. However, there is not a lot of evidence that explains this phenomenon prior to them leaving the profession in Texas. Identifying the reasons agriculture teachers are considering leaving the profession is important to teacher educators, agriculture teachers, and school administration to better prepare teachers with professional development in those critical need areas. Descriptive statistics were used to identify various reasons for agriculture teachers' consideration to leave the profession or remain were utilized. Online questionnaires were distributed to 330 agriculture teachers in Texas addressing three important questions. The first question addressed what aspects current agriculture teachers felt first-year agriculture teachers were lacking to be effective teachers. The second question asked what aspects of teaching affected their consideration to leave the profession. All participants were asked what aspects of teaching affected their decision to remain in the teaching profession in question three. Results of the study indicated that the majority of agriculture teachers who considered leaving the profession felt there was too much stress related to FFA and SAE projects. The study found agriculture teachers stay in the profession because they feel a sense of recognition of their role in advising students. Current teachers indicated that stress management and student discipline were major issues faced by first year teachers.

I. INTRODUCTION

The trend between supply and demand for adequate agriculture teachers has not considerably changed over the years. The National Agriculture Supply and Demand Study stated that the supply of agriculture teachers was way below the demand and retirement is the prevailing reason; followed by leaving for employment in the agribusiness industry (Smith, Lawver, & Foster, 2014). According to the 2016 National Agricultural Education Supply and Demand Study, the demand was still much higher than the supply with retirement and employment in business/industry still the leading cause (Smith, Lawver, & Foster, 2016). Kantrovich's (2007) study on supply and demand for agriculture teachers showed that there is a vast amount of graduates, but many of the graduates felt unprepared for the first year of teaching. Understanding ways to improve the teacher education program will help graduates feel more prepared for various situations. Feeling prepared may encourage more agriculture teachers to stay in the profession, but some do not feel included in all aspects. Agriculture education faces a diversity issue between color and gender, but addressing the issue might cause a decline in agriculture teachers (Kantrovich, 2007). However, the absence of diversity discourages students from agriculture courses and in turn pushes them away from pursuing a career in agricultural education, if desired. Currently there are few African American agriculture educators nationally on the collegiate level, which shows the shortage of diversity within the profession (Thompson & Fritsch, 2012).

Many agriculture teachers are leaving the profession prematurely, causing the demand to go up. This is because new teachers are seeking employment in agribusiness, teaching another subject, graduate school, etc. (Smith et al., 2016). What are the reasons

behind the agriculture teachers who are considering leaving the profession? How can graduates and beginning agriculture teachers be encouraged to stay in the profession? Beginning agriculture teachers claim one of the major problems faced is lack of knowledge on how to organize an effective alumni or advisory committee (Myers, Dyer, & Washburn, 2005). The logic behind these types of organizations is to assist the teacher in preparation for contests and funding. Another study found self-efficacy was a common concern for teachers who have not yet entered the field (Paulsen, Anderson, & Tweeten, 2015). According to Paulsen et al. (2015), this is not true for all areas of teaching, but that agriculture teachers have a great deal of anticipation towards their first year of teaching due to high stress and long hours related to the job. However, graduates leave student teaching feeling rejuvenated allowing them to put past problems behind and look forward to the first year of teaching. For agriculture teachers, who have been teaching longer than three years, they find administrative support, discipline and student motivation to be a leading cause for leaving the profession (Boone & Boone 2007). These factors may vary, but understanding the reasons behind beginning agriculture teachers considering leaving the profession is important.

For every reason to leave the profession there are many more reasons to stay. James (2013) found achievement to be an influential piece in agriculture teachers choosing to stay in the profession. The study further discovered females place more importance on recognition, advancement, policy, administration, and supervision than males. Edwards and Briers (2001) found females were more likely to work in a multi-teacher department. Multi-teacher departments place more importance on work itself and salary, another reason for females to seek out a multi-teacher job (James, 2013). Multi-

teacher departments split the work and allow teachers to decide who teaches what. Whereas in a single agriculture teacher department the work falls on one teacher to teach all subjects and run the FFA chapter.

The long hours, level of commitment and little help from others can become stressful. Croom (2003) agreed and found coping mechanisms for stress should be taught prior to entering the profession. Burnout is caused by high levels of stress within a profession; this is why burnout is thought to be a major cause for teachers leaving the profession. Many beginning teachers are told this is a concern to worry about, which causes them to shy away from teaching agriculture. However, Croom (2003) found burnout was not as serious of a cause for agriculture teachers leaving the profession and stated it should be communicated more clearly too potential agriculture teachers. In fact, Walker, Garton, & Kitchel (2004) found the level of satisfaction agriculture teachers receive the first year of teaching only increased over time.

Walker et al. (2004) also found that those who leave the profession typically enter into agriculture industry jobs. Should these former teachers should be encouraged by agriculture educators to become guest speakers or teach adult classes to promote agriculture awareness? Some educators may not feel like an effective teacher, which is why they choose to switch professions. Roberts and Dyer (2004) found there are forty characteristics of an effective agriculture teacher, which can be categorized into instruction, FFA, Supervised Agricultural Experience (SAE), building community partnerships, marketing, professional growth/professionalism, program planning, and personal qualities. The study also found that most teacher education programs have a curriculum that addresses these categories, except for personal qualities, which cannot be

taught. It is a loss for the agricultural education profession when one chooses to switch careers into the agriculture industry, but it is still important for ex educators to give back and be an educational resource. It is important for educators to know there is someone else willing to help teach a particular topic, so that the students benefit.

Statement of the Problem

This study sought to determine the leading aspects agriculture science teachers had considered leaving the profession for and the aspects effecting their decision to remain. This study used a quantitative research methodology collecting data from agriculture teachers in Texas. A survey was distributed to randomly selected current agriculture teachers in Texas to identify reasons for them staying in the profession. Problems faced by agriculture teachers (Edwards & Briers, 2001; Myers et al., 2005; Boone & Boone, 2007; James, 2013; Paulsen et al., 2015) and job satisfaction of agriculture teachers (Walker et al., 2004; Walsh & Battitori, 2011; Gilman, Peake, & Parr, 2012; Croom, 2003) have been documented. The demand for agriculture teachers has been on a rise for the past ten plus years. Identifying the reasoning behind the agriculture teachers staying even if they considered leaving will aid in the supply of prepared agriculture teachers (Kantrovich, 2007; Foster et al., 2014).

Purpose

The main purpose of this study was to identify aspects current agriculture teachers are considering leaving the profession for and aspects they are choosing to remain for. This is important because there is an inadequate supply of agriculture teachers compared to the demand for them. Agriculture science teachers in Texas who were currently teaching during the 2016-2017 school year were the target population for this study.

There is an immense amount of research as to why agriculture teachers are leaving the profession, but limited amount on why agriculture teachers are choosing to stay in the profession. Determining reasons for agriculture teachers staying in the profession will aid agriculture teacher educators in determining what competencies need to be added to the current curriculum and what to improve upon.

Objectives

The researcher sought to:

1. Identify the factors associated with staying in the agriculture teaching profession.
2. Determine if teacher preparation courses prepare future teachers for the rigor of the classroom.
3. Identify reasons agriculture teachers considered leaving the agriculture teaching profession.

Keywords

For the purpose of the study, the following terms were used:

Supervised Agriculture Experience (SAE): The Supervised Agricultural Experience Program is education. It is hands-on, real-life agricultural career preparation experiences tied to agricultural science curriculum, student aptitudes, interests, career, and educational goals and to the agricultural industry. It ties together the entire agricultural education experience. Each agricultural education should have an SAE that is documented in an approved record book (Texas FFA Organization, 2015).

National FFA Organization (FFA): FFA is an extracurricular student organization for those interested in agriculture and leadership. It is one of three components of agricultural education (National FFA Organization, 2015).

Vocational Agriculture Teachers Association of Texas (VATAT): The VATAT is a professional organization for agriculture science teachers and supporters that informs members about the latest agricultural education practices, encourages higher standards of teaching and provides a unified voice in the state legislature (VATAT, 2016).

Effective teacher: Five specific, critical areas make up teacher effectiveness: the teacher as a person, classroom management and organization, organizing for instruction, implementing instruction, monitoring student progress and potential (Stronge, 2007).

Stayers: Agriculture teachers who are remaining in the teaching profession (Walker, Garton, & Kitchel, 2004).

Leavers: Agriculture teachers who are leaving the teaching profession (Walker et al., 2004).

Assumptions

The research has the following assumptions:

1. This study assumes the instruments used will measure the perceptions of agriculture teachers on the issues first year agriculture teachers face.
2. This study assumes some agriculture teachers will identify as having considered leaving the profession.
3. This study assumes majority of the agriculture teachers will identify as staying in the profession.

Limitations

This research has the following limitations:

1. The population was limited to 330 randomly selected Texas secondary agricultural education teachers in the 2016-2017 school year. Although the

results of this study may have potential implications for teachers of other subjects, the ability to generalize these results cannot be extended beyond the target population.

2. Teachers who have taught zero to one year represent first year teachers who have just entered the profession. With the lack of experience, their answers may be less reliable.
3. There were too few who identified as having considered leaving the profession to give an opposing viewpoint for the study.

II. REVIEW OF LITERATURE

The focus of this study was to determine leading causes for agriculture science teachers staying in the profession even if they have considered leaving. Recent studies show a major decline in the number of agriculture teachers being produced to fill the positions (Thompson & Fritsch, 2012); (Kantrovich, 2007); (Foster et al., 2014). The numbers show there is a surplus of future agriculture teachers graduating, but only half of the graduates go into teaching. Where are graduates getting jobs? Many are going into the business industry; others are choosing continuing education programs or simply choosing another profession (Smith et. al, 2016). This study will analyze reasons agriculture teachers are choosing to stay in the profession and aspects affecting the consideration to leave (Thompson & Fritsch, 2012). Understanding why agriculture teachers are choosing to stay will give insight to administrators and teacher educators, to better the profession so that more choose to stay in the agriculture teaching profession. It is important to understand the reasons agriculture teachers are staying in the profession even if they have considered leaving, so that agriculture teachers, teacher educators, and administrators can continue to better the profession in hopes that more agriculture teachers choose to stay instead of leave the profession. The literature review will explore the reasons for agriculture teachers to stay or consider leaving the profession and concerns with the issues beginning agriculture teachers are having according to current agriculture teachers.

A detailed understanding of the history of agricultural education is necessary to fully understand the need for agricultural education. This chapter examined the supply and demand trends of agriculture teachers. Acknowledging there is a need for agriculture teachers to continue to stay in the profession, establishes the demand to understand the

needs of agriculture teachers. Understanding the characteristics of an effective agriculture teacher, job satisfaction and problems agriculture teachers face will allow us to better grasp these needs. Understanding why agriculture teachers are satisfied with their jobs shows why agriculture teachers are choosing to stay in the profession. The conceptual framework that shaped research on characteristics of an effective agriculture teacher, job satisfaction and problems agriculture teachers face were also examined.

History of Agricultural Education

Agricultural education has gone through major changes throughout history. John Dewey, Seaman Knapp, Rufus Stimson, and William Lancelot are the four philosophers that established the four pillars that support experiential learning (Knobloch, 2003). Experiential learning was developed to aid in agriculture by solving current issues through experiments. From 1825-1850 schools and colleges began offering agriculture classes and science classes based in agriculture (National Institute of Food and Agriculture Eds., 2014). According to the National Institute of Food and Agriculture Editors (2014) in 1862 the Morrill Land Grant College Act passed, providing land for states to build agricultural and mechanical colleges. In the 1870s, the colleges established by the Morrill Act began experimental work at the state agriculture colleges with the establishment of the Hatch Act of 1887 (Hillison, 1996). In 1894, Dewey started an experimental school at the elementary level, but controversies caused it to fall through (Biography.com). Dewey developed a philosophy based around learning by real-life contexts where he believed students learned by looking for solutions of real-life problems (Knobloch, 2003).

After Dewey presented his philosophy, Seaman Knapp, known as the “father” of

agricultural extension education, used the boll-weevil demonstration project to inspire extension education in 1903 (Knobloch, 2003). Knapp's ideas lead to the Smith-Lever Extension Act of 1914, establishing the federal extension service created to help educate farmers (National Institute of Food and Agriculture, 2014). This did not last long due to the Smith-Hughes Vocational Education Act of 1917, which shifted the direction of agricultural education by turning to the Federal Board for Vocational Education instead of the United States Department of Agriculture (USDA) (Hillison, 1996). Knobloch (2003) states Rufus W. Stimson shaped agricultural education at the high school level, by developing the project method of teaching, known as SAE. By 1920, there were 31,000 students enrolled in agriculture courses and in 1928, Future Farmers of America (FFA) was founded. Twenty years later there were roughly, 584,000 students enrolled in agriculture courses (National Institute of Food and Agriculture, 2014). During this time William H. Lancelot, a professor of vocational education, conceptualized Dewey's ideas and created the problem solving method of instruction in agricultural education (Knobloch, 2003).

Up until this time majority of students in agricultural education were males. Enns and Martin (2015) found the role of females became observed around the 1930s when women were included in adult classes, but were given roles that are more feminine. Females were given more supportive roles and even developed organizations that emphasized the roles. In the 1960s, female students began enrolling in agriculture mechanics courses and female student teachers began appearing in the equation (Enns & Martin, 2015). In 1970, agricultural education enrollment jumped to 853,000 students, a year after women were officially allowed in the FFA (National Institute of Food and

Agriculture, 2014).

Elementary education became the focus for many agriculture educators. Hillison's (1998) study at the Arkansas Department of Education established themes for instruction centered on plants and animals at the elementary level. Primary and first grade students studied parts of plants and animals, the second level of students studied the functions of the parts, the third level conducted experiments in growing cuttings in various soils as well as classifying the uses of animals and the fourth level studied germination and preparation of seedbeds followed by markets and seed selections. Arkansas education system took the ideas of the philosophers and merged them to educate students of all levels. Dewey believed it was important to educate students starting at the elementary level because that age is the adolescent stage when students are using exploratory ideas (Biography.com). The United States Bureau of Education began recommending integrating agriculture with other subjects such as mathematics, social studies, language arts and science at the elementary level (Hillison, 1998). With all of the improvements to agricultural education, FFA membership has reached the highest enrollment numbers peaking at 629,367 members.

Supply and Demand Issues Related to Agriculture Education

The supply and demand issues related to agriculture teachers has always been a major factor in agriculture teacher education. The realism of not having enough qualified teachers to fill all of the positions has caused new and existing programs to close (Thompson & Fritsch, 2012). According to Kantrovich (2007) in the Fall of 2006, forty agriculture programs could not operate due to the lack of qualified agriculture teachers. Since 2011, 27 out of 47 states reported a loss of programs or positions (Foster et al.,

2014). Smith et al. (2016) found 98.5 positions were lost and 73 programs closed in the 2015-2016 school year. Thompson and Fritsch (2012) found of the 679 agricultural education graduates in 2012-2013 school year only 473 pursued agriculture teaching jobs. However, this increased in 2016 with 508 graduates seeking employment in agriculture education (Smith et al., 2016). Ingersoll and Smith (2003) state policymakers are responding to the teacher shortage by increasing the supply of teachers, which is the wrong approach. This is because the recruitment of agriculture teachers does not necessarily mean recruiting qualified agriculture teachers. As of the 2012-2013 school year, 146 programs were operating with a non-licensed agriculture teacher (Thompson & Fritsch, 2012). These non-licensed agriculture teachers could be alternatively certified, from another state, or certified in another subject such as science (Ingersoll & Smith, 2003).

Currently the most common reason for agriculture teachers leaving the profession is retirement (Smith et al., 2016; Foster et al., 2014; Thompson & Fritsch, 2012; Ingersoll & Smith). For teachers to reach retirement means that the job was satisfying enough to stay thirty plus years. Looking at reasons agriculture teachers are staying in the profession might be a better solution to the problem. Understanding why agriculture teachers choose to stay instead of leave the profession provides insight to the good qualities of an agriculture teacher. Kantrovich (2007) found stability of the profession to play a major role in teacher retention. Ingersoll and Smith (2003) found attrition affects new teachers more so than experienced teachers. So does the problem relate more so with new teachers not understanding the benefits such as, constant pay raise, yearlong contract, and set vacation days. However, Ingersoll and Smith (2003) state too little

turnover can indicate stagnancy, but high levels of turnover can hint to underlying problems within an organization. However, eliminating low-caliber performers has benefited from some turnover. “The data suggest that after just five years, between forty and fifty percent of all beginning teachers have left the profession” (Ingersoll & Smith, 2003, p. 2). This is a high percentage of teachers when compared to the percentage of teachers staying in the profession.

Diversity within the profession has become a major concern and should be addressed. Kantrovich (2007) found in Kentucky 88% of agriculture teachers were Caucasian and 12% were non-Caucasian, being close to a 50/50 split between male and female. As of 2014, 63 agriculture educators were non-Caucasian and 628 were Caucasian (Foster et al., 2014). Smith et al. (2016) reported an increase in female agriculture teachers making up 67% of the population with 89.5% of the population reporting as white leaving 11.5% reporting other ethnicities. Ingersoll and Smith (2003) found, although raising teacher salary would be effective in filling positions it would be expensive. The same study found that looking at bettering working conditions would be a better source for increasing teacher numbers. Kantrovich’s (2007) supply and demand study found “if past trends continue we could see one of if not the highest need for teachers since the study began” (p. 37). How schools are managed and organized by the administration are the dominating factors to school staffing issues, but this is the solution as well (Ingersoll & Smith, 2003). Considering the reasons agriculture teachers are staying in the profession will aid teacher educators and school administrators in retaining qualified agriculture teachers who intend to stay in the profession.

Role Higher Education Plays on Preparing Agriculture Teachers

The majority of agriculture teachers graduate from an accredited university with a degree in agricultural education/science, with a teacher certification. Of all the agricultural education programs, 60% are administratively housed within the college of agriculture and enrollment ranges from one to two hundred students (Myers & Dyer, 2004). Myers and Dyer (2004) found the leading difference was in the percentage of professional education coursework between a four-year program and five-year program. How agricultural education majors teach and their success as an agriculture teacher is based on courses taken and professional development taught in undergraduate courses. The most common courses taught in the agricultural education program are methods of teaching, program planning and the student teaching internship (Myers & Dyer, 2004); (McLean & Camp, 2000). The common courses taught are generally the items beginning agriculture teachers consider top priority needs for in-service instruction because these are most beneficial to student teaching. Garton and Chung (1996) found classified instruction, program planning, development and evaluation, and program administration to be common in-service needs. McLean and Camp (2000) found student teaching and all agricultural education programs did not teach lesson planning. Student teaching is an important component of an agricultural education program. However, cooperating teachers do not always know what is expected of them, resulting in the student teacher not having a successful experience (Myers & Dyer, 2004). Beginning agriculture teachers feel they have the basic technical agriculture knowledge and skills to be successful, but lack professional competencies (Garton & Chung, 1996). Graduates suggest the amount of technical agriculture courses be increased, and pre-professional and agricultural

education coursework should stay the same (Myers & Dyer, 2004). Garton and Chung (1996) found the greatest need for beginning agriculture teachers, which is not taught, is how to complete reports for local and state administrators. This would be a helpful course if agriculture teachers intend to apply for grants for the agriculture program to have proper funding.

Graduates of agricultural education believe programs do not adequately prepare them for specific teaching tasks like using technology in the classroom and teaching English Language Learner (ELL) students (Hammond, Chung, & Frelow, 2002). The new and innovative ideas of teaching methods are changing constantly, but teacher educators and current teachers are unwilling to evolve. Hammond et al. (2002) found the National Council for Accreditation of Teacher Education (NCATE) accreditation is required by majority of states, making the standards for special needs and technology a dominant issue. Rudd, Baker, and Hoover (2000) found undergraduate agriculture students do not possess a strong disposition toward critical thinking. Having the ability to analyze and form a judgment toward a particular study is important in exploration, and agriculture is an exploratory-based subject. McLean and Camp (2000) found problem solving to be a dominant instructional method taught in agricultural education programs across the United States. However, agriculture teacher education programs prefer learner-centered instruction (Myers & Dyer, 2004; Rudd et al., 2000). Rudd et al. (2000) found females have a greater inclination to think critically, but age makes no difference for this. Being able to think critically and be in a hands on learning experience are both important ways for agriculture teachers to learn and teach.

Characteristics of an Effective Agriculture Teacher

Being an effective agriculture teacher is an important component and without understanding what characteristics make up an effective teacher, it can make teaching difficult. Koutsoulis (2003) found students are looking for a teacher with superman characteristics. Walker (2013) identified twelve characteristics of an effective teacher to be prepared, positive, have high expectation, creative, fair, have personal touch, develop a sense of belonging, admit mistakes, sense of humor, give respect to students, forgiving, and compassionate. The same characteristics play an important role for effective agriculture teachers. Roberts and Dyer (2004) found there to be forty characteristics of an effective agriculture teacher which can be categorized into "instruction, FFA, SAE, building community partnerships, marketing, professional growth/professionalism, program planning, and personal qualities" (p. 93). Minor, Onwuegbuzie, Witcher, and James (2002) found seven characteristics of an effective teacher to be student centered learning, effective classroom and behavior manager, competent instructor, ethical, enthusiastic about teaching, knowledgeable about subject, and professional. It is believe personal qualities of an effective teacher must exist or be developed. Being approachable as a teacher, by connecting with students, opening up to students and taking an interest in students personal life allows one to be more effective (Walker, 2013).

Duncan and Ricketts (2008) found traditionally certified agriculture teachers felt most successful in program management abilities and alternatively certified agriculture teachers felt most efficacious in pedagogical strategies. Duncan and Ricketts (2008) found the traditionally certified teachers and alternatively certified agriculture teachers, both, felt least effective in the technical agriculture content knowledge. Minor et al.

(2002) study on pre-service teacher's educational beliefs and perceptions of characteristics of effective teachers identified seven themes related to effective characteristics of agriculture teachers that are student-centered, effective classroom and behavior manager, competent instructor, ethical, enthusiastic about teaching, knowledgeable about subject and professional (p. 120). Pre-service teachers believe student-centered learning to be the greatest characteristic of an effective teacher (Minor et al., 2002). Students believe teachers should provide students with love and work, understanding, and effective communication (Koutsoulis, 2003). Minor et al. (2002) also found enthusiasm was an important characteristic for pre-service teachers over effective teaching, but this was dependent upon gender, ethnicity and intended grade level. Walker (2013) found having an optimistic attitude towards teaching by giving praise to students and communicating the progress with students is an effective characteristic of teachers. Effective teachers are hard to find and even harder to keep due to lack of authority in majority of schools.

Job Satisfaction of Agriculture Teachers

Agriculture teachers across the nation from first year teachers to retirement were generally satisfied with their work (Gilman et al., 2012; Walsh & Battitori, 2011; Blackburn & Robinson, 2008; Bennett, Iverson, Rohs, Langone & Edwards, 2004; and Walker et al., 2004). Blackburn and Robinson (2008) found satisfaction declines in the third to fourth years of teaching, but rises again in the fifth to sixth years of teaching. The study concluded this to be because the less effective teachers have left the profession by this time. Salary would appear to be the easy answer when asking teachers why they are choosing to leave the profession, however that is not the case; most teachers are satisfied

with the salary (Gilman et al., 2012). With a constant yearly pay raise and few worries related to losing the position the salary is satisfying. Walker et al. (2004) found the teachers who are leaving prematurely claim the lack of support from administration as the most common reason followed by family issues. Blackburn and Robinson (2008) found teacher self-efficacy to be a leading cause for agriculture teachers leaving the profession while, Gilman et al. (2012) found the leading cause to be school policy. Walsh and Battitori (2011) discuss the top reasons for leaving the profession relate to the interference of paperwork and other duties with teaching followed by the influence of the standards.

With the many unsatisfying reasons teachers leave there are more reasons for them to stay; number one being, "the work itself" (Gilman at el., 2012, p. 109). Walsh and Battitori (2011) looked at gender specifics and found females were more satisfied when rules were consistently enforced and there was active communication with the principal, than males. Gilman et al. (2012) found female agriculture teachers are more satisfied when recognized for their work. Beginning agriculture teachers are more satisfied when students are able to engage through classroom management; however, as teachers reach the fifth and sixth years of teaching engaging the students becomes less of a factor in job satisfaction (Blackburn & Robinson, 2008). Perhaps this is because agriculture teachers have had the time to progress to focusing more on the students involved in the FFA and SAE aspect of agriculture verses the classroom where students may have no interest. Bennett et al. (2004) found agriculture teachers with extended-day status were generally more satisfied, relating back to teachers being recognized through pay for the time spent and effort put into the program. However, Walker et al. (2004)

found agriculture teachers who leave the profession early enjoy the FFA aspect more than the teachers who stay or move schools. Nonetheless, these agriculture teachers choose to leave teaching because beginning agriculture teachers do not realize all of the responsibilities that come with being an agriculture teacher. Foster et al. (2014) reported 14.2% of agriculture teachers who leave the profession are gaining employment in the business industry related to agriculture. The teachers who choose this path have the skills related to fundraising and socialization allowing them to be successful sales representatives and managers (Walker et al., 2004).

The Professional Development Needs of Agriculture Educators

Agriculture teachers traditionally certified receive a bachelor's degree in agricultural education, requiring student teaching and completing the standardized tests. Those who choose to be alternatively certified must have a bachelor's degree and obtain a teaching job while taking courses through an alternative teaching certification course and must complete the standardized test. Different issues emerge when looking at the needs of agriculture educators. Similar differences can be found when looking at beginning agriculture teachers and experienced agriculture teachers. Layfield and Dobbins (2002) found beginning agriculture teachers needed in-service education on how to utilize a local advisory committee the most. Joerger (2002) found establishment, maintenance and use of an advisory committee in-service to be of importance also. Joerger (2002) found the highest need for in-service is on program design management, teaching and classroom management for beginning agriculture teachers. Layfield and Dobbins (2002) found experienced agriculture teachers needed more in-service training on integrating technology into the classroom. Peake, Duncan, and Ricketts (2007) and Duncan, Ricketts,

Peake and Uesseler (2006) found similar results on in-service needs relating to integrating current advances of agriculture technology into the curriculum.

Roberts and Dyer (2004) found traditionally certified and alternatively certified teachers both had the greatest need for writing grant proposals for external funding. This is a very important component because majority of successful agriculture programs use outside funding to support the organization. Joerger (2002) and Layfield and Dobbins (2002) found beginning agriculture teachers had common in-service needs related to preparation of FFA degree and proficiency award applications, but Roberts and Dyer (2004) found traditionally certified teachers had the lowest in-service need for FFA and SAE supervision. Layfield and Dobbins (2002) found beginning teachers also had a stronger need for in-service on developing SAE opportunities than supervising SAEs. Alternatively certified teachers felt a greater need for program planning and management, technical agriculture, FFA and SAE supervision and instruction and curriculum constructs (Roberts & Dyer, 2004).

Roberts and Dyer (2004) also found that alternatively certified teachers felt instruction and curriculum were the lowest in-service need. The study also suggests this could be because alternatively certified teachers "lack sufficient knowledge to adequately understand the value of pedagogy" (p. 68). However, these findings are not proven merely suggested. Joeger (2002) found the lowest need was on education instruction, which was a common finding with Roberts and Dyer (2004) as well. Agricultural education instruction is diverse and covers many different topics. However, one person cannot be responsible for knowing how to teach every subject. Peake et al. (2007) found teachers felt most competent in plant science courses and least competent in courses

related to aquaculture. Layfield and Dobbins (2002) agreed with the findings that beginning and experienced teachers needed less inservice on plant and animal sciences as well. Roberts and Dyer (2004) found that alternatively certified teachers had greater in-service needs on agriculture mechanics and plant science. Roberts and Dyer (2004) believe this is because the alternatively certified teachers are more competent in specific areas such as animal science because most majored in animal science prior to obtaining a certification.

Problems Faced by Agriculture Teachers

The problems many agriculture teachers face relates back to the many needs of agriculture teachers. Myers et al. (2005) found beginning agriculture teachers felt there were eleven major problems faced when entering the field. Myers et al. (2005) found the top five to be related to organizing an alumni chapter or advisory committee, planning an FFA chapter's events and activities, managing student discipline, and recruiting and retaining alumni members. Boone and Boone (2007) found beginning agriculture teaches to have problems with student discipline more so than experienced teachers. More recently, Paulsen et al. (2015) found discipline issues to be a concern for pre-service teachers. Understanding how to handle student discipline is something beginning teacher's lack, but it is not of top priorities for problems beginning teachers face when teaching agriculture. When looking at beginning and experienced agriculture teachers, lack of administrative support is a major problem (Boone & Boone, 2007). When focusing more on beginning teachers the major problem is with establishing or managing a support group for the FFA (Myers et al., 2005). The purpose of a support group is to aid the agriculture teacher and guide them to make better decisions for the FFA chapter.

Prior to entering the teaching profession self-adequacy is a concern for most (Paulsen et al., 2015). Determining how to balance homework, the classroom, and a successful FFA chapter during student teaching can play a role in these concerns. Paulsen et al. (2015) found pre-service teachers go through three phases: anticipation phase, survival phase and rejuvenation phase. The anticipation of not knowing what to expect helps work through the first few weeks. Pre-service teachers then enter the survival phase where they deal with the day-to-day, creating lesson plans and dealing with time management. Finally, pre-service teachers enter the rejuvenation phase where there is a break from school, the past weeks are left alone, and future agriculture teachers begin to enjoy the thought of having their own classroom and program at the end of student teaching. Once pre-service teachers are hired, concerns begin to be expressed with class preparation and feeling underprepared for some subjects and become concerned with self-confidence (Boone & Boone, 2007). With all of the stress and time put into students and student projects, teacher burnout becomes a major concern for agriculture teacher educators.

Croom (2003) found burnout in agriculture teaches to be of little concern. Once agriculture teachers become more experienced, developing lessons and looking for support from outside groups become less of a concern (Boone & Boone, 2007). The accomplishment felt by the agriculture teacher (Croom, 2003) when a student earns a scholarship or money for a project countless hours were put into is greater than the stress that comes with it. This study also found the lower the emotional exhaustion levels of agriculture teachers; the less likely teaching performance will suffer. With the continuing changes in agriculture and enrollment issues, the need for new qualified teachers is

becoming a concern (Boone & Boone, 2007). Students interested in entering the agricultural education field fear burnout and are deterred away, but it should be communicated to them that this is not a major issue (Croom, 2003). Agriculture teachers face many obstacles when entering the profession, the ones who stay in the profession find the good outweighs the bad.

Retention in the Agricultural Education Profession

Agriculture teachers are generally content with the career of teaching and get a great amount of satisfaction from student success. Achievement is considered a primary factor related to teacher retention (James, 2013). Boone (1990) found student achievement directly related to the knowledge of the subject prior to taking a course in agriculture, and the characteristics of the individual teacher. How do you judge the performance of an agriculture teacher prior to employment opportunities? Graham and Garton (2003) found the best way to predict the performance of the teacher was by the grade point average (GPA) of the agricultural education coursework of the future agriculture teacher. Meaning agriculture teachers who have a high GPA in the agricultural education program will be successful agriculture teachers. The successful agriculture teachers allow students to use problem-solving skills to gain knowledge in topics (Boone, 1990). Allowing students to use real life problem solving skills increases the retention of students as well as teachers. Gaining recognition from staff, community and administration for student success is important to teacher retention as well (James, 2013).

There is evidence to support that attrition is high among beginning agriculture teachers, but after four to five years, it decreases (Allen, 2005). This has something to do

with the gender of agriculture teachers having shifted from male to female over the years (Edwards & Briers, 2001). Allen (2005) found evidence to support that most agriculture teachers who leave prematurely return to the profession, and it is thought to be because they have children and then once the children are grown, agriculture teachers return to teaching. Even though the attrition rate appears high, studies are revealing that many of these teachers do return to the profession. Allen (2005) found turnover is more of an issue in smaller schools than larger schools, but when looking at reducing class size and teacher workload the literature was inconclusive.

Administrative support is important to agriculture teachers in the decision to stay in the profession (Graham & Garton, 2003). James (2013) found female agriculture teachers place an importance on policy, administration and supervision. Without a strong administration, the school begins to drop in areas like salary. However, working conditions appeared to be a larger issue related to retention than salary according to the literature (Allen, 2005). Whereas, female teachers tend to avoid areas that make them less comfortable by teaching in multi-teacher programs with larger budgets where more emphasis is on salary (James, 2013). Agriculture teachers with successful programs or support from schools are choosing to remain in the profession because the experience is satisfying. If agriculture teachers were not satisfied with the career choice, they simply would not do it because of the long hours put into student success.

Conclusion

In conclusion, the history of agricultural education had an enormous impact on current issues. Males were predominantly educators whereas today the roles have shifted slightly, and females are moving more into the agriculture classroom and taking on roles

that are more dominant. The way agriculture is taught based upon philosophies of others has a major impact on some of the problems agriculture teachers face such as time management. Without the hands on experience in real life situations however, it would be much more difficult to learn these topics. None of which would be possible without the policies that were put into place such as the Smith Hughes Act of 1917 that enabled high school agricultural education. More currently agricultural education has faced a supply and demand issue. The lack of qualified new teachers to fill the growing number of positions is causing new and old programs to close the doors. So what characteristics make up an effective qualified agriculture teacher? A successful agriculture teacher has a balance between the three pillars of agricultural education: classroom, FFA and SAE. Knowing how each of the three parts works is important to student's knowledge base and influencing an equal amount of each. In addition, understanding the constant change agriculture is going through and keeping up with it in teachings. The most qualified teacher is not always the most satisfied teacher. Agriculture teachers have a great amount of work beyond the classroom and generally enjoy it. The job satisfaction level of agriculture teachers is high in comparison to core subject teachers because agriculture teachers get a sense of accomplishment from student success. The needs of agriculture teachers relate directly to problems faced. Most commonly, agriculture teacher needs reflect on training in how to build a support organization and how to gain administration support.

Understanding why agriculture teachers stay in the profession is important for teacher educators to develop courses, which will aid in resolving issues future agriculture teachers are having. Currently, burnout is not a major issue agricultural education faces,

however, students are choosing not to enter the profession because of the issue. It is important for educators of agriculture teachers as well as current agriculture teachers to spread the word. The retirement numbers have increased in agricultural education, but there are not enough teachers to fill the positions because so many graduates are choosing other career paths. Incoming students believe the salary is terrible, the hours are long and unsatisfying and that teaching is not the profession to enter. Finding ways to encourage them to stay in the teaching profession is important.

Need for the Research Activity

Understanding why agriculture teachers are staying in the profession is important to learning how to better prepare future agriculture teachers. Identifying aspects affect their consideration to leave the profession will be beneficial as well. Teacher educators are constantly working on ways to improve upon how to teach teachers. Understanding problems agriculture teachers face as beginning agriculture teachers and problems current agriculture teachers see as issues with new agriculture teachers can help eliminate some of the issues. Being more prepared on writing lesson plans is one example. Student teachers are asked to prepare lessons prior to teaching, but programs do not go in depth enough for some to fully feel prepared. If teacher educators can learn more about the issues student teachers face, new ideas can be built to aid students prior to teaching.

Research Questions

1. What were the personal and professional characteristics of agriculture teachers in Texas?
2. What aspects did current agriculture teachers feel first-year teachers were lacking knowledge in to be effective?

3. What reasons did current agriculture teachers have when they considered leaving the agriculture teaching profession?
4. What were the specific aspects of teaching agriculture that affected the consideration to leave the profession?
5. What were the specific aspects of teaching agriculture that affected the decision to remain in the profession?

III. METHODOLOGY

The demand for qualified agriculture teachers has increased over the years due to the growing number of agriculture teachers retiring and the lack of students entering the profession. Identifying why agriculture teachers are continuing to leave the profession for reasons other than retirement is important for sustaining the agriculture teacher profession. Past studies have focused on attrition, and identifying the reasons why teachers leave, whereas this study will also look at why agriculture teachers are staying. Aspects that affected agriculture teacher's considerations to leave and decisions to stay were considered to identify ways to improve upon teacher preparation courses. James (2013), Edwards and Briers (2001), Graham and Garton (2003), and Allen (2005) all identified common factors for teacher retention, but few studies have been done to reduce teacher turnover in agricultural education. Understanding why teachers are staying plays an important role in understanding how to aid the preparation of agriculture teachers prior to entering student teaching.

The purpose of this study was to identify the leading reasons agriculture teachers are staying and considering leaving the profession for and determining what additions or changes could be made in teacher preparation courses to better prepare future teachers. Agriculture teachers were asked if they had ever considered leaving the profession to gain more insight as to why. The study was conducted quantitatively using a descriptive research design. This chapter identifies the structure of how the study was conducted.

Population and Sample

The target population for this study consisted of agriculture teachers in the state of Texas. There were 2,129 agriculture teachers in Texas for the 2016-2017 school year

according to the VATAT directory. The proportional stratified random sampling approach was used to select an equal representation of the ten areas in Texas (Table 1). Data was collected from a sample size of 330 current agriculture teachers in an active program as defined by the 2016-2017 VATAT directory. Two subgroups of agriculture teachers were defined for this study. The first group consisted of agriculture teachers who were staying in the teaching profession and not considering leaving and the second group consisted of agriculture teachers who had considered leaving the teaching profession at some point, but stayed.

Table 1

Display of Proportional Stratified Random Sampling Approach

Area	**Number of participants selected per area**	**Total Number of teachers per area**	**(%)**
Area 1	20	128	6.0
Area 2	17	109	5.2
Area 3	68	440	20.6
Area 4	17	112	5.2
Area 5	43	274	13.0
Area 6	30	196	9.1
Area 7	44	285	13.3
Area 8	31	197	9.4
Area 9	30	193	9.1
Area 10	30	194	9.1
Total	330	2,129	100.0

Instrumentation

A quantitative study was conducted using a survey analysis. Eleven questions address demographics of the participant. This was followed by the question: what aspects are first-year agriculture teachers lacking knowledge in to be effective teachers? Fifteen factors related to agricultural education and regular education such as, managing student discipline, time/stress management, and preparation of FFA CDE/LDE teams, etc. were listed under the question. An initial question asked whether the teacher had ever considered leaving the profession or not. If the participant selected, yes, they had considered leaving the profession, the teacher was asked the reason for considering leaving (i.e.) retirement, personal reasons, graduate school, etc. There were sixteen factors related to reasons for agriculture teachers leaving the profession consolidated into three categories labeled: FFA and SAE, school/classroom, and personal issues. The six factors comprising the FFA and SAE category included time management, stress, and parent conflict, recognition from community, recognition from administration, lack of advancement in the profession, and lack of proper funding. The six factors comprising the school/classroom category were administration support, low salaries, lack of classroom management, extended contract, planning for multiple classes, and paperwork. The three factors comprising the personal issues category were low career commitment, work conflicting with family, and family conflicting with work. If the teacher selected no, they never considered leaving, the teachers were prompted to answer questions related to reasons for staying in the profession. There were thirteen factors related to reasons why agriculture teachers were staying in the profession, consolidated into three categories labeled: involvement, recognition and personal reasons. The four factors comprising the

involvement category were parents, administration, other teachers and community. Recognition was comprised of from administration, from parents/community, of our role in advising of students, and of your success advising the FFA chapter. The last category, personal reasons, was comprised of work schedule/hours, level of enthusiasm about teaching, professional growth opportunities, salary and proper funding. Responses to the survey were recorded in qualtrics and coded into SPSS.

Reliability and Validity of Constructs

The reliability and validity of the survey was based on a panel of experts in the agriculture teacher education field and a pilot test of twenty-five agriculture teachers in Texas. The survey was distributed to a panel of experts consisting of three current professors at Texas State University - San Marcos within the agriculture and occupational education department. Thirteen spring 2016 Texas State University agricultural education student teacher graduates in 2016 reviewed the survey for wording and grammatical errors. The panel was given two weeks starting on June 15, 2016 to review and critique the survey. There were no responses related to changes needing to be made to the survey. A pilot test was distributed to twenty-five randomly selected agriculture teachers in the state of Texas on September 12, 2016 after the new school year began. The agriculture teachers were listed on an excel sheet from one to 2,129. An online random integer generator was used to select the twenty-five agriculture teachers out of the 2,129 teachers. The testers were initially given one week to complete the survey, taking 10-15 minutes, and then a reminder email was distributed to the pilot testers. On September 20th and 27th, reminder emails went out to participants of the pilot test and the final day of collection was September 30, 2016. Out of the twenty-five participants, fourteen

completed the survey providing adequate numbers to test reliability and validity. Cronbach's coefficient α was calculated to test internal consistency of the instrument. The reliability scale relating to how various aspects of teaching agriculture affected the consideration to leave instrument was α = .89. The reliability scale relating to how various aspects of teaching agriculture affect the decision to remain instrument was α = .86. The reliability scale relating to aspects first-year teachers are lacking knowledge in to be effective instrument was α = .74. Based upon the response rate for the pilot test the decision was made to reverse the order of the questions to prompt more responses. All eleven demographic questions were at the beginning followed by the question related to knowledge first-year teachers are lacking to be effective. Teachers were then asked had they ever considered leaving the profession, if so for what other career paths. This was followed by the question asking what specific aspects of teaching agriculture affected their decision in consideration of leaving the profession answered by only those who had selected considered leaving. Lastly, all participants were asked the aspects of teaching agriculture that affected their decision to remain in the profession.

Data Collection Process

A survey was developed using ideology of previous studies from James (2013), Karsenti and Collin (2013), Sorensen et al. (2015), and Myers et al. (2005). The survey consisted of eleven demographic questions and two main questions grouped into three categories each, one for agriculture teachers staying in the profession and one for agriculture teachers who considered leaving the profession. The survey provided questions directly related to reasons agriculture teachers considered leaving or staying in the profession found from previous studies. The question for agriculture teachers leaving

the profession was divided into three groups: reasons related to FFA and SAE with seven subgroups, reasons related to school/classroom with six subgroups, and reasons related to personal issues with three subgroups. The question for agriculture teachers staying in the profession was divided into three groups: reasons related to involvement from with three subgroups, reasons related recognition with four subgroups, and reasons related to personal reasons with five subgroups. Questions also related to what aspects current agriculture teachers felt first-year agriculture teachers were lacking knowledge in to be effective teachers. The survey attempted to assess leading reasons for agriculture teachers staying in the profession and the reasons agriculture teachers had considered leaving the profession. The survey also, identified what factors associated first-year agriculture teachers are being lacking knowledge in to be effective teachers. Determining if teacher preparation courses are adequate to the needs of agriculture teachers is an important factor in developing courses for future teachers. The surveyors rated questions, from strongly disagree to strongly agree, the data was measured with an interval level response using a Likert five-point scale.

A panel of experts was asked to review the material and provide feedback. Following this, a pilot test was conducted to provide the researcher with reliability and validity of the instrument. Once all changes were made to the survey and the researcher and committee was satisfied with the survey, it was distributed via email through qualtrics to 330 agriculture teachers on the VATAT directory. One agriculture teacher on the list had retired and one email was duplicated on the directory. There were thirteen emails which bounced back initially and were unable to be distributed bringing the sample size to 316 agriculture teachers. On October 12, 2016 through qualtrics, a cover

letter was attached explaining the purpose for the research and asking for their participation. Contact information for the researcher was included in the email in case the teacher had any questions or concerns. By October 23, 2016, 53 agriculture teachers had completed the survey. The first e-mail reminder was sent out to participants who had not yet responded to the survey on October 24, 2016. The purpose of the reminder email was to inform those who had not completed the survey there was still time to do so. By October 31, 2016, 24 more agriculture teachers had completed the survey. There were three more reminder emails distributed on November 1st, 8th, and 14th. The third reminder added ten more survey responses, the fourth reminder brought thirteen more responses, and the fifth reminder had seven more responses. The final reminder was sent out on November 30, 2016 and data was collected December 7, 2016. One hundred and fourteen agriculture teachers were ultimately assessed yielding a response rate of 36.1%.

Storage

The data was stored on the Qualtrics website where the survey was distributed and collected. The agriculture department at Texas State University had a subscription to the Qualtrics database and it was offered to graduate students for research purposes. Dr. Morrish was allowed to see the contents of the data because he guided the researcher through the collection process. The instrument responses were stored on the Qualtrics website under a username and password only the researcher and Dr. Morrish had access to. Data based off the responses was stored on a USB drive, which stayed with the researcher throughout the study. This insured the data was protected and safe from any outside sources.

Data Analysis Overview

A questionnaire survey was distributed to a sample size of 330 Texas agriculture teachers. IBM SPSS Statistics 20 was used for the data analysis. The research was a quantitative analysis using descriptive statistics. The descriptive statistics were used to familiarize the reader with the demographics of the agriculture teachers. Frequencies, percentages, measures of central tendency, and variability were all used to fully describe the data that were collected by the researcher. Rankings were used to determine the importance of aspects first year agriculture teachers are lacking. Cronbach's alpha was used to determine the reliability of each scale of the instrument. If a certain item decreased the alpha, it was eliminated to increase the final alpha.

These statistics were chosen, because related studies looked at these statistics when identifying reasons agriculture teachers are staying in the profession or problems agriculture teachers face in the first years of teaching agriculture. Identifying these statistics showed the consensus, of agriculture teachers' in Texas opinions on reasons to stay in the profession and reasons for their consideration to leave. Understanding the leading aspects to stay in the profession will identify ways to encourage more graduates and current agriculture teachers to continue teaching. Specific factors were identified that current agriculture teachers felt first-year teachers were lacking knowledge in to be effective teachers. Being able to identify weaknesses in first-year agriculture teachers will aid secondary schools in what information they are lacking prior to student teaching and their first-year. The data coding was in the numeric format measured on an interval five-point scale. The scale consisted of strongly disagree, disagree, neutral, agree, and strongly agree. Qualtrics was the database used to conduct the analysis. The program

distributed the survey to the 330 sample agriculture teachers in Texas registered in the VATAT directory. Once a teacher completed the survey the data was sent back to the qualtrics program, which stored the information. To clean up the data, surveys not answered honestly (marking the same answer for every question) or missing questions were thrown out of the study. The qualtrics database calculated results based upon the five-point scale. The researcher chose to conduct a quantitative study because prior studies have developed data from the same format.

IV. FINDINGS AND DISCUSSION

The purpose of the study was to determine reasons why agriculture teachers were choosing to stay in the agriculture teaching profession. It was also important to look at reasons why agriculture teachers had considered leaving the profession. Looking at both perspectives from agriculture teachers gave a better understanding on retention and attrition in the profession.

The following research questions were proposed for the study:

1. What were the personal and professional characteristics of agriculture teachers in Texas?
2. What aspects did current agriculture teachers feel first-year teachers were lacking knowledge in to be effective?
3. What reasons did current agriculture teachers have when they considered leaving the agriculture teaching profession?
4. What were the specific aspects of teaching agriculture that affected the consideration to leave the profession?
5. What were the specific aspects of teaching agriculture that affected the decision to remain in the profession?

The research questions of this study served as a guide for presenting the findings of the study. Information regarding each research question was presented in separate sections.

Findings Related to Research Question One

A description of the demographics of participants was necessary to understand the population. The methodology consisted of a survey designed to assess the perceptions of

agriculture teachers randomly selected from the current VATAT directory. As shown in Table 2, the gender of agriculture teachers is evenly distributed. The sample of agriculture teachers in Texas consisted of 55.3% males and 44.7% females.

Table 2

Gender of Agriculture Teachers

Gender	**n**	**(%)**
Male	63	55.3
Female	51	44.7
Total	114	100.0

The sample consisted of a mixture of White/Caucasian, Hispanic or Latino, African American and Native American/Alaskan agriculture teachers. As shown in Table 3, a majority (93.9%) of agriculture teachers were White/Caucasian. Four agriculture teachers (3.5%) were Hispanic or Latino, while two agriculture teachers (1.8%) were African American. Additionally, one agriculture teacher (0.9%) was Native American/Alaskan.

Table 3

Ethnicity of Agriculture Teachers

Ethnicity	**n**	**(%)**
White/Caucasian	107	93.9
Hispanic or Latino	4	3.5
African American	2	1.8
Native American/Alaskan	1	0.9

Table 4 displays the age range for the sample of agriculture teachers in Texas. The distribution of ages was evenly spread throughout the age groups. Of the 20-29 age range 30 (26.3%) agriculture teachers fell into this age range. Thirty-three (28.9%) agriculture teachers classified as 30-39 years of age. There were 27 (23.7%) agriculture teachers, which fell into the 40-49 age range. For the 50+ age range 24 (21.1%) agriculture teachers were classified in this age range.

Table 4

Age of Agriculture Teachers

Age	**N**	**(%)**
20-29	30	26.3
30-39	33	28.9
40-49	27	23.7
50+	24	21.1
Total	114	100.0

Table 5 indicates the certification route taken by the agriculture teachers. The majority of agriculture teachers within the sample chose the traditional certification route. Ninety-five (83.3%) agriculture teachers attended a four-year university and obtained a teaching certification. Nineteen of the 114 (16.7%) agriculture teachers chose to gain certification through the alternative route from outside schooling.

Table 5

Certification Route Taken by Agriculture Teachers

Certification	**N**	**(%)**
Traditional Certification (4 year university)	95	83.3
Alternative Certification	19	16.7
Total	114	100.0

The data on Table 6 illustrates the number of years teaching experience the agriculture teachers in the sample population have. The average years' experience teaching agriculture was 13 years. Almost half (49.1%) of agriculture teachers have been teaching agriculture from 0-10 years. Thirty-seven (32.5%) of the sample population have been teaching agriculture from 11-20 years. Only eight (7.0%) of agriculture teachers have been teaching 21-30 years. Agriculture teachers, within the sample, who have been teaching 41-50 years consisted of one (0.9%).

Table 6

Number of Years Teaching Experience for Agriculture Teachers

Years	**N**	**(%)**
0-10	56	49.1
11-20	37	32.5
21-30	8	7.0
31-40	12	10.5
41-50	1	0.9
Total	114	100.0

Table 7 looks at which of the ten areas in Texas the agriculture teachers selected were located. Within area one, there was three (2.6%) agriculture teachers, which responded to the survey. Areas 2 and 4, both, had five (4.4%) agriculture teachers from the areas within the population. Area three, being the largest area, had 22 (19.3%) agriculture teachers from the sample population. There were 13 (11.4%) agriculture teachers from areas five and ten. Three areas 6, 8, and 9, had 11 (9.6%) respondents from the sample population. Area 7 is the second largest within Texas and had 20 (17.5%) agriculture teachers.

Table 7

Distribution of Agriculture Teachers within the Ten FFA Areas

Area	**N**	**(%)**	**Total Population**	**(%) from Population**
Area 1	3	2.3	20	6.0
Area 2	5	4.4	17	5.2
Area 3	22	19.3	68	20.6
Area 4	5	4.4	17	5.2
Area 5	13	11.4	43	13.0
Area 6	11	9.6	30	9.1
Area 7	20	17.5	44	13.3
Area 8	11	9.6	31	9.4
Area 9	11	9.6	30	9.1
Area 10	13	11.4	30	9.1
Total	114	100.0	330	100.0

In Texas there are various size high schools from 1A (104.9 students and below) to 6A (2,150 students and above). Table 8 identifies what size school the agriculture teachers were currently teaching in. Very few agriculture teachers taught at a 1A school district. Seven (6.1%) agriculture teachers taught at a 1A school district. There were 19 (16.7%) agriculture teachers within the sample population who taught at a 2A and 19 (16.7%) who taught at a 6A. Twenty-three (20.2%) agriculture teachers taught at a 3A school district. Twenty-one (18.4%) agriculture teachers taught at a 4A school district. With the highest population of agriculture teachers in 5A, there were 25 (21.9%) within the population.

Table 8

Size of School District

Size of School District	**N**	**(%)**
1A	7	6.1
2A	19	16.7
3A	23	20.2
4A	21	18.4
5A	25	21.9
6A	19	16.7
Total	114	100.0

Typically, the number of agriculture teachers at a school depends upon the schools size and the number of students enrolled in the agriculture program. In Table 9 illustrates the number of students enrolled in the agriculture program at the school. There

were 9 (7.9%) schools with 0-50 agriculture students enrolled in the agriculture program. Fifteen (13.2%) agriculture teachers stated there were 51-100 students enrolled in the agriculture department. Thirty-four (29.8%) agriculture teachers stated there were 101-200 students enrolled in the agriculture department. There were 31 (27.2%) schools with 201-300 agriculture students enrolled in the agriculture program. Schools with 301+ students enrolled in the agriculture department included 25 (21.9%).

Table 9

Number of Students Enrolled in Agriculture Courses in the Agriculture Teacher's School

Number of Students	**N**	**(%)**
0-50	9	7.9
51-100	15	13.2
101-200	34	29.8
201-300	31	27.2
301+	25	21.9
Total	114	100.0

Table 10 looks at the number of agriculture teachers in the agriculture department at the given schools. Schools with two agriculture teachers is the most common with 43 (37.7%) agriculture teachers stating to work in a two teacher department. Thirty-four (29.8%) agriculture teachers worked in a three teacher department. Twenty (17.5%) agriculture teachers work in a single agriculture department. There were eleven (9.6%) agriculture teachers that worked in a four teacher department. Five (4.4%) agriculture teachers identified as working in a five agriculture teacher department. Very few

agriculture teachers worked in >5 agriculture teaching departments. One (0.9%) agriculture teachers identified as working in a >5 agriculture teaching department.

Table 10

Number of Teachers in the Teacher's Agriculture Department

Number of Teachers	**N**	**(%)**
1	20	17.5
2	43	37.7
3	34	29.8
4	11	9.6
5	5	4.4
>5	1	0.9
Total	114	100.0

There were twenty-four agriculture courses listed on the TEKS available for agriculture teachers to teach. An agriculture teacher, unlike general education teachers, have anywhere from one to six different preps every day. A series of questions was presented to the agriculture teachers to determine which courses were taught. Table 11 illustrates the courses taught by the agriculture teachers within the population. Forty-three (37.7%) agriculture teachers taught agricultural Facilities Design and Fabrication. Agricultural Power Systems was taught by 21 (18.4%) of agriculture teachers. The table shows 30 (26.3%) agriculture teachers taught Practicum of Agriculture, Food and Natural Resources. Energy and Natural Resources Technology had one (0.9%) teacher teaching the subject, making this the least taught course compared to the 11 (9.6%) agriculture

teachers who taught Food Technology and Safety, as illustrated in the table. There are 35 (30.7%) agriculture teachers teach Wildlife, Fisheries and Ecology Management. Range Ecology and Management and Forestry and Woodland Ecosystems were taught by five (4.4%) agriculture teachers. Principles of Elements of Floral Design was taught by 38 (33.3%). Landscape Design and Turf Grass Management was taught by 18 (15.8%) teachers. There are 22 (19.3%) agriculture teachers teach Horticulture Science. Principles of Agriculture, Food and Natural Resources (Principles of AFNR) was the most taught course by agriculture teachers, as it is the introductory course for all freshman required prior to any other courses in agriculture. Table 11 identifies 74 (64.9%) agriculture teachers who teach Principles of Agriculture, Food and Natural Resources. Livestock Production was taught by 43 (37.7%) and 34 (29.8%) taught Small Animal Management. Equine Science had 26 (22.8%) who taught the course, while twenty-two (19.3%) agriculture teachers taught Veterinary Medical Applications. Table 11 identified 43 (37.7%) agriculture teachers who taught Advanced Animal Science. Professional Standards in Agribusiness was taught by 13 (11.4%) agriculture teachers and Agribusiness Management and Marketing is taught by 9 (7.9%). The table illustrates Mathematical Applications in Agriculture, Food and Natural Resources were taught by 4 (3.5%) agriculture teachers. Six (5.3%) agriculture teachers taught Advanced Plant and Soil Science and 54 (47.4%) taught Agricultural Mechanics and Metal Technologies. Advanced Environmental Technology and Food Processing courses were not taught during the 2016-2017 school year by the agriculture teachers within the population.

Table 11

Agriculture Courses Taught by Agriculture Teachers

Agriculture Course	**n**	**(%)**
Agricultural Facilities Design and Fabrication	43	37.7
Agricultural Power Systems	21	18.4
Practicum in Agriculture, Food, and Natural Resources	30	26.3
Energy and Natural Resources Technology	1	0.9
Advanced Environmental Technology	0	0
Food Technology and Safety	11	9.6
Food Processing	0	0
Wildlife, Fisheries and Ecology Management	35	30.7
Range Ecology and Management	5	4.4
Forestry and Woodland Ecosystems	5	4.4
Principles and Elements of Floral Design	38	33.3
Landscape Design and Turf Grass Management	18	15.8
Horticulture Science	22	19.3
Principles of Agriculture, Food, and Natural Resources	74	64.9
Livestock Production	43	37.7
Small Animal Management	34	29.8
Equine Science	26	22.8
Veterinary Medical Applications	22	19.3
Advanced Animal Science	43	37.7
Professional Standards in Agribusiness	13	11.4
Agribusiness Management and Marketing	9	7.9
Mathematical Applications in Agriculture, Food, and Natural Resources	4	3.5

Table 11

Continued

Advanced Plant and Soil Science	6	5.3
Agricultural Mechanics and Metal Technologies	54	47.4

Prior to teaching, many agriculture teachers have some type of agriculture related experience. This could range from being involved in FFA or 4-H to showing animals or competing in CDE and LDE contests. Majority of current agriculture teachers have had experience with FFA. Table 12 shows there are 103 (90.4%) current agriculture teachers who have had experience with FFA prior to teaching. A smaller percentage of agriculture teachers had experience with 4-H than FFA. The table illustrates 55 (48.2%) agriculture teachers had experience with 4-H. When it came to experience related to showing livestock 87 (76.3%) agriculture teachers had experience. LDE and CDE contests are an important part of FFA and majority of agriculture teachers had experience with one or the other. Eighty (70.2%) agriculture teachers had experience with LDE contests and 88 (77.2%) agriculture teachers had experience with CDE contests. Table 12 illustrates the agriculture teachers who selected other agriculture experiences. Twenty-eight (24.6%) agriculture teachers chose other experiences related to agriculture. Other experiences related to agriculture consisted of agriculture mechanics, farm and ranch experiences, and collegiate opportunities or internships. Two agriculture teachers stated none for experiences related to agriculture.

Table 12

Agriculture Experience Prior to Teaching

Experience	**n**	**(%)**
FFA	103	90.4
4-H	55	48.2
Showing Livestock	87	76.3
LDE	80	70.2
CDE	88	77.2
Other	28	24.6

Findings Related to Research Question Two

Research question two was to determine what knowledge first year teachers were lacking according to current agriculture teachers. The respondents were asked to give their perceptions on fifteen aspects related to teaching agriculture. The items were scored on a five-point Likert-type scale where 1 indicated "strongly disagree," 2 indicated "disagree," 3 indicated "neither agree nor disagree," 4 indicated "agree," 5 indicated "strongly agree." The frequencies and number of participants responding to each question were determined and illustrated in Table 14.

The mean and standard deviation for the level of importance were computed and ranked for knowledge first year teachers were lacking according to current agriculture teachers (Table 13). Current agriculture teachers ranked time and stress management first with a mean score of $M = 4.12$. Managing student discipline ($M = 4.05$) and managing paperwork and finances (3.88) were ranked second and third. Current agriculture teachers ranked dealing with the reputation (positive or negative) of the previous agriculture teacher fourth with a mean of $M = 3.77$. Being able to organize a support group for FFA

(i.e. alumni chapter, advisory committee, booster club, etc.) and adjusting to individual students (i.e. learning styles, special education needs, etc.) were in a close fifth and sixth position with respective means of *M* = 3.68 and *M* = 3.65. Current agriculture teachers ranked working with parents, teachers, and administrators seventh with a mean score of *M* = 3.60. Closely ranked in eighth was planning FFA chapter events and activities (i.e. banquets, meetings, etc.) with a mean score of *M* = 3.56. Being technically competent in all areas of agriculture and preparation of FFA CDE/LDE teams tied for ninth and tenth with a mean score of *M* = 3.54. Agriculture teachers ranked curriculum development and lesson planning (*M* = 3.45) in eleventh and supervising students in laboratory activities (i.e. greenhouse, shop, etc.) with a mean score of *M* = 3.39 twelfth. On the bottom end of the importance scale, current agriculture teachers ranked recruiting students (*M* = 3.27) and lack of resources/management of resources (*M* = 3.22) in thirteenth and fourteenth. Current agriculture teachers felt that safety in the classroom and laboratory (*M* = 3.02), although still important, was the least important knowledge first year agriculture teachers are lacking.

Table 13

Ranking of Knowledge Believed to Be Lacking in First Year Teachers

Aspect of Knowledge	**Rank**	***M***	**SD**
Time/stress management	1	4.12	0.90
Managing student discipline	2	4.05	0.79
Managing paperwork and finances	3	3.88	0.98
Dealing with the reputation (positive or negative) of the previous agriculture teacher	4	3.77	0.95

Table 13

Ranking of Knowledge Believed to Be Lacking in First Year Teachers Continued

Being able to organize a support group for FFA (i.e. alumni chapter, advisory committee, booster club, etc.)	5	3.68	0.96
Adjusting to individual students (i.e. learning styles, special education needs, etc.)	6	3.65	0.88
Working with parents, teachers, and administrators	7	3.60	0.99
Planning FFA chapter events and activities (i.e. banquet, meetings, etc.)	8	3.56	0.96
Being technically competent in all areas of agriculture	9	3.54	1.18
Preparation of FFA CDE/LDE teams	10	3.54	0.99
Curriculum development and lesson planning	11	3.45	1.07
Supervising students in laboratory activities (i.e. greenhouse, shop, etc.)	12	3.39	1.01
Recruiting students	13	3.27	0.89
Lack of resources/management of resources	14	3.22	1.11
Safety in the classroom and laboratory	15	3.02	1.04

*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

Table 14

Perceived Knowledge Believed to be Lacking in First Year Teachers

	Rating									
	Strongly Disagree		**Disagree**		**Neither Agree nor Disagree**		**Agree**		**Strongly Agree**	
	1		**2**		**3**		**4**		**5**	
Aspect of Knowledge	n	%	n	%	n	%	n	%	n	%
Time/stress management	2	1.8	5	4.4	13	11.4	51	44.7	43	37.7
Managing student discipline	1	0.9	3	2.6	17	14.9	61	53.5	32	28.1
Managing paperwork and finances	3	2.6	6	5.3	26	22.8	46	40.4	33	28.9
Dealing with the reputation (positive or negative) of the previous agriculture teacher	2	1.8	9	7.9	28	24.6	49	43.0	26	22.8
Being able to organize a support group for FFA (i.e. alumni chapter, advisory committee, booster club, etc.)	2	1.8	14	12.3	23	20.2	55	48.2	20	17.5
Adjusting to individual students (i.e. learning styles, special education needs, etc.)	2	1.8	10	8.8	29	25.4	58	50.9	15	13.2
Working with parents, teachers, and administrators	1	.9	18	15.8	28	24.6	46	40.4	21	18.4
Planning FFA chapter events and activities (i.e. banquet, meetings, etc.)	2	1.8	17	14.9	25	21.9	55	48.2	15	13.2
Being technically competent in all areas of agriculture	6	5.3	19	16.7	24	21.1	38	33.3	27	23.7
Preparation of FFA CDE/LDE teams	1	0.9	22	19.3	22	19.3	53	46.5	16	14.0
Curriculum development and lesson planning	3	2.6	25	21.9	20	17.5	50	43.9	16	14.0

Table 14

Perceived Knowledge Believed to be Lacking in First Year Teachers Continued

Supervising students in laboratory activities (i.e. greenhouse, shop, etc.)	3	2.6	24	21.1	24	21.1	52	45.6	11	9.6
Recruiting students	2	1.8	22	19.3	38	33.3	47	41.2	5	4.4
Lack of resources/management of resources	6	5.3	28	24.6	29	25.4	37	32.5	14	12.3
Safety in the classroom and laboratory	6	5.3	35	30.7	31	27.2	35	30.7	7	6.1

*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

Findings Related to Research Question Three

Research question three was to determine reasons current agriculture teachers had considered leaving the teaching profession for. The respondents were presented an initial question asking whether the participant had considered leaving the agriculture teaching profession or not. Table 15 illustrates 89 (78.1%) had considered leaving the profession leaving 25 (21.9%) who had not. For the 78.1% who had considered leaving the profession a follow up question was presented asking why. Table 16 identified 13 (11.4%) who had considered leaving the profession for retirement. With 44 (38.6%) agriculture teachers considering leaving to pursue employment in the agriculture business/industry this was the most common reasoning. Only one (0.9%) agriculture teacher was not offered a contract/terminated. There were ten (8.8%) who sought employment in production agriculture/farming. Twelve (10.5%) sought to gain employment in another educational content area (outside of agricultural education).

Another seven (6.1%) considered becoming a stay at home parent/caregiver, while four (3.5%) considered moving out of state. Eight (7.0%) considered continuing their education/graduate school and nine (7.9%) considered employment in post-secondary education. There was a small percentage (1.8%) who considered leaving due to health issues. 29 (25.4%) agriculture teachers selected other consisting of lack of support from administration and the school, stress with the demanding time for little pay, and other career choices such as; administration, self-employment, or another direction.

Table 15

Percentage of Agriculture Teachers Who Have and Have Not Considered Leaving the Profession

	n	**(%)**
Yes	89	78.1
No	25	21.9
Total	114	100.0

Table 16

Employment Opportunities for those Considering Leaving the Profession

Reasons	**n**	**(%)**
Employment in the agriculture business/industry	44	38.6
Other	29	25.4
Retirement	13	11.4
Employment in another educational content area (outside of agriculture)	12	10.5
Employment in production agriculture/farming	10	8.8

Table 16

Employment Opportunities for those Considering Leaving the Profession Continued

Employment in post-secondary education	9	7.9
Continuing education/graduate school	8	7.0
Stay at home parent/caregiver	7	6.1
Considered moving out of state	4	3.5
Health	2	1.8
Not offered a contract/terminated	1	0.9

Findings Related to Research Question Four

Research question four was to identify specific aspects of why agriculture teachers had considered leaving the profession. Only the 89 (78.1%) agriculture teachers who had considered leaving the profession were asked to respond. The respondents were presented a series of statements and asked to rate the importance of each. The items were scored on a five-point Likert-type scale where 1 indicated "strongly disagree," 2 indicated "disagree," 3 indicated "neither agree nor disagree," 4 indicated "agree," 5 indicated "strongly agree." The SPSS procedure FREQUENCIES was implemented, and the frequencies and number of participants responding to each question were determined in Table 18. The means and standard deviations for aspects of the profession current agriculture teachers had considered to leave were calculated. Table 17 determines the responses from current agriculture teachers who had considered leaving (n=89). Stress (M = 3.88), excessive paperwork (M = 3.67) and low salary (M = 3.65) were the highest agreed upon reasons for consideration of leaving the profession. Lack of classroom management (M = 2.46), lack of extended contract (M = 2.30), and low career

commitment (M = 2.08) were the lowest agreed upon reasons for consideration of leaving the profession.

Table 17

Perceptions Affecting the Consideration to Leave the Profession

Aspect	N	*M*	SD
Related to FFA and SAE			
Too much stress	85	3.88	1.12
Lack of recognition from administration	85	3.59	1.33
Time management	85	3.55	1.23
Lack of proper funding for trips/contests/etc.	85	3.29	1.29
Lack of advancement in the profession	86	3.10	1.18
Parent conflict	86	3.05	1.25
Lack of recognition from community	84	2.90	1.25
Related to school/classroom			
Excessive paperwork	86	3.67	1.17
Low salary	86	3.65	1.21
Lack of administration support	84	3.54	1.26
Multiple class preps	86	3.34	1.20
Lack of classroom management	85	2.46	1.14
Lack of extended contract	84	2.30	1.07
Related to personal issues			
Work conflicting with family	83	3.12	1.45
Family conflicting with work	84	2.65	1.38
Low career commitment	84	2.08	1.04

*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

Table 18

Perceived Aspects Affecting the Consideration to Leave the Profession

	Rating									
	Strongly Disagree		**Disagree**		**Neither Agree nor Disagree**		**Agree**		**Strongly Agree**	
	1		**2**		**3**		**4**		**5**	
Aspect	n	%	n	%	n	%	n	%	n	%
Related to FFA and SAE										
Too much stress	4	4.7	7	8.2	13	15.3	32	37.6	29	34.1
Lack of recognition from administration	9	10.6	10	11.8	15	17.6	24	28.3	27	31.8
Time management	7	8.2	12	14.1	13	15.3	33	38.8	20	23.5
Lack of proper funding for trips/contests/etc.	8	9.4	22.4	16.7	16	19.0	24	28.2	18	21.2
Lack of advancement in the profession	8	9.3	19	22.1	27	31.4	20	23.3	12	14.0
Parent conflict	10	11.6	22	25.6	20	23.3	22	25.6	12	14.0
Lack of recognition from community	12	14.3	23	27.4	20	23.8	19	22.6	10	11.9
Related to school/classroom										
Excessive paperwork	4	4.7	13	15.1	14	16.3	31	36.0	24	27.9
Low salary	4	4.7	15	17.4	13	15.1	29	33.7	25	29.1
Lack of administration support	7	8.3	12	14.3	16	19.0	27	23.7	22	19.3
Multiple class preps	6	7.0	18	20.9	19	22.1	27	31.4	16	18.6
Lack of classroom management	20	23.5	26	30.6	23	27.1	12	14.1	4	4.7
Lack of extended contract	24	28.6	25	29.8	22	26.2	12	14.3	1	1.2

Table 18

Perceived Aspects Affecting the Consideration to Leave the Profession Continued

Related to personal issues										
Work conflicting with family	16	19.3	16	19.3	11	13.3	22	26.5	18	21.7
Family conflicting with work	22	26.2	21	25.0	17	20.2	12	14.3	12	14.3
Low career commitment	32	38.1	21	25.0	25	29.8	4	4.8	2	2.4

*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

Findings Related to Research Question Five

Research question five was to identify specific aspects of why agriculture teachers had chosen to remain in the profession. The respondents were presented a series of statements and asked to rate the importance of each. The items were scored on a five-point Likert-type scale where 1 indicated "strongly disagree," 2 indicated "disagree," 3 indicated "neither agree nor disagree," 4 indicated "agree," 5 indicated "strongly agree." Table 19 illustrates the perceptions of current agriculture teachers in their decision to remain in the agriculture teaching profession. The SPSS procedure FREQUENCIES was implemented, and the frequencies and number of participants responding to each question were determined in Table 20. The means and standard deviations for aspects of the profession current agriculture teachers had considered to stay were calculated. The role in advising of students (M = 3.95), the success in advising an FFA chapter (M = 3.93), and parent support (M = 3.70) were the highest rated aspects for staying in the profession.

Salary (M = 3.04), proper funding (M = 3.02), and recognition from administration (M = 2.96) were the lowest rated aspects for staying in the profession.

Table 19

Perceptions Affecting the Consideration to Stay in the Profession

Aspect	**N**	***M***	**SD**
Support from…			
Parent support	111	3.70	0.94
Community support	111	3.67	0.99
Other teachers support	111	3.55	1.02
Administration support	111	3.20	1.14
Recognition			
Of your role in advising of students	111	3.95	0.98
Of your success advising the FFA chapter	111	3.93	0.96
From parents/community	111	3.32	1.03
From administration	111	2.96	1.13
Personal reasons related to			
Level of enthusiasm about teaching	111	3.52	1.08
Work schedule/extra hours	111	3.16	1.20
Professional growth opportunities	111	3.10	1.00
Salary	111	3.04	1.19
Proper funding	111	3.02	1.15

*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

Table 20

Perceived Aspects Affecting the Consideration to Stay in the Profession

	Rating									
	Strongly Disagree		**Disagree**		**Neither Agree nor Disagree**		**Agree**		**Strongly Agree**	
	1		**2**		**3**		**4**		**5**	
Aspect	n	%	n	%	n	%	n	%	n	%
Support from										
Parent support	3	2.7	9	8.1	25	22.5	55	49.5	19	17.1
Community support	3	2.7	11	9.9	28	25.2	47	42.3	22	19.8
Other teachers support	3	2.7	16	14.4	27	24.3	47	42.3	18	16.2
Administration support	9	8.1	22	19.8	31	27.9	36	32.4	13	11.4
Recognition										
Of your role in advising of students	4	3.6	4	3.6	19	17.1	50	45.0	34	30.6
Of your success advising the FFA chapter	3	2.7	4	3.6	25	22.5	45	40.5	34	30.6
From parents/community	7	6.3	15	13.5	33	29.7	47	42.3	9	8.1
From administration	15	13.5	20	18.0	37	33.3	32	28.8	7	6.3
Personal reasons related to										
Level of enthusiasm about teaching	7	6.3	12	10.8	25	22.5	50	45.0	17	15.3
Work schedule/extra hours	10	9.0	24	21.6	33	29.7	26	23.4	18	16.2

Table 20

Perceived Aspects Affecting the Consideration to Stay in the Profession Continued

Professional growth opportunities	8	7.2	20	18.0	42	37.8	35	31.5	6	5.4
Salary	16	14.4	19	17.1	30	27.0	37	32.5	9	7.9
Proper funding	14	12.6	21	18.9	34	30.6	33	29.7	9	8.1

*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

V. SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of the study was to determine reasons current agriculture teachers have chosen to stay in the profession. All chose to remain in the profession, but many had considered leaving and were asked questions related to why. The goal for understanding why agriculture teachers are considering leaving is to work on improving the profession.

The following research questions were pursued to accomplish the purpose of the study:

1. What were the personal and professional characteristics of agriculture teachers in Texas?
2. What aspects did current agriculture teachers feel first-year teachers were lacking knowledge in to be effective?
3. What reasons did current agriculture teachers have when they considered leaving the agriculture teaching profession?
4. What were the specific aspects of teaching agriculture that affected the consideration to leave the profession?
5. What were the specific aspects of teaching agriculture that affected the decision to remain in the profession?

The study was conducted quantitatively using a cross-sectional survey research design. The cross-sectional survey research design was useful for studying problems in education. The research design was useful in assessing the reasons current agriculture teachers are considering leaving or staying in the profession, and what aspects first-year

agriculture teachers are lacking knowledge in. These constructs were then examined for reliability.

As of August 31, 2016, there were 2,129 agriculture teachers registered with the VATAT. There were ten areas within Texas and an equal amount compared to the size of area was selected. A stratified random sampling approach was used to randomly select 330 current agriculture teachers to examine.

An online questionnaire was used to gather information from the targeted population. The population consisted of 330 current agriculture teachers registered with the VATAT from the 2016-2017 academic school year. Of the 330 agriculture teachers, 14 were incorrect emails making the population 316. Of the 316 agriculture teachers, 114 responded for a rate of 36.1%.

Conclusions

Research Question One

Research question one sought to determine the personal and professional characteristics of current agriculture teachers in the state of Texas. The "common" agriculture teacher participant was a white, male, from the age of 30-39, with a traditional certification, and 0-10 years teaching experience. Majority of agriculture teachers who participated were from areas three and seven. This is because these two areas have larger cities located within the boundaries causing the population to be high versus areas one and ten, which are larger, but the population is spread out. When looking at the size of the school district, 5A was the most common school size with 25 agriculture teachers in this range, followed by 3A with 23, 4A with 21, 6A and 2A with 19 each and 1A with 7.

The most common number of teachers in the agriculture department was two with 43 agriculture teachers, closely followed by three agriculture teacher departments with 34. Only one participant worked in a >5 teacher department. This corresponded with 34 agriculture teachers who identified their program to have 101-200 students enrolled in the agriculture department, 31 with 201-300 students, and 21 with 301+ students.

Principles of AFNR (prerequisite to agriculture courses) was the most common course taught by 74 agriculture teachers. There were two courses, Advanced Environmental Technology and Food Processing, with zero participants teaching the course. Almost all agriculture teachers had experience with FFA prior to teaching and less than half had experience with 4-H. However, majority had experience with CDEs, LDEs, and showing livestock, all important aspects of teaching agriculture.

Research Question Two

Research question two determined what knowledge first year teachers were lacking according to current agriculture teachers. Current agriculture teachers strongly agreed time and stress management (M = 4.12) and managing student discipline (M = 4.05) were important factors first year agriculture teachers were lacking in. Current agriculture teachers agreed managing paperwork and finances (M = 3.88), dealing with the reputation (positive or negative) of the previous agriculture teacher (M = 3.77), being able to organize a support group for FFA (M = 3.68) were important. Adjusting to individual students (M = 3.65), working with parents, teachers, and administrators (M = 3.60), planning FFA chapter events and activities (M = 3.56), being technically competent in all areas of agriculture (M = 3.54), and preparation of FFA CDE/LDE teams (M = 3.54) were also important. Curriculum development and lesson planning (M

= 3.45), supervising students in laboratory activities (*M* = 3.39), recruiting students (*M* = 3.27), lack of resources/managing of resources (*M* = 3.22), and safety in the classroom and laboratory (*M* = 3.02) were still agreed important, but on the lower end.

Joerger (2002) found similar results and indicated that teaching and classroom management and conducting local FFA chapter activities were very important in-service needs of beginning teachers. Program design and management, establishing a program advisory committee, preparing agriculture/FFA contest teams, planning banquets, and organizing fundraising activities were considered important as well.

Duncan et al. (2006) found preparation of CDE teams was more important than being able to organizing fundraising activities, develop an advisory committee, conducting local FFA chapter activities, and plan banquets.

Research Question Three

Research question three sought to determine the reasons current agriculture teachers had considered leaving the profession. Majority (78.1%) of agriculture teachers had considered leaving the agriculture teaching profession at some point. The reasons for consideration of leaving were assessed with employment in the agriculture business/industry with the highest percentage at 38.6%, closely followed by other with 25.4%. Reasons related to other could be categorized into groups such as, lack of support from administration and the school, stress with the demanding time for little pay, and other career choices such as; administration, self-employment, or another direction. Retirement (11.4%), employment in another educational content area (outside of agricultural education) (10.5%), employment in production agriculture/farming (8.8%), employment in post-secondary education (7.9%), continuing education/graduate school

(7.0%), and stay at home parent/caregiver (6.1%) were all closely considered for reasons to leave the profession. Considering moving out of state (3.5%), health (1.8%), and not offered a contract/terminated (0.9%) were the lower ranked reasons for leaving the profession. There were no comparable studies which looked at other professions agriculture teachers were considering leaving the profession for.

Research Question Four

Research question four was to identify specific aspects of why agriculture teachers had considered leaving the profession. Agriculture teachers who had considered leaving the profession agreed too much stress related to FFA and SAE (M = 3.88) was the greatest reason. Current agriculture teachers also agreed lack of recognition from administration (M = 3.59) and time management (M = 3.55) related to FFA and SAE were strong reasons for considering leaving the profession. Related to school and classroom, agriculture teachers agreed excessive paperwork (M = 3.67), low salary (M = 3.65), and lack of administration support (M = 3.54) were some of the major reasons for consideration to leave. On the lower end of agreed upon reasons for considering leaving the profession related to FFA and SAE were lack of proper funding for trips/contests/etc. (M = 3.29), lack of advancement in the profession (M = 3.10), and parent conflict (M = 3.05). For reasons related to school and classroom multiple class preps (M = 3.34) was on the lower end of agreed upon reasons. For reasons related to personal issues, work conflicting with family (M = 3.12) was on the lower end of agreed upon reasons. Lack of recognition from community related to FFA and SAE (M = 2.90) was the highest neither agree nor disagreed response. Low career commitment related to personal issues (M = 2.08) was the lowest neither agree nor disagree response. Lack of classroom management

(M = 2.46) and lack of extended contract (M = 2.30) related to school and classroom were also neither agreed nor disagreed on. Lastly, family conflicting with work (M = 2.65) related to personal issues was neither agreed nor disagreed upon.

Boone and Boone (2007) found multiple class preparations, time management, and paper work to be of the major problems current and beginning agriculture teachers experienced. Community support and faculty support were the more neutral issues related to the study. Boone and Boone (2007) also found balancing school and home was not a major issue faced by current agriculture teachers.

However, Myers et al. found balancing work and personal life to be a major issue beginning agriculture teachers faced. However, managing stress and time management had similar mean scores to this research study.

Research Question Five

Research question five sought to identify specific aspects of why agriculture teachers had chosen to remain in the profession. Current agriculture teachers felt recognition of their role in advising of students (M = 3.95) and recognition of their success advising the FFA chapter (M = 3.93) were the highest agreed upon reasons for staying in the profession. Support from parents (M = 3.70), community (M = 3.67), other teachers (M = 3.55), and administration (M = 3.20) were all agreed upon for reasons to stay in the profession. Recognition from parents/community (M = 3.32) was agreed upon on the lower end for reasons to stay in the profession. Personal reasons related to level of enthusiasm about teaching (M = 3.52) was agreed upon for reasons to remain in the profession. On the lower end of reason's to remain in the profession related to personal reasons such as work schedule/extra hours (M = 3.16), professional growth opportunities

(M = 3.10), salary (M = 3.04), and proper funding (M = 3.02). Recognition from administration (M = 2.96) was the only reason teachers identified as neither agree nor disagree.

Bennett et al. (2004) found teachers felt they had adequate administrative support and backing form staff more so than from parents. Agriculture teachers felt the salary was more adequate than the hours of the job unlike this study. Appreciation from parents was lacking according to Bennett et al. (2004). Having adequate facilities and supplies for the program was higher rated in Bennett's et al. (2004) study, but not an issue for current agriculture teachers in the current study.

Gilman et al. (2012) found recognition was important to both males and female agriculture teachers. Administration and policy however was more of an issue for agriculture teachers. Salary was also more of an issue for both male and female agriculture teachers than administration. This study looked at male versus female, but both agreed upon most everything.

Implications

This study indicates that current agriculture teachers in Texas have strongly considered leaving the profession, but have chosen to remain. The majority of agriculture teachers considered taking employment in the agriculture business/industry. Taking employment in the agriculture business/industry and retirement were also major reasons for leaving the profession as well in the National Agricultural Education Supply and Demand Study (Smith et al., 2016; Foster et al., 2014). This could possibly be due to the low pay associated with teachers, which was an important factor in their consideration to leave the profession. The stress load associated with teaching agriculture at the high

school level was another major factor associated in the consideration to leave. This resonates with the consideration to teach other courses outside of agriculture, as well as no longer teach at all. As for receiving support from parents, administration or other teachers and funding issues that is dependent upon the location of the school. Rural or urban areas with high for low financial support affect the attitudes of the community support, which all play a major role in the success of the program, and the attitude of the agriculture teachers.

In some cases, the schools are based around the agriculture program and support is given to the agriculture teachers by the parents and community. However, administration is not always supportive and continues to push the agriculture teachers out. Receiving recognition follows closely with having support, if your parents and community support you generally, they give your recognition and vice versa. Recognition of the role in advising students and the FFA chapter is the most important aspect to agriculture teachers and generally outweighs recognition from others. As for personal reasons for staying in the profession, having enthusiasm towards teaching is most important and salary, low funding and long hours are not the main issue. With outside support, there are ways of making salary, low funding and long hours less important.

Can these issues be addressed prior to the first year of teaching? Current agriculture teachers believe first-year agriculture teachers lack knowledge in time and stress management. Roberts and Dyer (2004) similarly found stress and time management to be a concern for agriculture teachers relating to professional development. This issue should be addressed in college courses and allow students to grasp this. Having students shadow, a current agriculture teacher for a day or week prior to student teaching could be

a solution to this. Also, understanding all of the extra time put into managing paperwork and finances. Student teachers are not always trusted with this aspect, but it is relevant to learn prior to being on their own. Not all agriculture teachers end up at a multi-teacher department their first year and do not have an understanding of everything that goes on behind the scenes. It is important to realize all that goes into teaching agriculture and not just the fun parts. Managing student discipline is another issue, which is not addressed extensively in college courses. This is an aspect that is learned, but providing ideas and demonstrating scenarios could help with this problem. Current agriculture teachers, teacher educators, and administration must work together to identify ways to improve the profession so that less teachers are considering to leave the profession.

Recommendations

Based on the findings and conclusions in this study, recommendations have been made in two specific areas. These are 1) recommendations for practice and 2) recommendations for further research.

Recommendations for practice have been developed and are presented as follows:

1. Teacher educators and administration should assist agriculture teachers in identifying ways of dealing with time management and stress within the profession.
2. Administration and teacher educators should develop student discipline strategies to be used throughout the school. Providing a method for the school would show students there is a strong support system backing teachers.

3. Administration should work on identifying ways for providing assistance to agriculture teacher's workload with balancing multiple course preps and handling all FFA finances and paperwork.
4. Addressing the issue related to lack of support and recognition from administration is a major factor. Teachers and educators should work together to develop a stronger understanding for one another and the benefits of the program as a whole.

Recommendations as a result of this study for further research have been developed and include:

1. Future studies should use a larger population sample to get a better understanding for the state as a whole. Texas has a large population of agriculture teachers and a larger response rate might provide different results.
2. Factors considered by agriculture teachers in their decision to remain in the profession as well as considerations to leave should be examined in other states. Geographical context may have a major input on what agricultural teachers place more importance on.
3. Future studies should consider focusing on agriculture teachers who have left the profession. Understanding their reasoning for leaving the profession would provide further insight into why the demand is higher than the supply.

4. Further studies should focus on traditionally certified agriculture teachers versus those who went through alternative certification. The results behind reasons to stay or leave the profession should be compared.

APPENDIX A: INSTRUMENTATION

Ag Teachers Staying or Leaving-Bridget McIntosh

What is your gender?
- ❍ Male (1)
- ❍ Female (2)

What is your age?
- ❍ 20-29 (1)
- ❍ 30-39 (2)
- ❍ 40-49 (3)
- ❍ 50+ (4)

How many years of teaching experience do you have?
_____

Certification route taken
- ❍ Traditional certification (4 year university) (1)
- ❍ Alternative certification (2)

Size of school district you're teaching at?
- ❍ 1A (1)
- ❍ 2A (2)
- ❍ 3A (3)
- ❍ 4A (4)
- ❍ 5A (5)
- ❍ 6A (6)

What is your ethnicity?
- ❍ White/Caucasian (1)
- ❍ Hispanic or Latino (2)
- ❍ African American (3)
- ❍ Native American/Alaskan (4)
- ❍ Asian American (5)
- ❍ Other (6) _____

What FFA area is your school located?

- ❍ Area I (1)
- ❍ Area II (2)
- ❍ Area III (3)
- ❍ Area IV (4)
- ❍ Area V (5)
- ❍ Area VI (6)
- ❍ Area VII (7)
- ❍ Area VIII (8)
- ❍ Area IX (9)
- ❍ Area X (10)

How many students are enrolled in your agriculture program?

- ❍ 0-50 (1)
- ❍ 51-100 (2)
- ❍ 100-200 (3)
- ❍ 201-300 (4)
- ❍ 301+ (5)

Number of teachers in agriculture department at your school?

- ❍ 1 (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 (4)
- ❍ 5 (5)
- ❍ >5 (6)

Select all agriculture courses you currently teach.

- ❑ Principles of AFNR (1)
- ❑ Livestock Production (2)
- ❑ Small Animal Management (3)
- ❑ Equine Science (4)
- ❑ Veterinary Medical Applications (5)
- ❑ Advanced Animal Science (6)
- ❑ Professional Standards in Agribusiness (7)
- ❑ Agribusiness Management and Marketing (8)
- ❑ Mathematical Applications in AFNR (9)
- ❑ Energy and Natural Resources Technology (10)
- ❑ Advanced Environmental Technology (11)
- ❑ Food Technology and Safety (12)
- ❑ Food Processing (13)
- ❑ Wildlife, Fisheries and Ecology Management (14)
- ❑ Range Ecology and Management (15)
- ❑ Forestry and Woodland Ecosystems (16)
- ❑ Principles and Elements of Floral Design (17)
- ❑ Landscape Design and Turf Grass Management (18)
- ❑ Horticulture Science (19)
- ❑ Advanced Plant and Soil Science (20)
- ❑ Agricultural Mechanics and Metal Technologies (21)
- ❑ Agricultural Facilities Design and Fabrication (22)
- ❑ Agricultural Power Systems (23)
- ❑ Practicum in AFNR (24)

What agriculture experience do you have prior to teaching? (Select all that apply)

- ❑ FFA (1)
- ❑ 4-H (2)
- ❑ Showing livestock (3)
- ❑ LDE judging contests (4)
- ❑ CDE judging contests (5)
- ❑ Other (6) _____

As a current agriculture teacher, what aspects are first-year agriculture teachers lacking knowledge in to be effective teachers?

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Adjusting to individual students (i.e. learning styles, special education needs (1)	❍	❍	❍	❍	❍
Managing student discipline (2)	❍	❍	❍	❍	❍
Curriculum development and lesson planning (3)	❍	❍	❍	❍	❍
Lack of resources/management of resources (4)	❍	❍	❍	❍	❍
Supervising students in laboratory activities (i.e. greenhouse, shop, etc.) (5)	❍	❍	❍	❍	❍
Managing paperwork and finances (6)	❍	❍	❍	❍	❍
Being technically competent in all areas of agriculture (7)	❍	❍	❍	❍	❍
Dealing with the reputation (positive or negative) of the previous agriculture teacher (8)	❍	❍	❍	❍	❍
Preparation of FFA CDE/LDE teams (9)	❍	❍	❍	❍	❍
Planning FFA chapter events and activities (i.e. banquet, meetings, etc.) (10)	❍	❍	❍	❍	❍
Being able to organize a support group for FFA (i.e. alumni chapter, advisory committee, booster club, etc.) (11)	❍	❍	❍	❍	❍
Recruiting students (12)	❍	❍	❍	❍	❍

Working with parents, teachers, and administrators (13)	❍	❍	❍	❍	❍
Time/stress management (14)	❍	❍	❍	❍	❍
Safety in the classroom and laboratory (15)	❍	❍	❍	❍	❍

Have you ever considered leaving the agriculture teaching profession?

❍ Yes (1)
❍ No (2)

If No Is Selected, Then Skip To How do the following aspects of teach...

If you have considered leaving why?

❑ Retirement (1)
❑ Employment in the agriculture business/industry (2)
❑ Not offered a contract/terminated (3)
❑ Employment in production agriculture/farming (4)
❑ Employment in another educational content area (outside of Ag Education) (5)
❑ Stay at home parent/caregiver (6)
❑ Considering moving out of state (7)
❑ Continuing education/graduate school (8)
❑ Health (9)
❑ Employment in postsecondary education (10)
❑ Other (11) _____

How did the following aspects of teaching agriculture affect your consideration to leave the teaching profession?

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Time management (1)	❍	❍	❍	❍	❍
Too much Stress (2)	❍	❍	❍	❍	❍
Parent conflict (3)	❍	❍	❍	❍	❍
Lack of recognition from community (4)	❍	❍	❍	❍	❍
Lack of recognition from administration (5)	❍	❍	❍	❍	❍
Lack of advancement in the profession (6)	❍	❍	❍	❍	❍
Lack of proper funding from trips/contests/etc. (7)	❍	❍	❍	❍	❍
Lack of administration support (8)	❍	❍	❍	❍	❍
Low salary (9)	❍	❍	❍	❍	❍
Lack of classroom management (10)	❍	❍	❍	❍	❍
Lack of extended contract (11)	❍	❍	❍	❍	❍
Multiple classes preps (12)	❍	❍	❍	❍	❍
Excessive paperwork (13)	❍	❍	❍	❍	❍
Low career commitment (14)	❍	❍	❍	❍	❍
Work conflicting with family (15)	❍	❍	❍	❍	❍
Family conflicting with work (16)	❍	❍	❍	❍	❍

How did the following aspects of teaching agriculture affect your decision to remain in the teaching profession?

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Parent (1)	❍	❍	❍	❍	❍
Administration (2)	❍	❍	❍	❍	❍
Other Teachers (3)	❍	❍	❍	❍	❍
Community (4)	❍	❍	❍	❍	❍
From administration (5)	❍	❍	❍	❍	❍
From parents/community (6)	❍	❍	❍	❍	❍
Of your role in advising of students (7)	❍	❍	❍	❍	❍
Of your success advising the FFA chapter (8)	❍	❍	❍	❍	❍
Work schedule/extra hours (9)	❍	❍	❍	❍	❍
Level of enthusiasm about teaching (10)	❍	❍	❍	❍	❍
Professional growth opportunities (11)	❍	❍	❍	❍	❍
Salary (12)	❍	❍	❍	❍	❍
Proper Funding (13)	❍	❍	❍	❍	❍

APPENDIX B: COVER LETTER

Bridget McIntosh, a graduate student at Texas State University, is conducting a research study to determine the factors secondary agricultural education teachers consider in their decisions to remain in or leave the teaching profession. You are being asked to complete this survey because you are an agriculture educator in the state of Texas.

Participation is voluntary. The survey will take approximately 30 minutes or less to complete. You must be at least 18 years old to take this survey.

This study involves no foreseeable serious risks. We ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank. Your responses are anonymous.

If you have any questions or concerns feel free to contact Bridget McIntosh or her faculty advisor:

Bridget McIntosh, graduate student
Agriculture Department
(512) 245-3320 ext. 53329
brm93@txstate.edu

Douglas Morrish, Professor
Agriculture Department
(512) 245-3321
dm43@txstate.edu

This project EXP2016Q456412T was approved by the Texas State IRB on April 12, 2016. Pertinent questions or concerns about the research, research participants' rights, and/or research-related injuries to participants should be directed to the IRB chair, Dr. Jon Lasser 512-245-3413 – (lasser@txstate.edu) or to Monica Gonzales, IRB Regulatory Manager 512-245-2334 – (meg201@txstate.edu).

Please complete the survey by October 21, 2016.

If you would prefer not to participate, please do not fill out a survey.
If you consent to participate, please complete the survey.

Take the survey

Respectfully,

Bridget McIntosh
Master's Student
Department of Agricultural
Texas State University

APPENDIX C: FIRST REMINDER EMAIL

Greetings!

On Octover 12th you received an email containing a link to a survey

Take the survey

regarding a research project about the factors secondary agricultural education teachers consider in their decisions to remain or leave the teaching profession. Information provided by you will be used to better understand reasons that secondary agricultural education teachers decided to remain or leave the teaching profession.

If you have already completed the online questionnaire, please accept my sincere appreciation. If you have not completed the online questionnaire, please do so **by October 31st** at 5pm. As you know, it is important that your response be included in the study.

Thank You!
Bridget McIntosh
Master's Student
Department of Agricultural
Texas State University

APPENDIX D: SECOND REMINDER EMAIL

Greetings!

On October 24th you received a reminder email containing a link to a survey

Take the survey

regarding a research project about the factors secondary agricultural education teachers consider in their decisions to remain or leave the teaching profession. Information provided by you will be used to better understand reasons that secondary agricultural education teachers decided to remain or leave the teaching profession.

If you have already completed the online questionnaire, please accept my sincere appreciation. If you have not completed the online questionnaire, please do so **by November 7th** at 5pm. As you know, it is important that your response be included in the study.

Thank You!
Bridget McIntosh
Master's Student
Department of Agricultural
Texas State University

APPENDIX E: THIRD REMINDER EMAIL

Greetings!

On November 1st you received a reminder email containing a link to a survey

Take the survey

regarding a research project about the factors secondary agricultural education teachers consider in their decisions to remain or leave the teaching profession. Information provided by you will be used to better understand reasons that secondary agricultural education teachers decided to remain or leave the teaching profession.

If you have already completed the online questionnaire, please accept my sincere appreciation. If you have not completed the online questionnaire, please do so **by November 13th** at 5pm. As you know, it is important that your response be included in the study.

Thank You!
Bridget McIntosh
Master's Student
Department of Agricultural
Texas State University

APPENDIX F: FOURTH REMINDER EMAIL

Greetings!

On November 8th you received a reminder email containing a link to a survey

Take the survey

regarding a research project about the factors secondary agricultural education teachers consider in their decisions to remain or leave the teaching profession. Information provided by you will be used to better understand reasons that secondary agricultural education teachers decided to remain or leave the teaching profession.

If you have already completed the online questionnaire, please accept my sincere appreciation. If you have not completed the online questionnaire, please do so **by November 18th** at 5pm. As you know, it is important that your response be included in the study.

Thank You!
Bridget McIntosh
Master's Student
Department of Agricultural
Texas State University

APPENDIX G: FINAL REMINDER EMAIL

Greetings!

On October 12th you received a reminder email containing a link to a survey

Take the survey

regarding a research project about the factors secondary agricultural education teachers consider in their decisions to remain or leave the teaching profession. Information provided by you will be used to better understand reasons that secondary agricultural education teachers decided to remain or leave the teaching profession.

I am hoping to increase the response rate of my research to provide adequate information to the agricultural education profession.

If you have already completed the online questionnaire, please accept my sincere appreciation. If you have not completed the online questionnaire, please do so **by December 7th** at 5pm. As you know, it is important that your response be included in the study.

Thank You!
Bridget McIntosh
Master's Student
Department of Agricultural
Texas State University

APPENDIX H: AGENCY APPROVAL

Bridget and Doug,

It is permissible to use the Texas AST Directory data for research purposes, including conducting a survey through email. The complete current directory is attached to this email. Let me know if you have questions or need additional information.

Thanks,
Clay Ewell
www.JudgingCard.com

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