

Work–Life Variables Influencing Attrition among Beginning Agriscience Teachers
of Texas

by

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ABSTRACT

The purpose of this study was to describe the perceptions of former beginning agriscience teachers and to explore the relationships between these perceptions, the characteristics of former beginning agriscience teachers, work satisfaction, work-life balance, and their reasons for leaving the profession. Information was gathered from former secondary agriscience teachers across Texas who left the profession during the 2001–2002 through 2005–2006 academic years.

A survey instrument was created specifically for this study through which information about perceived work satisfaction, work-life balance, effect of work-life on attrition, and demographic characteristics of the former beginning agriscience teachers was gathered. Data were analyzed using descriptive and correlational statistics.

For this population, work satisfaction, work-life balance, and teacher attrition were not found to differentiate among demographic and career characteristics: age, gender, ethnicity, employment, salary, teacher training institution, years of experience, agriscience department size, hours on the job, or FFA area association.

The results suggested evidence of an inverse relationship between work satisfaction and beginning agriscience teacher attrition as well as an inverse relationship between work-life balance and agriscience teacher attrition.

Nearly half of all respondents reported the wanting of balance between professional work and personal life as their chief reason for leaving the profession. Closely following this reason were the placement of students in agriscience classes who did not choose to be in the elective courses and too much time away from family.

Nearly two-thirds of the respondents offered the recommendation to set a maximum student enrollment per class period and to decrease the number of class preparations/course sections taught by beginning teachers. Over half of the respondents

made the recommendation to share the load of shows and contests equally among teachers and to increase the number of teachers in the agriscience department.

To improve the preparation and retention of agriscience teachers, two-thirds of the respondents recommended a salary increase. The recommendation following salary and given by nearly half of respondents was to provide mentor teachers. And, one-third of respondents offered the recommendation for more follow-ups from university teacher trainers.

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CHAPTER I
INTRODUCTION

Enormous concern exists for teacher attrition in the United States, especially in the midst of teacher shortages, a growing student population, and higher expectations of schools (Stewart, Moore, & Flowers, 2004). In September 2001, 300 schools were unable to hire qualified agriscience teachers (Camp, Broyles, & Skelton, 2002). Teacher shortages have been an issue for the agricultural education profession since the early 1900s, and it continues to be of high priority today (Stewart et al., 2004). The National Strategic Plan and Action Agenda for Agricultural Education lists its first goal of four as having a sufficient quantity of highly motivated and qualified agriscience teachers to fill American classrooms (National Council for Agricultural Education, 2000). An objective of this goal is for teacher preparation programs to be based in the most current and widely representative research available (National Council for Agricultural Education, 2000). For research to be representative, the reasons for attrition from those who have left the profession should be included.

Background

The 1999–2001 National Study of the Supply and Demand for Teachers of Agricultural Education (Camp, Broyles, & Skelton, 2002) is the most current and comprehensive national study providing data for the status of agricultural education today. According to the study, 11,000 men and women are teaching agriscience subjects

in America's public secondary schools. Most people study to become agriscience teachers by majoring in agricultural education at their state agriculture colleges or land-grant universities (Camp et al., 2002). Agricultural education in the United States is constantly fluctuating. Likewise, the professional preparation of agriscience teachers in the United States is fluctuating (Camp et al., 2002). Nationally, there were 1,170 available openings seeking agriscience teachers in 2001 (Camp et al., 2002). Moreover, there are sufficient numbers of newly certified agriscience teachers to fill job openings. Historically, many do not seek employment as secondary agriscience teachers. Relatively low graduate placement rates and high teacher attrition rates result in an agriscience teacher shortage. This has been a continual problem and was addressed as early as 1917 with the passage of federal legislation. The National Vocational Education (Smith-Hughes) Act (Public Law No. 347, 1917) provided for cooperation with the states in the preparation of teachers of vocational subjects, including agriscience.

Agriscience Teacher Shortages

In the past decade, the number of agriscience teaching positions has slowly but steadily increased at 7.8% (Camp, Broyles, & Skelton, 2002). A problem becomes apparent as one looks at the Supply and Demand National Study and realizes that there is a gap between the numbers of teachers needed and the numbers of teachers seeking employment as of September 1 of each year. Among the newly certified agriscience teachers, 59% entered teaching in 2001 (Camp et al., 2002). This percentage is representative of the national averages since 1965, and if higher, could offset the agriscience teacher supply-and-demand mismatch.

Texas has the largest number of agriscience teaching positions in the United States. This number ($n=1,691$) amounts to 15.1% of all agriscience teaching positions (Camp, Broyles, & Skelton, 2002). Texas has undergone rapid and steady growth in teacher numbers from 1,490 positions in 1995 to 1,590 in 1998 (Camp et al., 2002). Nationally, the profession is growing slower in terms of numbers of teaching positions than Texas but still is growing. Even so, newly certified teachers actually seeking employment as teachers ($n=693$) were less than the net number of replacements needed ($n=799$) in 2001 (Camp et al., 2002). The largest number of new hires was in the southern region ($n=414$) of which Texas is a member. Texas alone had 160 of those new hires (Camp et al., 2002).

The shortage of agriscience teachers is reflective of a continuing shortage nationwide in the number of fully certified teachers desiring to accept teaching positions. Three important indicators support this finding (Camp, Broyles, & Skelton, 2002). As of September 1, 2001, 67 agriscience teachers were needed but not available, 242 agriscience teachers taught with emergency certification, and 35 agriscience departments, in all likelihood, did not operate because no teacher was available (Camp et al., 2002).

Growing Student Population

Nine thousand people are born alive on Earth each hour (Shinn, 2006) and according to the U.S. Census Bureau, the U.S. population reached 300 million in 2006. The National Center for Education Statistics (NCES) provides the following student enrollment figures and projections (National Center for Education Statistics, 2006): Public school enrollment in prekindergarten through the eighth grade rose from 29.9

million in 1990 to 34.2 million in 2003; public school enrollment in the upper grades rose from 11.3 million in 1990 to 14.3 million in 2003; the growing numbers of students who have been filling the elementary schools will cause some increases at the secondary school level through 2007; public elementary enrollment is expected to increase again from 2006 to 2014; and Texas had 4,331,751 of the total number of students in 2003–2004 attending 8,110 Texas schools. Overall, according to NCES, school enrollment is projected to set records nationally every year from 2006 until at least 2014, the last year NCES has school enrollment projections.

Higher Expectations for Schools

Additional concerns prevail because of the federal No Child Left Behind (NCLB) legislation. NCLB calls for more curricular rigor and testing measures for school results. Immense pressure exists for quality teaching and accountability at the local level. Consequently, agricultural education must make sure that its curriculum is current and relevant (Stewart, Moore, & Flowers, 2004). Additionally, in the beginning of the 2005–2006 academic year, school districts were mandated by NCLB to hire only certified teachers in core subject areas: English, math, science, and social studies (Public Law 107–110, 2002). This affects agricultural education because school districts have the option to adopt more rigorous hiring practices and to hire certified teachers in all areas. In 2003–2004, 77% of public school districts did just that by requiring full standard state certification in the field to be taught when considering teaching applicants (National Center for Education Statistics, 2006). Consequently, it is reasonable to believe that the shortage of agriscience teachers is going to increase at even a greater rate in the years to

come because many positions are filled by emergency certified teachers that are looked down upon by NCLB.

Beginning Agriscience Teacher Attrition

Complicating the teacher shortage problem is beginning agriscience teacher attrition. Nationally, within the first three years of teaching, 20% of beginning teachers leave the profession (Wilson, 2000) and by the end of the fifth year of teaching, 30% to 50% of beginning teachers leave the profession (Campos, 2006; Ingersoll & Smith, 2003; Peterson, 2006; Reuters, 2006). For agriscience teachers specifically, Warnick (2004) found in his national study of first year agriscience teachers that fewer than one third reported they were highly likely to teach secondary agriscience in five years. This is significant because, according to Camp, Broyles, and Skelton (2002), agricultural education programs continue to have a shortage of certified teachers to fill teaching positions. Some shortage for agriscience teachers is found in The Educator Supply and Demand in the United States Report (American Association for Employment in Education, 2003). Moreover, recent studies have found that today's average worker will change careers several times over the course of a lifetime (Hansen, 2006). In attempting to keep agricultural education both credible and modern, the reasons for teacher attrition are important to comprehend.

Despite there being ample certified teachers available, only 59% actively seek employment as teachers, resulting in a teacher shortage. Complicating this problem is the growing student population and higher expectations placed on schools. This makes for

the need to determine the critical reasons for leaving and factors that influence teacher attrition as related to work-life variables.

Statement of the Problem

It is not known why up to half of all beginning teachers leave the profession in their first five years of teaching. There is no required exit interview to analyze the reasons, nor is there any official listing of beginning teachers who have left the profession. The aspects of job satisfaction and the reasons for remaining in the profession have been well studied. But, it is not shown in the literature why beginning agriscience teachers leave. The critical deciding factors in choosing to leave a profession that is loved as a student, that has taken four years for certification, that has cost a substantial amount of money, and that is a calling for many, is not known.

Legislative changes, especially during the new millennium, have placed an increased emphasis on public schools to hire professionally certified teachers. This study examined job satisfaction and attrition in the field of agricultural education. It examined the professional and personal factors related to the decision to leave the profession and the adequacy of preparedness for roles and responsibilities developed in professional teacher preparation programs. This study was an attempt to systematically process the individual perceptions and reflections of beginning agriscience teachers in Texas who have chosen to leave the profession. This study holds a strong message for school administration and teacher preparation programs; if quality teachers are to be recruited and maintained in the profession, a clear understanding of their reasons for leaving must be gained.

Purpose of the Study

The purpose of this study was to 1) identify the demographic and career characteristics of former beginning agriscience teachers, 2) describe the reasons for leaving the agriscience teaching profession, recommendations for improving work-life balance, and recommendations for improving the preparation and retention of agriscience teachers, and 3) examine the relationships among demographic and career characteristics, work satisfaction, work-life balance, and attrition. Knowledge of these specifics, perceptions, and relationships will allow for a systematic approach for developing strategies to retain beginning teachers. The population for this study consisted of beginning agriscience teachers from Texas who left the profession between the academic years beginning with the 2001–2002 term and ending with the 2005–2006 term.

Questions to Frame the Study

The following research questions guided the study:

1. What are the demographic and career characteristics of former beginning agriscience teachers?
2. How does work satisfaction relate to beginning agriscience teacher attrition?
3. How does work-life balance relate to beginning agriscience teacher attrition?
4. What are the recommendations from former beginning agriscience teachers for improving work-life balance in the agriscience teacher career field?
5. What are the chief reasons beginning agriscience teachers leave the agriscience teaching profession?

6. What are the recommendations from former beginning agriscience teachers for improving the preparation and retention of agriscience teachers?

Hypotheses

In addition to the questions that guided the study, three hypotheses were tested:

H₀₁: There is no significant difference between the means of the demographic and career characteristics on work satisfaction, work-life balance, or agriscience teacher attrition.

H₀₂: There is no relationship between work satisfaction and agriscience teacher attrition.

H₀₃: There is no relationship between work-life balance and agriscience teacher attrition.

Theoretical Framework

Abraham Maslow argued in his 1943 work that people are wanting and needing beings. People always want more, he wrote, and what people want depends on what they already have. Therefore, human needs can be arranged into levels in series of importance (Examstutor, 2004). People go through life seeking to satisfy these needs, starting at the bottom and working their way up. To motivate people, the opportunity to satisfy their current level of need must be offered. Once a need is satisfied, it will no longer act as a motivator; only unsatisfied needs will motivate a person (Examstutor, n.d.). Human needs progress from basic to complex and therefore are the founding theoretical framework for job satisfaction. Applied to working life, the hierarchy covers from, for example, adequate pay and conditions to satisfaction from the nature of the work itself

(Chartwell Learning & Development, 2004). Need-satisfaction models indicate that an employee's affective domain is affected by working conditions. The working environment either does or does not provide for meeting an employee's needs. When it does not, the employee reacts adversely, which leads to job dissatisfaction and attrition (Castillo & Cano, 1999).

As reported in Castillo and Cano's study, Herzberg, Mausner, and Snyderman (1959) developed a need-satisfaction model, the Motivator-Hygiene Theory. This theory is sometimes labeled Frederick Herzberg's Dual Factor Theory or Two-Factor Theory. Essentially, jobs have factors leading to satisfaction or dissatisfaction. Job motivators (satisfaction factors) include achievement, recognition, responsibilities, and advancement. These factors allow employees to satisfy their psychological needs and are usually related to the work itself. Shriberg, Shriberg, and Lloyd (2002) recognized Herzberg's explanation that it is unusual to find these factors absent where employees are satisfied. Hygiene (dissatisfaction factors) is related to the work environment. Job hygiene factors include adequacy of pay, fringe benefits, working conditions, quality of supervision, policies, job security, and interpersonal relationships (Castillo & Cano, 1999). Having these factors doesn't necessarily mean employees will be satisfied but their absence could mean high levels of dissatisfaction (Shriberg et al., 2002). Therefore, unsatisfactory hygiene factors can act as de-motivators, but if satisfactory, their motivation effect is limited (Accel Team, 2004). Hygiene issues are the source of dissatisfaction, so these issues must be dealt with to create an environment in which employee satisfaction and motivation are possible (Syptak, Marsland, & Ulmer, 1999).

Parallels can be seen as examined by Chartwell Learning & Development (2004) between Maslow's Hierarchy of Needs Theory on human motivation and Herzberg's Motivator-Hygiene Theory (Figure 1).

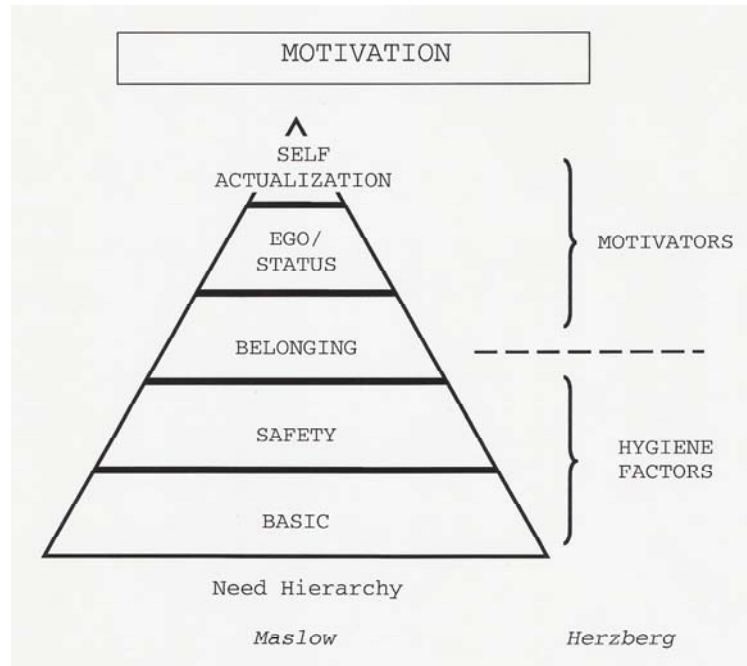


Figure 1. Maslow and Herzberg motivation models are parallel.

The hierarchy covers working conditions from, for example, adequate pay and conditions to satisfaction from the nature of the work itself. The similarities between the two models suggest that needs have to be satisfied for the employee to be motivated. However, Herzberg argued that only the higher levels of the Maslow Hierarchy act as a motivator. The remaining needs serve only dissatisfaction if not achieved. Karasek and Theorell's Demand-Control Model (1990; cited in Croom, 2002) solidifies the dissatisfaction factors of the Motivator-Hygiene theory, the work environment. Job demands and the lack of decision-making authority on the job are most likely to cause job

strain. Croom cited other researchers' efforts and studies showing the lack of control of one's work environment leads to low morale and burnout. Burnout is significant here because, according to Combs (2006), it often results in an unwanted attitude change leading to decreased passion and commitment to work that is no longer seen as rewarding. Combs (2006) further concluded that a detachment from one's goals and purpose could result from prolonged burnout.

A high percentage of beginning agriscience teachers leave the teaching profession by the end of their third year of teaching because the expectations and demands of the position are overwhelming (Osborne, 1992). Even though they are devoted to teaching and working with students, eventually the flux of working condition stressors can extend to an imbalance between personal and professional life that contributes to job dissatisfaction. Work motivation is related to job satisfaction and work-family relationships; motivation is not independent of an employee's work environment or personal life (Motivation I: needs et al., 2004). The personal life of an agriscience teacher can influence actions regarding professional life (Odell, Cochran, Lawrence, & Gartin, 1990). Work-life balance is a person's control over conditions in the workplace. It is accomplished when a person feels dually satisfied about his personal life and his paid occupation. Moreover, managing professional and personal life, which is to function, progress, and regulate both professional work and personal life, is more than simply an issue of time; it also involves energy and mood, which are not constrained in the way that time can be (Galinsky, 2003).

Significance of the Study

Texas has the nation's largest number of agriscience teaching positions, but research literature lacks the understanding of work-life variables influencing attrition of beginning teachers. Few studies have been conducted throughout the country that help identify work-life variables so that professional development and assistance can be provided to beginning agriscience teachers.

With the national focus on academic standards and testing, agricultural education implications point toward funding emphasis focusing in the direction of reducing the funding for career and technical education programs like agricultural education (Stewart, Moore, & Flowers, 2004). This is clearly evident by the fiscal proposal made in February 2006 by President George W. Bush calling for a cutting of all Carl Perkins career and technology funding for fiscal year 2007. Instead, this funding as proposed was to go toward academic testing initiatives. Congress denied this fiscal proposal, but its very existence and suggestion by the president of the United States is startling. Stewart et al. (2004) wrote that agricultural education leaders need to recognize that whatever gets measured gets done, and therefore if agricultural education programs are to survive, they must be measured as a relevant component of the school system.

Many things affect keeping agriscience teaching positions filled. One such effect is that in the past 25 years there has been dramatic growth in the number of dual career households (Neault & Pickerell, 2005). There has been a major increase in the number of female agriscience teachers (Castillo & Cano, 1999). Women now comprise almost 30% of American agriscience teachers and almost 50% of newly qualified potential teachers

(Camp, Broyles, & Skelton, 2002). Most of these women can expect to combine their teaching career with significant family responsibilities. That expectation is shared by growing numbers of men, too. Yet today's agriscience teachers are confronting pressures that make such a work-life balance increasingly difficult to achieve. Such pressures also limit the time available for other important pursuits, including agricultural production pursuits and personal interests. Achieving a perfect balance or complete job satisfaction will never be achieved, but achieving greater balance and greater job satisfaction will be critical to the beginning teacher's survival and retention. Not all individuals leave the profession for the same reasons. Nonetheless, there is great value in identifying common reasons, and having teachers share their personal experiences for the benefit of others facing similar challenges.

Furthermore, teacher attrition impacts not only the individual who leaves the profession but many others, too. For example, their families, educational administrators, teacher trainers, beginning and veteran teachers, students, and communities of people are all impacted. And, even though school districts, region service centers, and professional organizations address teacher needs through professional development opportunities and workshops these attempts have fallen short with the reality of 30% to 50% of beginning teachers leaving the profession by their fifth year. Attrition carries a considerable cost, not only for people but also for departments, school districts, and the profession, not to mention incalculable social costs. This problem cannot be easily resolved. But neither can it be easily ignored. Men and women with substantial family commitments are entering the profession. Increasing numbers of studies indicate dissatisfaction with

workload and time demands. A profession seriously committed to preparing individuals for careers must do more to transform its principles into practice for its teachers, and to create more opportunities for balanced lives and job satisfaction.

Limitations of the Study

For this study, a questionnaire was used to obtain data regarding work satisfaction, work-life variables, and attrition among beginning agriscience teachers. The limitation to this approach is that the data obtained consisted of perceptions from the respondents. Therefore, the possibility of variability inherent to self-reported data may have reduced the validity of the study.

Another limitation of this study focuses on the surveying of only formerly employed beginning agriscience teachers. Therefore, results apply only to those individuals and not to employed agriscience teachers. When surveying only beginning teachers who have left the profession, the researcher can only generalize the results of the study to the former teachers responding and not to those who remain in the profession. Even though the population frame may be seen as a weakness, this researcher chose to continue with the frame because of the lack of previous research on those who decide to leave the profession. Consequently, new knowledge can be discovered and added to the teacher attrition research base.

A final limitation is that of a consistency issue. Consistency in using a Likert-type rating scale can be considered a weakness. Some respondents may have determined the answer choice of “agree” to be the same as the answer choice “strongly

agree.” However, much of agricultural education research uses Likert-type rating scales and the profession deems it acceptable.

Assumptions of the Study

The assumptions related to this study were that the respondents would be truthful in their answers. Furthermore, because there has been a historical shortage of agriscience teachers, several other assumptions were made. First, it is assumed that historically, the needs have not been met for agriscience teachers. Second, beginning teachers’ needs differ from veteran teachers’ needs. Third, the problem is complex, and to ignore it or to continue with the status quo would increase beginning teacher attrition and the historical teacher shortage. Fourth, former beginning agriscience teachers, using their insights and experience, were better equipped to explain the attrition of beginning teachers, making them experts. Fifth, these experts represented diverse teacher preparation programs, agriscience departments, and school districts. Sixth, it was assumed that locating and surveying all former beginning agriscience teachers was impossible or impractical. Seventh, bringing together all former beginning agriscience teachers in one meeting to survey was impossible or impractical.

Definition of Terms

Agriscience Teacher: teaches agricultural science and technology to students in grades six through 12; prepares students for successful careers and a lifetime of informed choices in global agriculture, food, fiber, and natural resource systems.

Agricultural Education Program: targets students through high quality classroom and laboratory instruction, through FFA activities to develop leadership, personal growth, and

career success, and through supervised agricultural experience (SAE) programs to enhance career skills.

Attrition: leaving the profession of teaching for reasons other than reaching the normal retirement age.

Beginning Teacher: teacher with five or fewer years of teaching experience.

Burnout: a condition that exists when one becomes emotionally exhausted as a result of the combination of excessive demands and inadequate resources to meet the demands (Combs, 2006).

Former Beginning Agriscience Teacher: no longer teaching agriscience in the secondary public schools of Texas. May be teaching in another discipline, a college, or university, or have left the teaching profession entirely.

Managing Professional and Personal Life: to function, progress, and regulate both professional and personal life. It is more than simply an issue of time; it also involves energy and mood, which are not constrained in the way time can be (Galinsky, 2003).

Quality of Life: the degree to which a person enjoys the important possibilities of life, which include the interaction of personal and environmental factors (Renwick, 1998).

Veteran Teacher: teacher with six or more years of teaching experience.

Work-life Balance: a person's control over conditions in their professional work and personal life. It is accomplished when people can manage both without significantly sacrificing either of the two.

Introduction Summary

Agricultural education programs continue to have a shortage of certified teachers to fill teaching positions. A gap exists between the numbers of teachers needed and the numbers seeking employment (Camp, 2002). This study determined reasons beginning agriscience teachers leave the profession within five years. Maslow's Hierarchy of Needs and Herzberg's Motivator-Hygiene theory provided the theoretical framework. The information found in this study can be seen as significant to many people including the individuals who left the profession and their families, educational administrators, teacher trainers, beginning and veteran teachers, students, and communities.

CHAPTER II

REVIEW OF LITERATURE

The literature suggests that a real world practical problem of teacher shortages exists for agricultural education. According to National FFA statistics, over 35 agricultural education programs shut down in 2001, 59% of agricultural education graduates pursued teaching, and 23% of agriscience teachers had fewer than five years experience. Related to this is a lack of understanding for the deciding factors associated with leaving the profession before retirement.

Increasing understanding of the agriscience teacher shortage problem would be beneficial because if retention of qualified teachers in the profession is to be realized, a clear appreciation of their needs must be gained (Foster, 2001). Retention of agriscience teachers has become imperative because a large percentage of agriscience teachers are nearing retirement age and more school campuses, requiring teachers to fill them, are being built to accommodate an increasing population.

These issues and others provide a rationale for the need to review the literature on agriscience teacher shortages. In particular, seven critical concerns suggest the importance of examining what is known about beginning agriscience teachers, including: (1) job satisfaction and dissatisfaction, (2) teacher burnout, (3) inservice needs, (4) work-life balance, (5) teacher attrition, (6) induction programs, and (7) teacher mentoring.

Job Satisfaction and Dissatisfaction

Scholars who have addressed the agriscience teacher shortage problem have studied job satisfaction and dissatisfaction (Bennett, Iverson, Rohs, Langone, & Edwards, 2002; Castillo & Cano, 1999; Greiman, Walker, & Birkenholz, 2005; Syptak, Marsland, & Ulmer, 1999; Walker, Garton, & Kitchel, 2004). This focus helps explain the problem because it addresses job satisfying or motivating factors as well as job dissatisfying or demotivating hygiene factors.

Castillo and Cano (1999) studied job satisfaction among agriscience teachers over a ten-year period. Overall, agriscience teachers remained satisfied with their jobs over the ten-year period though they remained slightly dissatisfied to satisfied with the motivator and hygiene factors of their job. Suggestions from this study were to further investigate bureaucracies of the job, opportunities for advancement, gender bias, and administrative training for agricultural education program responsibilities.

Bennett, Iverson, Rohs, Langone, and Edwards (2002) designed a study to determine to what extent agriscience teachers were satisfied with teaching agriscience and factors causing teacher dissatisfaction. They found that teachers were generally satisfied, however several items indicated less satisfaction. Dissatisfaction aspects were burnout, feeling that inappropriate students were placed in classes, inadequate opportunities for promotion, and inappropriate student-teacher ratios.

Walker, Garton, and Kitchel (2004) investigated the extent to which the level of job satisfaction of secondary agriscience teachers changed from their initial year of teaching to their current employment. Comparisons were made between teachers who

remained in the profession with those who changed school districts and those who left the profession. Walker et al. (2004) concluded that all three groups of teachers were generally satisfied with their first year of teaching. Teachers who left the profession were generally as satisfied as those who remained in the profession with regard to job responsibilities. Although the results implied that teachers leaving the profession were relatively satisfied, they were leaving the profession for opportunities and job satisfaction aspects that could not be obtained through teaching.

Greiman, Walker, and Birkenholz (2005) studied the attitude of beginning agriscience teachers after completing their first year of teaching. Greiman et al. (2005) concluded that factors related to the organizational environment of the school influence the induction stage of teaching. Beginning teachers were not prepared for isolation and socialization issues, were challenged by program management responsibilities, and were frustrated with school administrators' amount and quality of support provided. And despite reporting a love-hate relationship with their career as an agriscience teacher, it was determined the beginning teachers had an overall positive attitude with regard to their first year of teaching.

Job satisfaction studies have helped the profession to understand the agriscience teacher shortage problem. Although job dissatisfying or demotivating hygiene factors cannot motivate employees, they can minimize dissatisfaction when prepared for and addressed (Syptak, Marsland, & Ulmer, 1999). The knowledge of job satisfying or motivating factors and job dissatisfying or demotivating hygiene factors helps agriscience

teacher preparation programs prepare beginning teachers for the context of their professional and personal work-life as agriscience teachers.

Teacher Burnout

In addition to job satisfaction studies, scholars addressing the teacher shortage problem have placed a high priority on teacher morale (Stewart, Moore, & Flowers, 2004). Teacher morale refers to the enthusiasm and excitement teachers have about their profession (Stewart et al., 2004). Scholars have identified teacher burnout in particular as a contributing factor negatively affecting morale and instilling job dissatisfaction.

Combs (2006) found burnout is what happens to individuals who are highly passionate about their work and committed to achievement and meaningful pursuits. But once they encounter numerous obstacles that outmatch their resources, burnout results. Prolonged stress often results in the detachment from one's goals and purpose (Combs, 2006).

Furthermore, burnout is linked to the accumulation of demands accompanied by unsuccessful attempts to resolve the demands, often resulting in an unwanted attitude change; passion and commitment lessen, and work is no longer rewarding (Combs, 2006). Maslach (1982) identified three stages of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. Furthermore, a teacher's personal attributes and efficacy can lead to teacher burnout. Croom (2002) cited studies that show a lack of control of one's work environment leads to low morale and burnout. Nonetheless, teacher burnout literature, though informative, limits complete

understanding of the teacher shortage problem because it does not address the on-going professional development or inservice needs of beginning agriscience teachers.

Inservice Needs

Being prepared for agriscience teaching is important. As teachers gain confidence in their teaching abilities, their decisions to leave the profession may be more likely related to job satisfaction and commitment (Knobloch, 2003). Therefore, a group of scholars help to move past this limit given their focus of inservice needs of beginning agriscience teachers. Beginning teachers need to be prepared to be not only good teachers, but also good managers of change because teachers deal with challenging, ever changing environments (Stewart, Moore, & Flowers, 2004). If not prepared, both the hygiene and motivator factors may facilitate negative experiences while teaching (Myers, Dyer, & Washburn, 2005).

As well, Garton and Chung (1996) generally find the ranking of inservice needs by beginning teachers to be different than the rankings of perceived inservice needs by teacher educators and state supervisors. Beginning teachers see their greatest inservice needs to fit in the categories of instruction, program planning, development and evaluation, as well as program administration. Classroom teaching is difficult for all teachers but beginning and veteran teachers are somewhat different in their inservice needs (Garton & Chung, 1996). What's more, many beginning agriscience teachers proclaim to be only somewhat competent in implementing the competencies important for their survival and success (Joerger, 2002). Teachers need to be up-to-date on the latest content and teaching technology and is seen as essential (Stewart, Moore, &

Flowers, 2004). However, the technical agriscience knowledge and skill competencies rank lower in priority for inservice than professional competencies in the areas of instruction, program planning, development and evaluation, and program administration (Garton & Chung, 1996). Furthermore, beginning teachers' inservice needs change over time, especially in subject areas as technologically demanding as agriscience (Roberts & Dyer, 2004) and should be evaluated continually (Joerger, 2002).

Work-Life Balance

Beginning a career is a fundamental step for teachers, and beginning agriscience teachers tend to consider leaving the profession when faced with difficulties (Knobloch & Whittington, 2003). Likewise, to address skill development and retention, one must look at and encourage work-life balance (EEO Trust, 2005). Scholars have studied challenges involving work-life balance in business and private industry but to a lesser extent in agricultural education. Exploring challenges involving work-life balance for the agricultural education field may produce solutions for the teacher shortage problem. Of the work-life balance literature, the general agreement is consistently reiterated that improving work-life balance is a critical factor in increasing both the quality of life and living standards of workers, which can be seen as hygiene factors explained by Herzberg, Mausner, and Snyderman (1959). Moreover, two of every five employees are dissatisfied with the balance or lack of balance between their work and their personal lives (Hansen, 2006). And since initial experiences as a teacher can determine whether or not a teacher stays in the profession (Knobloch & Whittington, 2003), it is reasonable to expect

work-life balance issues to be included in the initial experiences as beginning agriscience teachers attempt to juggle both professional and personal lives.

Furthermore, in order to attract and retain high achievers, employers need to position themselves as employers of choice offering excellent workplace conditions including work-life balance initiatives (EEO Trust, 2005). When employers are not employers of choice, organizations lose trained people as well as potential employees to more work-life friendly organizations (Kutilek, Conklin, & Gunderson, 2002). It has been recommended that companies review the work-life balance of their employees on a regular basis in order to institute strategies to combat the growing work-life conflict with lower rates of absenteeism and a more motivated, satisfied workforce being the result. Work-life balance research is needed and practical for agricultural education as 59% of agricultural education graduates enter the teaching profession.

Agricultural education scholars studying the challenges of balancing professional and personal life found in teaching are limited. Foster (2001) structured a quantitative survey to address the perceptions of women agriscience teachers regarding the challenges they faced in teaching. A limitation of quantitative research is that it forces the respondent to choose an inadequate answer. Possibly because of this, when asked what was the greatest challenge in teaching, respondents wrote many comments in the margins and on extra sheets of the questionnaire. Foster turned the comments into a qualitative study. An emergent theme appeared: balancing professional and personal life was the greatest challenge in teaching. Myers, Dyer, and Washburn (2005) also found balancing professional and personal life to emerge as a theme in their study of beginning

agriscience teachers. And Knobloch, in his agricultural education research summary report for Illinois (2003), found that 49% of the novice teachers he studied agreed that being an agriscience teacher took too much time from family and personal interests. Additionally, 41% of the novice teachers agreed that they questioned their career choice at least once a week.

Only a small number of studies exist pertaining to agriscience teachers and work-life balance. Somewhat related are quality of life studies that have attracted interest over the past two decades, particularly in areas of health, rehabilitation, and social services, but also in medicine, education, and others (Renwick, 1998). Quality of life was the focus of research conducted by Smith and Briers (2001) on scholarship recipients. These scholars concluded that research focusing on common life conditions provides valuable information to individuals and programs about conditions that seem to promote quality of life.

Teacher Attrition

The National Center for Education Statistics (NCES) reported in 2005 that at the end of 1999–2000, 16% of the total national teacher workforce turned over or did not continue teaching in the same school during the 2000–2001 school year. Moreover, half of teacher turnover was attributed to transfer of teachers between schools. This would logically leave the other half through attrition. The turnover was larger at the end of 1999–2000 (16%) than at the end of 1987–88 (14%), 1990–91(13%), or 1993–94 (14%) (National Center for Education Statistics, 2005). Teachers who left at the end of

1999–2000 most commonly identified retirement as a reason for leaving teaching, 20%; family reasons, 16%; pregnancy/child rearing, 14%; wanting better salary and benefits, 14%, and wanting to pursue a different career, 13%. Both teachers who left teaching and teachers who transferred at the end of 1999–2000 reported a lack of planning time, too heavy a workload, too low a salary, and problematic student behavior among their top five sources of dissatisfaction with the school (National Center for Education Statistics, 2005).

Although statistics similar to the above national figures for all teachers are not specifically cited for agriscience teachers, the high attrition rate of beginning agriscience teachers directly impacts the quality of education provided students by limiting the expertise that develops with experience. In order for agricultural education to continue to grow, a highly motivated agriscience teaching profession is necessary (Stewart, Moore, & Flowers, 2004). Job dissatisfaction factors exist. And, because of them, it is important for the agricultural education profession in Texas and nationally to better comprehend the reasons that beginning agriscience teachers leave the profession prior to retirement.

Induction Programs

Increasing attrition rates of teachers can justify the implementation of induction programs, as they are effective in supporting beginning teachers (Joerger & Bremer, 2001). In recent years there has been an increase in programs offering support, guidance, and orientation for beginning teachers during the transition into their first teaching job (Smith & Ingersoll, 2004). The induction period lasts up to 5 or 6 years and includes all of the teaching and professional activities and events experienced by beginning teachers

(Joerger & Bremer, 2001). Research indicates that induction programs can be successful in achieving five common goals: (1) improving teaching performance, (2) increasing teacher retention, (3) promoting personal and professional well-being of beginning teachers, (4) satisfying induction and certification mandated requirements, and (5) transmitting the culture of the system to beginning teachers (Huling-Austin, 1988).

Furthermore, research indicates that beginning teachers who were provided with mentors from the same subject field and who participated in induction activities were less likely to leave the profession (Smith & Ingersoll, 2004). This can be important for agriscience teachers, as the induction needs of beginning career and technology teachers (CTE) differ from the needs of other beginning teachers because in addition to teaching in the classroom and laboratory, CTE teachers are also expected to serve as advisors of intracurricular student organizations and program managers of a variety of integral work-based programs (Joerger & Bremer, 2001).

Teacher Mentoring

Since 1989, the state of Texas has experimented with mentoring for beginning teachers as a strategy to facilitate the retention of teachers through their first years in the profession (Pan & Mutchler, 2000). In 1990, mentoring was a requirement for all alternatively certified teachers. And, in 1991, mentoring was mandated for all teachers during their induction year. In 1995, this requirement was unsuccessfully challenged by legislation to release districts from the unfunded mandate. In 1996, the Texas State Board of Educator Certification's (SBEC) strategic plan stipulated that all educators receiving a conditional teaching certificate have the support of a mentor during their two-

year induction period, which is also not funded or supported by the state. In 1999, SBEC received funding through a grant from the U.S. Department of Education to pilot a three-year support system named the Texas Beginning Educator Support System (TxBESS). And, even though mentoring has been used successfully in induction programs to help reduce feelings of isolation and enhance problem solving (Huling & Resta, 2003), future funding to support teacher mentoring in Texas is uncertain (Pan & Mutchler, 2000).

Although previous groups have helped the profession to understand the teacher shortage problem and induction programs including teacher mentoring are available, additional research is needed because the problem persists, and balancing professional and personal life as work-life variables in the research of agricultural education is limited. Therefore, a proposal was made to do research within the former beginning agriscience teacher frame. Based upon the theoretical framework and the literature review, a conceptual model (Figure 2) was developed that served to construct the questionnaire instrument.

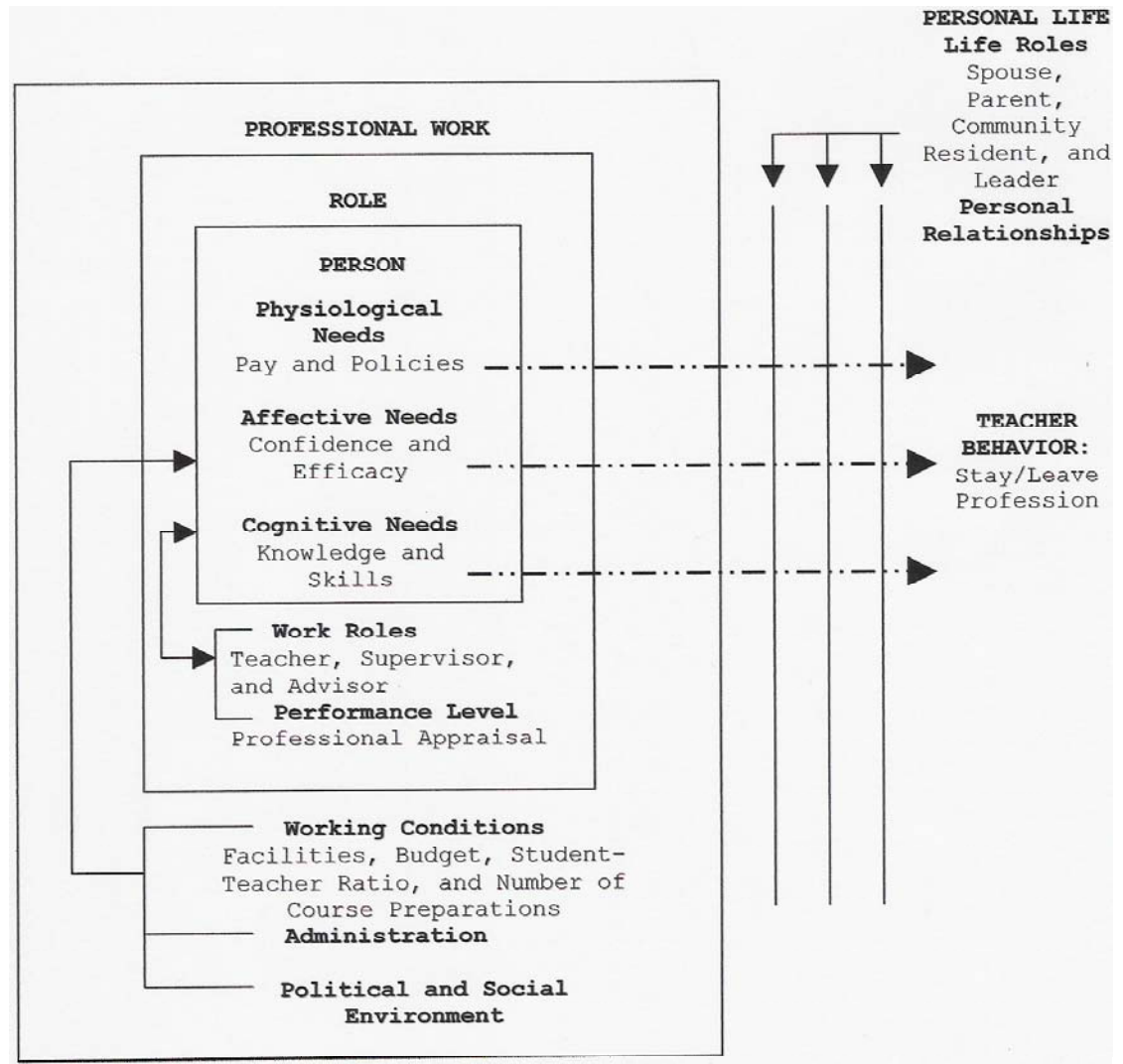


Figure 2. The conceptual model that served to construct the questionnaire instrument.

Work-life balance is difficult because agriscience teachers have many roles to fulfill outside their teaching role. Personal life roles cannot be ignored as they influence teacher behavior in their decision to stay or leave. In 1987, Gary and Straquadine informed the profession that the agriscience teacher's life is not bound by the time and space of the school. This was emphasized 20 years ago, and it is still true today.

Agriscience teachers coordinate many roles: teacher, supervisor, adviser, coach, spouse,

parent, community resident, and leader. For agriscience teachers to coordinate all of these roles, they must cope with many demands of their time, especially the demand placed upon them by marriage (Mojaphoko, 1999). County agents from Ohio cited as reasons for agent turnover (Roussan, 1995): family obligations, other life priorities, too many late night meetings, too many responsibilities, and no time for personal relationships.

Summary of Literature Review

The literature reveals critical concerns when examining what is known about beginning agriscience teachers, including: (1) job satisfaction and dissatisfaction, (2) teacher burnout, (3) inservice needs, (4) work-life balance, (5) teacher attrition, (6) induction programs, and (7) teacher mentoring.

Scholars have found agriscience teachers to be satisfied with the job itself and dissatisfied with working conditions (Bennett, Iverson, Rohs, Langone, & Edwards, 2002; Castillo & Cano, 1999; Greiman, Walker, & Birkenholz, 2005; Syptak, Marsland, & Ulmer, 1999; Walker, Garton, & Kitchel, 2004). Scholars have identified teacher burnout in particular as a contributing factor negatively affecting morale and instilling job dissatisfaction. Furthermore, beginning teachers' inservice needs change over time, especially in subject areas as technologically demanding as agriscience (Roberts & Dyer, 2004) and should be evaluated continually (Joerger, 2002). Scholars have studied challenges involving work-life balance in business and private industry but to a lesser extent in agricultural education. Balance between professional work and personal life is an unsatisfied need of beginning agriscience teachers as supported by the findings of

Foster, 2001; Mojaphoko, 1999; NCES, 2005; and Neault & Pickerell, 2005. The high attrition rate of beginning teachers (Campos, 2006; Ingersoll & Smith, 2003; Peterson, 2006; Reuters, 2006; Wilson, 2000) directly impacts the quality of education provided students by limiting the expertise that develops with experience. And, increasing attrition rates can justify teacher induction programs including mentoring, as they help to retain and develop the skills, satisfaction, and experience of beginning CTE teachers (Joerger & Bremer, 2001).

CHAPTER III
METHODOLOGY

This study was an identification and analysis of work-life variables influencing attrition among beginning agriscience teachers of Texas. The purpose of the study was to 1) identify the demographic and career characteristics of former beginning agriscience teachers, 2) describe the reasons for leaving the agriscience teaching profession, recommendations for improving work-life balance, and recommendations for improving the preparation and retention of agriscience teachers, and 3) examine the relationships among demographic and career characteristics, work satisfaction, work-life balance, and attrition. Descriptive-correlational research procedures were used to conduct this study.

Prior to embarking upon data collection, a proposal was submitted to the Office of Research Services at Texas Tech University. A copy of the data collection instruments and all cover letters to be used were sent with the proposal for review by an Internal Review Board (IRB). This process was to ensure that the research involved would pose no physical, mental, or emotional harm to those responding. Care was taken to include information in the cover letters noting that all answers would remain confidential and that no information would be reported that could lead to identification of any individual's answers. Upon approval by Texas Tech University, a copy of the IRB form was forwarded to Texas A&M University for filing.

Research Design

This ex post facto study was primarily descriptive with correlational analysis. An ex post facto study is a causal-comparative design in which the treatment is included by selection rather than manipulation, meaning that respondents have self-selected the independent variable (Tuckman, 1999). The correlational design measured the relationship between the factors that influenced the respondents' perceptions.

Population

The target population was defined as former beginning agriscience teachers previously employed by Texas public secondary schools. The years of employment were five separate school year terms, beginning with the 2001–2002 school term and ending with the 2005–2006 school term. For this study, a beginning teacher was defined as a teacher with five or fewer years of teaching experience. By using this group of teachers, it was likely that reasons for attrition identified by this study were only those experienced by a beginning teacher. Moreover, the former beginning teachers were the ones with the needed information, the reasons for leaving the profession.

Several procedures were used to locate former beginning agriscience teachers. First, a public information request (PIR) was made to the Texas Education Agency for a list of beginning agriscience teachers having five or fewer years of experience and who did not return to teaching in the Texas public schools or returned but no longer taught agriscience. Five cohorts of former beginning agriscience teachers were identified for the 2001–2002 to 2005–2006 school terms. Second, current contact information including

e-mail addresses was found for the former agriscience teachers. To do this, teacher educators throughout Texas, the Vocational Agriculture Teacher Association of Texas, and school district personnel directors were asked for addresses of those former teachers. Third, a people-search on the Internet was used for remaining unknown addresses.

It was determined that the number of feasible former beginning agriscience teachers was small; therefore no sampling methods were conducted. All former beginning agriscience teachers with available addresses were contacted to participate in the survey.

Response Rate

The population for this study consisted of beginning agriscience teachers previously employed by Texas public secondary schools, $N=520$. E-mail messages were sent to former teachers identified by the Texas Education Agency.

Two questions in the demographic information section were used to collect information that would allow the researcher to determine if the respondent was included within the parameters of the population. The first of these questions asked for respondents' current employment. The responses of any participant providing a response, "I am currently an agriscience teacher," "I have returned to teaching agriscience," or "I have never taught agriscience," were not included in the final analysis. The other question used to determine whether or not participants' responses should be included in the final analysis asked for information about the number of years employed as an agriscience teacher. The responses of any participant identified as being employed more than five years or leaving the profession prior to 2001 were not included in the final analysis. Therefore, the responses of 106 participants were removed from the database prior to analysis. After making adjustments for those misidentified, duplicated, or

responding that did not match the population parameters, 58 usable surveys were returned from 85 potential participants, yielding a return of 68.24%. Information regarding the adjusted population and response rate is presented in Table 1.

Table 1

Adjusted Population and Response Rates for the Study

Texas Teacher Representation	Number	Number	Percentage
Agriscience Teachers Identified		520	
Removed Due to Duplication		48	
Teachers Misidentified		106	
Never Taught Agriscience	21		
Left Prior to 2001	1		
Never Left Agriscience	43		
Left but Returned	29		
Taught More than 5 Years	12		
*Population Without Duplicates or Misidentified		366	
Total Responses		94	
Initial Response Rate			25.68%
Responses Not Meeting Criteria		36	
Nonusable Information from Personnel Directors		234	
No Contact Info Available	119		
Refused to Release Info	33		
Leads but No Contact Info	82		
Undeliverable E-mail		47	
*Adjusted Population		85	
Total Accessible Responses		58	
Accessible Response Rate			68.24%

The first mailing resulted in 22 returned questionnaires. The first follow-up mailing to nonrespondents yielded an additional 17 questionnaires. The second follow-

up yielded 12 questionnaires. The third and final reminder yielded six questionnaires. The follow-up procedures were the first step in controlling for nonresponse error, attempting to get as many responses as possible (Dillman, 2000).

As there were 28 teachers who had not responded to the survey, each member of the nonrespondents group was asked to complete the questionnaire over the telephone, or complete it and return through fax or e-mail. Only one of the 28 teachers completed the questionnaire as part of this follow-up group. Eight teachers contacted reported they did not meet the required parameters of the population as they were either still teaching agriscience or never taught agriscience, and one teacher declined to participate. Lindner, Murphy, and Briers (2001) suggested that, after diligent effort, if data can be obtained from fewer than 20 nonrespondents, the data from nonrespondents that is collected could be combined with the response data from late respondents in making comparisons for estimation of nonresponse error. They recommended that late respondents be operationally defined to include those who respond following the final follow-up stimulus. In this study, six participants responded after the final reminder. The summed responses of the seven participants considered nonrespondents or late-respondents were compared to the summed responses of the 51 participants who responded prior to the final reminder using an independent t test. An analysis of the responses of those who were considered late respondents and nonrespondents as compared to those who had responded prior to the final reminder notice showed no significant difference between the means of these two samples ($p=.24$).

Screening of Data

Before any data analysis was performed, all responses were carefully screened to ensure that the respondent matched the parameters of the population. 36 sets of responses were eliminated from the data set because the respondents remained in the agriscience teaching profession or taught more than five years. Additionally, the data were carefully screened for accuracy, missing values, and outliers using SPSS for Windows version 12.0. Visually looking at minimum and maximum values as well as frequencies helped in checking for accuracy. However, normal distribution and linearity could not be assumed because data was ordinal at best, not interval. Therefore, data were considered to be nonparametric.

Data Collection

Former beginning agriscience teachers were invited to participate in this study. A cover letter with consent information was e-mailed to each teacher. Online survey techniques were used as the primary means of data collection. SurveyMonkey was the survey software used to collect responses. Non-response was handled as outlined by Lindner, Murphy, and Briers (2001). Three follow-up reminders were e-mailed to respond. Early respondents were compared with late respondents to determine if any significant differences existed between them. And, subjects were not required to identify themselves anywhere on the survey.

Data Management

An uninterested party, the online services of SurveyMonkey, managed returned surveys. The anonymity of the survey was maintained and e-mail addresses were used to check off

the respondents returning their survey on the master list. The tallied information from the surveys was provided in report form to the researcher. Completion of the survey was verified.

Instrumentation

The instrument used in this study was an adaptation from an instrument used in a study conducted by Lepley (2003) with Texas Cooperative Extension agents. The instrument was divided into four sections and was evaluated for face and content validity by a panel of experts (N=7). After pilot testing the instrument with a group (N=15) of former secondary teachers, the instrument was revised as suggested.

The participants of the study completed four sections including the demographic and career section, Work Satisfaction Scale (WS), Work-Life Balance Scale (WLB), and Work-Life on Attrition Scale (WLA). Included in the instrument were open-ended questions asking for the chief reasons for leaving the profession and recommendations for improving work-life balance, teacher preparation, and retention. These open-ended questions were analyzed using keyword frequency analysis on the comments given.

Blanding (1995), as noted in Lepley (2003), developed the Work Satisfaction Scale to measure the degree of job satisfaction, happiness in the job environment, and satisfaction with the supervisor. The Work Satisfaction Scale contained a three-question, five-point Likert-type measure that used a response format ranging from "Very Satisfied" to "Dissatisfied." One sample question from the instrument was "How satisfied are you with your job?" Blanding (1995) reported the reliability alpha coefficient to be .78.

These questions were modified to be appropriate for former agriscience teachers. Thus, the sample question read, “Were you satisfied with your job as an agriscience teacher?”

The Effect of Job on Family Life Scale as used by Lepley (2003) was adapted to determine the influence of work-life on attrition for former beginning agriscience teachers. Therefore, questions were altered and the instrument section was named the Effect of Work-Life on Attrition by this researcher and used accordingly. The Work-Life on Attrition Scale contained Likert-type items and used a five-point response format. One sample item was “Indicate the importance of the following reason to your decision to leave agriscience teaching: Inadequate opportunities for training.” Responses ranged from “Not Important” to “Extremely Important.”

The Work-Life Balance Scale was developed specifically for this study and by this researcher. It contained Likert-type items and used a five-point response format. One sample item was “You were able to balance quality time between your work and your family/personal commitments.” Responses ranged from “Strongly Agree” to “Strongly Disagree.”

Analysis of Instrument Reliability

The instrument created for this study consisted of three major sections and a demographic and career section. Each subsection of the major section was evaluated for reliability, or internal consistency, independent of the other subsection. Reliability was then examined for the major section to measure its overall reliability. Accordingly, the reliability for the first major section of the instrument was estimated individually with no subsections present.

The internal consistency for the instrument was estimated using Cronbach's alpha. Cronbach's alpha is a widely used method for estimating the internal consistency of instruments. Table 2 reports the number of items, title, and coefficient alpha for each section for the questionnaire. When analyzing all scaled items for the instrument, the overall alpha score for the questionnaire was .69.

Table 2

Coefficient Alpha for Each Questionnaire Section

Section Number	Number of Items	Title	Coefficient Alpha
I	3	Work Satisfaction	.73
II	14	Work-Life on Attrition	.83
A	9	Job Related Attrition	.87
B	5	Personally Related Attrition	.48
III	5	Work-Life Balance	.50
A	3	Work-Life Balance Achievement	.95
B	2	Work-Life Balance Belief	.76
OVERALL	22	ALL SCALED ITEMS	.69

Data Analysis

All statistical analyses of the data were done using the Statistical Package for the Social Sciences (SPSS, version 12.0) program. Descriptive and correlational statistics were used to compute, organize, and test the hypotheses in the study. Frequency distributions and descriptive statistics were computed to produce frequency tables for all survey items. Keyword frequency counts were used for the open-ended comments.

The first type of analysis was descriptive statistics. Frequencies, percentages, means, and standard deviations were used to report data as appropriate. Cronbach's alpha was used to assess reliability as a measure of internal consistency for each scale.

The second type of analysis was exploratory in nature, including *t* tests for comparing early and late respondents. Multivariate analysis of variance (MANOVA) was used to test for significant differences among demographic and career characteristics on work satisfaction, work-life balance, and attrition. An alpha level of .05 significance was set *a priori*.

The third type of analysis was correlational. Spearman's rho correlation coefficient was used for the scaled items as a Likert-type measure was used and therefore, ordinal data. An alpha level of .05 significance was set *a priori*. The research adhered to the Davis Convention (1971) to interpret effect size. Following are the verbal description Davis attaches to specific ranges of Spearman's rho coefficient levels: 1) .70 or higher - very strong association, .50 to .69 - substantial association, .30 to .49 - moderate association, .10 to .29 - low association, and .01 to .09 - negligible association.

Operational Definitions of Work-Life Variables

Work Satisfaction: the sum score of the Work Satisfaction Scale with higher scores representing high levels of work satisfaction. The Work Satisfaction Scale used three items to assess satisfaction (Lepley, 2003).

Work-Life on Attrition: the sum score of the Work-Life on Attrition Scale with higher scores representing more importance of work-life on attrition. The Work-Life on Attrition Scale used 14 items to assess this effect as adapted from Lepley (2003).

Work-Life Balance: the sum score of the Work-Life Balance Scale with higher scores representing high levels of work-life balance. The Work-Life Balance Scale used five items to assess balance.

Summary of Methodology

This study was an identification and analysis of work-life variables influencing attrition among beginning agriscience teachers of Texas. Descriptive-correlational research procedures were used to conduct this ex post facto study. The accessible population consisted of beginning agriscience teachers previously employed by Texas public secondary schools, $N=85$. The researcher developed (Cronbach's $\alpha = .69$) online questionnaire was sent to former teachers identified by the Texas Education Agency and a 68.24% response rate was attained.

CHAPTER 4

RESULTS

Information gathered in chapter two provided the literature indicating an increasing need to research job satisfaction, work-life balance, and teacher attrition among beginning agriscience teachers. In chapter three, descriptions of this study's purpose, design, population, data collection, instrumentation, and statistical methodologies were provided. In this chapter statistical implementation, reasoning, and results are provided, which are reported according to the questions that guided the study.

Demographic and Career Characteristics

RESEARCH QUESTION ONE was designed to identify the demographic and career characteristics of the population and effects on work satisfaction, work-life balance, and agriscience teacher attrition. Questions included information about each teacher's personal characteristics and general career characteristics concerning the last school and program in which they taught.

Teacher Personal Characteristics

Questions about respondents' personal characteristics were gender, age, ethnicity, salary, current employment, and teacher training. Of the respondents, 44.8% were female and 55.2% were male. Figure 3 represents the percentages of male and female respondents in the study.

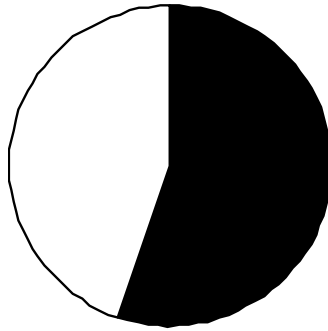


Figure 3. There were more male respondents (n=32) than female (n=26) respondents.

Participant ages ranged from under 30 (44.8%) to 40–49 years (6.9%) with no one reporting 50 or over (0.0%). These ages were grouped into four intervals based upon the range of ages for ease of reporting. Figure 4 shows the breakdown of participants by age group.

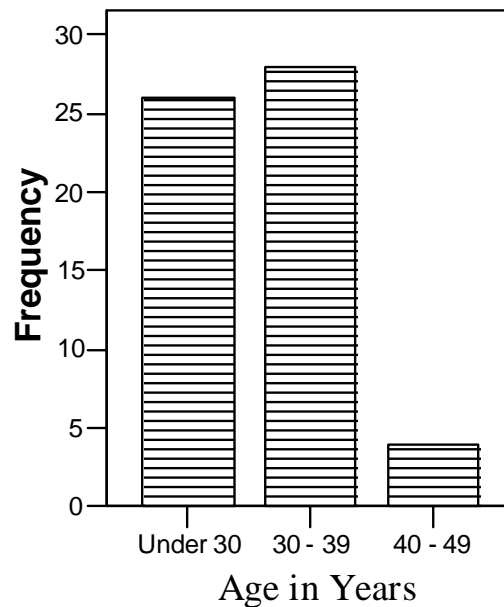


Figure 4. The age group 30–39 represents the plurality of respondents (48.3%).

The majority of respondents (94.8%) reported that their ethnic identity was best described as “White, European American, Non-Hispanic.” Three respondents (5.2%) identified “Hispanic or Latino American.” There were no respondents who reported their ethnic identity as “Asian or Asian American,” “Black, African American, Non-Hispanic,” “Middle Eastern or Middle-Eastern American,” “North African or North African-American,” “Pacific Islander,” or “American Indian or Alaskan Native.” The percentage of respondents identifying with each category of ethnic identity is provided in Table 3.

Table 3

Distribution of Ethnic Identity for Respondents (N = 58)

Ethnic Identity	Response Percent	Response Total
White, European American, Non-Hispanic	94.8%	55
Asian or Asian American	0%	0
Black, African American, Non-Hispanic	0%	0
Middle Eastern or Middle-Eastern American	0%	0
North African or North African-American	0%	0
Pacific Islander	0%	0
Hispanic or Latino American	5.2%	3
American Indian or Alaskan Native	0%	0
Decline to respond	0%	0

Participant salaries ranged from less than \$25,000 to \$49,000 with no one reporting \$50,000 or more. These salaries were grouped into five intervals based upon the range of salary for ease of reporting. Figure 5 shows the breakdown of participants into the salary groups. The plurality of respondents’ salary was \$30,000 to \$39,000.

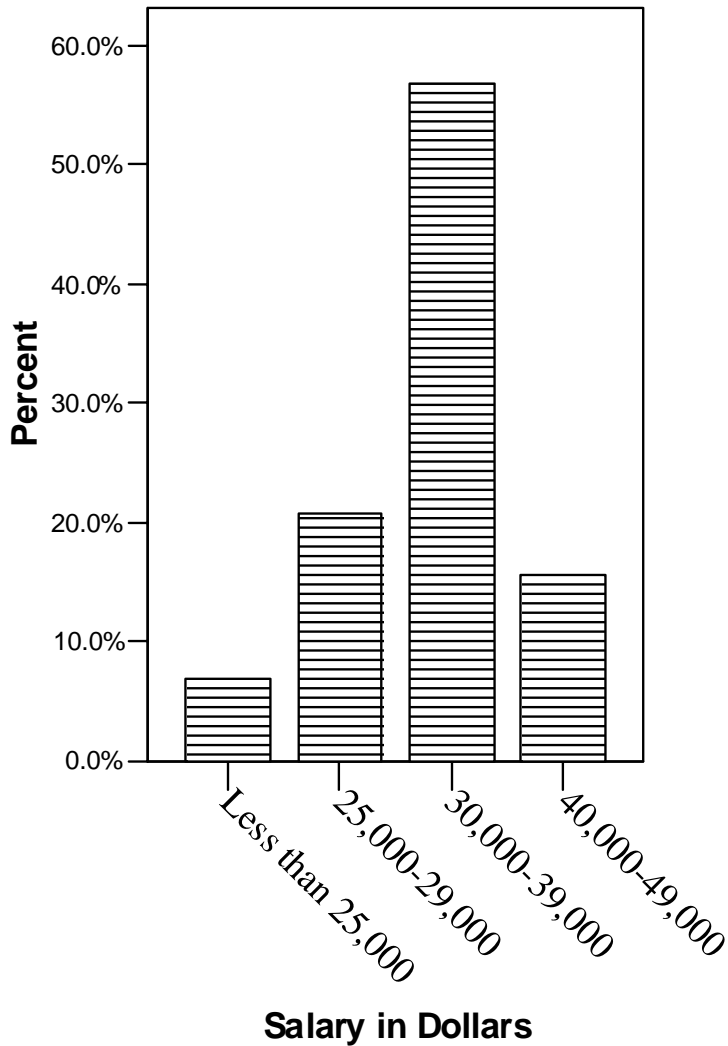


Figure 5. The distribution of salaries ranged from less than \$25,000 to \$49,000.

The majority of respondents (96.6%) reported that they were reemployed. Two respondents (3.4%) declined to respond. There were no respondents who reported that they were not employed. The percentage of respondents indicating reemployment is provided in Figure 6 and the keyword frequency analysis for the career field open-ended comments is provided in Table 4.

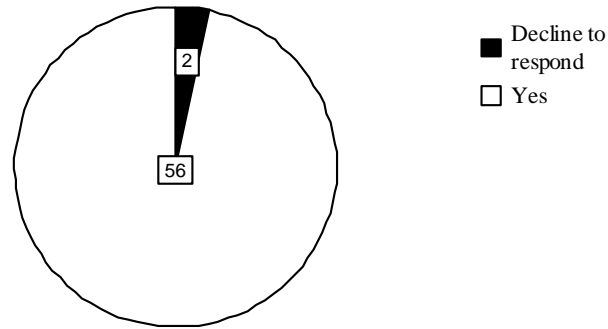


Figure 6. The majority of respondents are employed.

Table 4

Keyword Frequency Analysis for Open-Ended Comments on Career Field

Keyword	Response Percent	Response Total
Secondary Education	54	30
Administration	10	
Science Teacher	10	
Elementary Teacher	3	
Counselor	2	
Special Education Teacher	2	
Librarian	1	
Communications Teacher	1	
Social Studies Teacher	1	
Ag Industry	9	5
Ag Finance	5	3
Ag Sales	5	3
General Sales	5	3
Texas Cooperative Extension	5	3
Higher Education Instructor	4	2
Continued Education Full Time	4	2
Farm Insurance	4	2
Ag Business Owner	4	2
Manufacturing Engineer	2	1
Total	100	56

Respondents were asked to identify the institution where they completed their agriscience teacher training. Two respondents (3.4%) reported that they had completed their teacher training at Stephen F. Austin, four (6.9%) Sam Houston State University, 15 (25.9%) Texas A&M University, 13 (22.4%) Texas A&M University-Commerce, eight (13.8%) Texas A&M University-Kingsville, six (10.3%) Tarleton State University, six (10.3%) Texas Tech University, zero (0.0%) West Texas A&M University, and four (6.9%) other institutions. A summary of the reported teacher training institutions is provided in Figure 7 and other specified training institutions are listed in Table 5.

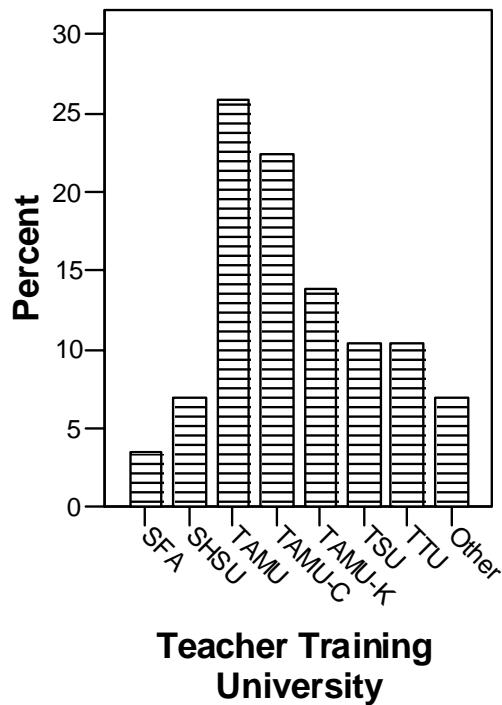


Figure 7. Texas A&M University was the teacher training institution for a plurality of respondents.

Table 5

Frequency Analysis for Other Specified Teacher Training Institutions

Teacher Training	Response Percent	Response Total
Sul Ross State University	25	1
District	25	1
Emergency Certified	25	1
Post-bac	25	1
Total	100	4

General Career Characteristics

Questions about the career characteristics of the last school and agricultural program in which the beginning teacher taught included the number of instructors teaching in the agriscience department, the FFA Area Association designation, the number of years employed as an agriscience teacher, and the number of hours per week, on average, worked as an agriscience teacher.

Respondents were asked how many instructors taught in the last agriscience department in which they taught. 20 respondents (34.5%) reported they taught in a school with only one agriscience teacher, 26 (44.8%) two teachers, 10 (17.2%) three teachers, 2 (3.4%) four teachers, and no (0.0%) respondents responded five or more teachers. Figure 8 provides a summary for the responses to the question about the number of agriscience instructors in the school of the last agriscience department in which the beginning teachers taught.

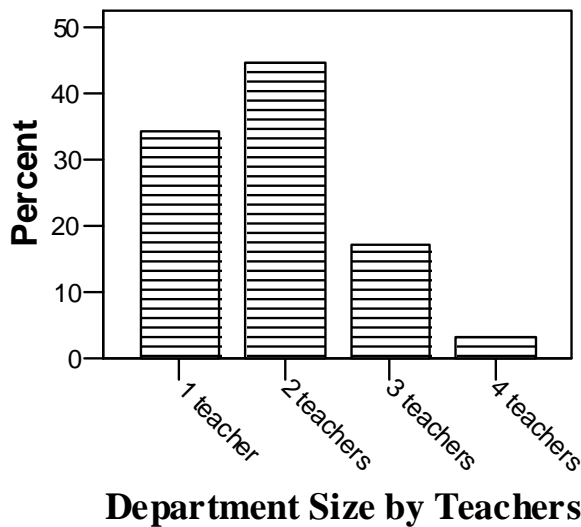


Figure 8. The plurality of respondents worked in a two-teacher agriscience department.

Respondents were asked to select the FFA Area Association that their last agriscience program belonged to. Three respondents (5.2%) reported that their last agriscience program belonged to Area I, four (6.9%) Area II, eight (13.8%) Area III, two (3.4%) Area IV, 13 (22.4%) Area V, six (10.3%) Area VI, three (5.2%) Area VII, three (5.2%) Area VIII, five (8.6%) Area IX, four (6.9%) Area X; seven (12.1%) declined to respond. The distribution of FFA Area Associations in which respondents reportedly taught is summarized in Figure 9.

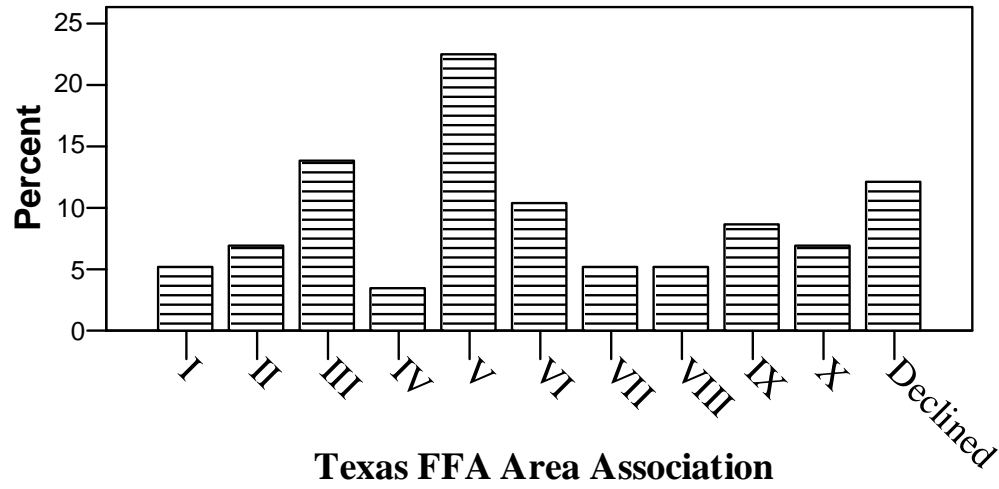


Figure 9. The plurality of agriscience teachers taught in the Area V Association.

Respondents were asked to report the number of years in which they taught agriscience. Responses ranged from 1 to 5 years. A summary of the reported years of agriscience teaching is provided in Figure 10.

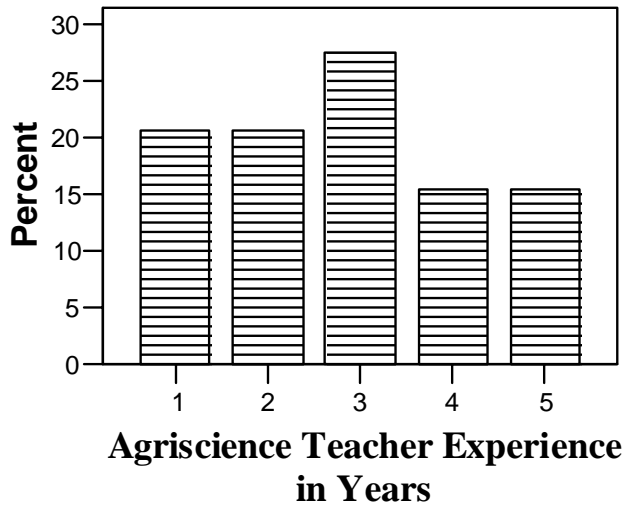


Figure 10. The plurality of former teachers taught agriscience for three years.

Respondents were asked to report the number of hours per week, on average, they worked as an agriscience teacher. A summary of the reported number of hours worked as an agriscience teacher is provided in Figure 11.

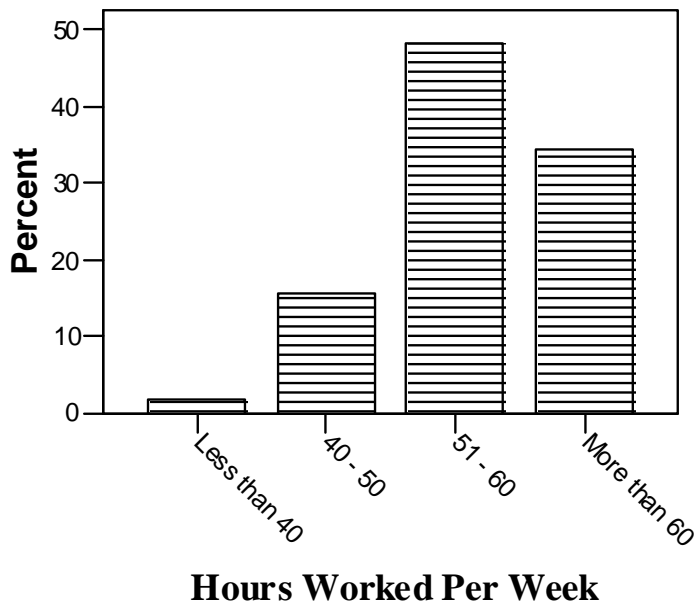


Figure 11. Beginning teachers worked, on average, a minimum of 51 hours per week.

Effects of Demographic and Career Characteristics

Multivariate analysis of variance (MANOVA) was conducted to analyze respondent differences in work satisfaction (WS), work-life balance (WLB), and work-life on attrition (WLA) based on demographic and career characteristics. The data in Table 6 and Table 7 show there is no significant difference between the means of the demographic and career characteristics on WS, WLB, or WLA: salary ($F(3,18)=1.94, p>.05$), gender ($F(1,18)=.14, p>.05$), age ($F(2,18)=.57, p>.05$), ethnicity ($F(1,18)=.39, p>.05$), employment ($F(1,18)=1.02, p>.05$), training institution

($F(7,18)=1.26, p>.05$), years employed ($F(4,5)=.54, p>.05$), department size ($F(3,5)=.14, p>.05$), area association ($F(10,5)=1.06, p>.05$), and hours worked ($F(3,5)=.62, p>.05$) on work satisfaction; salary ($F(3,18)=1.03, p>.05$), gender ($F(1,18)=.01, p>.05$), age ($F(2,18)=.61, p>.05$), ethnicity ($F(1,18)=1.98, p>.05$), employment ($F(1,18)=.07, p>.05$), training institution ($F(7,18)=.56, p>.05$), years employed ($F(4,5)=.98, p>.05$), department size ($F(3,5)=1.08, p>.05$), area association ($F(10,5)=1.55, p>.05$), and hours worked ($F(3,5)=1.78, p>.05$) on work-life balance; salary ($F(3,18)=1.38, p>.05$), gender ($F(1,18)=.88, p>.05$), age ($F(2,18)=1.71, p>.05$), ethnicity ($F(1,18)=.40, p>.05$), employment ($F(1,18)=3.89, p>.05$), training institution ($F(7,18)=.53, p>.05$), years employed ($F(4,5)=1.85, p>.05$), department size ($F(3,5)=3.06, p>.05$), area association ($F(10,5)=3.10, p>.05$), and hours worked ($F(3,5)=.69, p>.05$) for work-life on attrition.

Table 6

Multivariate Analysis of Variance for Demographic Characteristics on Work Satisfaction, Work-Life Balance, and Work-Life on Attrition

		n	M	SD		
	Salary	58	2.81	.78		
	Gender	58	1.45	.50		
	Age	58	1.62	.62		
	Ethnicity	58	1.31	1.34		
	Employment	58	2.97	.18		
	Institution	58	4.50	1.97		
		SS	df	MS	F	p
WS	Salary	26.12	3	8.71	1.94	.16
	Gender	.65	1	.65	.14	.71
	Age	5.12	2	2.55	.57	.58
	Ethnicity	1.85	1	1.85	.39	.54
	Employment	4.57	1	4.57	1.02	.33
	Institution	39.58	7	5.66	1.23	.32
	Error	80.87	18	4.49		
WLB	Salary	29.00	3	9.67	1.03	.40
	Gender	.09	1	.09	.01	.92
	Age	11.40	2	5.70	.61	.56
	Ethnicity	20.41	1	20.41	1.98	.17
	Employment	.64	1	.64	.07	.80
	Institution	36.62	7	5.23	.56	.78
	Error	168.70	18	9.37		
WLA	Salary	229.40	3	76.47	1.38	.28
	Gender	49.05	1	49.05	.88	.36
	Age	190.30	2	95.15	1.71	.21
	Ethnicity	25.40	1	25.40	.40	.53
	Employment	216.07	1	216.07	3.89	.06
	Institution	207.49	7	29.64	.53	.80
	Error	1001.20	18	55.62		

Table 7

Multivariate Analysis of Variance for Career Characteristics on Work Satisfaction, Work-Life Balance, and Work-Life on Attrition

	n		M		SD
Years Employed	58		2.84		1.35
Dept Size	58		1.90		.81
Area Association	58		6.05		3.05
Hours Worked	58		3.16		.74
	SS	df	MS	F	p
WS					
Years Employed	9.75	4	2.44	.54	.71
Dept Size	1.86	3	.62	.14	.94
Area Association	48.06	10	4.81	1.06	.47
Hours Worked	9.00	3	3.00	.62	.61
Error	40.92	5	4.55		
WLB					
Years Employed	35.57	4	8.89	.98	.43
Dept Size	29.19	3	9.73	1.08	.37
Area Association	147.96	10	14.80	1.55	.15
Hours Worked	53.77	3	17.92	1.78	.16
Error	370.82	5	9.04		
WLA					
Years Employed	149.33	4	37.33	1.85	.20
Dept Size	185.58	3	61.86	3.06	.08
Area Association	626.26	10	62.63	3.10	.05
Hours Worked	131.10	3	43.70	.69	.56
Error	181.75	5	20.19		

Work Satisfaction and Agriscience Teacher Attrition

RESEARCH QUESTION TWO was designed to determine relationships between work satisfaction and agriscience teacher attrition. Part I of the questionnaire provided statements about work satisfaction. Respondents were asked to determine whether they were satisfied with their job as an agriscience teacher, job environment, and school

administration by choosing “Satisfied,” “Somewhat Satisfied,” “Somewhat Dissatisfied,” or “Dissatisfied.”

Work Satisfaction Response Summary

The majority of respondents (97%) reported being satisfied or somewhat satisfied with their job as an agriscience teacher and as satisfied or somewhat satisfied with their job environment (80%). Satisfaction with school administration resulted in 64% satisfied or somewhat satisfied. Table 8 provides a summary of the response frequencies for the statements related to work satisfaction.

Table 8

Work Satisfaction As An Agriscience Teacher (N = 58)

	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Response Average
Were you satisfied with your job as an agriscience teacher?	2% (1)	2% (1)	40% (23)	57% (33)	3.52
Were you satisfied with your job environment as an agriscience teacher?	5% (3)	16% (9)	33% (19)	47% (27)	3.21
Were you satisfied with your former school's administration?	17% (10)	19% (11)	26% (15)	38% (22)	2.84

Work Satisfaction and Attrition Relationship

The Likert-type scale was used to measure the perception of work satisfaction. Being ordinal data, a nonparametric correlation test was necessary for detecting relationships. Spearman's rho correlation coefficient was used to calculate and describe

the relationship between work satisfaction and job related attrition. The data in Table 9 show coefficients to have a substantial inverse (Davis, 1971) statistical significance ($r_s = -.69, p < .001$) between work satisfaction and job related attrition. It was also determined that job related attrition ($r_s^2 = .48$) accounts for 48% of the variability in work satisfaction.

Table 9

Intercorrelations Among Composite Variables (N = 58)

Composite Variable	Work Satisfaction	Work-Life Balance Achievement	Job Related Attrition
Work Satisfaction	1.00	.17	-.69**
Work-Life Balance Achievement		1.00	-.34**
Job Related Attrition			1.00

** $p < .01$.

Work-Life Balance and Agriscience Teacher Attrition

RESEARCH QUESTION THREE was designed to determine relationships between work-life balance and agriscience teacher attrition. Part III of the questionnaire provided statements about work-life balance. Scaled items were divided into two subsections: (A) work-life balance achievement and (B) work-life balance beliefs.

(A) Work-Life Balance Achievement

The first three of five statements were scaled to determine the perceived achievement of professional work and personal life balance by choosing “Strongly Agree,” “Agree,” “Neutral,” “Disagree”, or “Strongly Disagree.” More than half (54%) of the beginning teachers responding to this survey reported they were unable to balance work demands without making unreasonable compromises on family-personal responsibilities; 24% reported they were able to balance without making unreasonable compromises. Half (50%) reported they were unable to balance quality time between work and family-personal commitments; 28% reported they were able to balance commitments. Almost half (45%) reported they were unable to have a fulfilling personal life and adequately perform work responsibilities; 29% reported they were able to manage both.

(B) Work-Life Balance Beliefs

The last two statements were scaled to determine work-life balance beliefs by choosing “Strongly Agree,” “Agree,” “Neutral,” “Disagree,” or “Strongly Disagree.” The majority of respondents agreed or strongly agreed that a good work-life balance for agriscience teachers would help retain teachers in the profession (91%) and help provide a more effective and successful agricultural education organization (87%). Table 10 provides a summary of the response frequencies for the statements related to both work-life balance achievement (Section A) and beliefs (Section B).

Table 10

Work-Life Balance Among Agriscience Teachers (N = 58)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Response Average
SECTION A						
1. You were able to balance quality time between your work and your family/personal commitments.	22% (13)	28% (16)	22% (13)	26% (15)	2% (1)	2.57
2. You were able to balance work demands without making unreasonable compromises on family/personal responsibilities.	21% (12)	33% (19)	22% (13)	22% (13)	2% (1)	2.52
3. You were able to have a fulfilling personal life and adequately perform your work responsibilities.	17% (10)	28% (16)	26% (15)	26% (15)	3% (2)	2.71
SECTION B						
4. A good work-life balance for agriscience teachers would help provide a more effective and successful agricultural education organization.	0% (0)	0% (0)	14% (8)	40% (23)	47% (27)	4.33
5. A good work-life balance for agriscience teachers would help retain teachers in the profession.	2% (1)	0% (0)	7% (4)	34% (20)	57% (33)	4.45

Work-Life Balance and Attrition Relationship

The Likert-type scale was used to measure the perception of achievement for work-life balance. Being ordinal data, a nonparametric correlation test was necessary. Spearman's rho correlation coefficient was used to calculate and describe the relationship between work-life balance achievement and job related attrition. The data in Table 9 provide evidence that a moderate (Davis, 1971) inverse statistical significance ($r_s = -.34$, $p < .01$) exists between work-life balance achievement and job related attrition. It was determined that job related attrition ($r_s^2 = .12$) accounts for 12% of the variability in work-life balance achievement.

Work-Life Balance and Work Environment

Part III of the questionnaire included working conditions found in the work environment of an agriscience teacher. Respondents were asked to check "yes," "no," or "not available to me" for conditions that helped balance work and personal-family commitments: 66% of the respondents reported time off for family emergencies and events helped them balance work and personal life; 69% reported compensation days were not available to them. Frequencies for the data are shown in Table 11.

Table 11

Work Conditions that Help Work and Personal-Family Commitments Balance (N=58)

	Yes	No	Not available to me
Flexible start times	12% (7)	9% (5)	79% (46)
Flexible finish times	24% (14)	14% (8)	62% (36)
Flexible hours generally	19% (11)	21% (12)	60% (35)
Compensation (Comp) days	14% (8)	17% (10)	69% (40)
Time off for family emergencies & events	66% (38)	16% (9)	19% (11)
Part-time or reduced work hours	0% (0)	17% (10)	83% (48)
Time off during school holidays	60% (35)	22% (13)	17% (10)

Likewise, working conditions that hindered the balancing of work and personal-family commitments were included in Part III. The respondent was asked to check “yes,” “no,” or “not applicable to me” for conditions that hindered balancing work and personal-family commitments. Weekend work was the most frequent deterrent (81%), followed by long work hours (78%) and timing of work meetings/trainings (60%). Frequency tabulations for the data are shown in Table 12.

Table 12

Work Conditions that Hinder Work and Personal-Family Commitments Balance (N=58)

	Yes	No	Not applicable to me
Long work hours	78% (45)	19% (11)	3% (2)
Compulsory overtime	53% (31)	24% (14)	22% (13)
Weekend work	81% (47)	14% (8)	5% (3)
Timing of work meetings/training	60% (35)	33% (19)	7% (4)

Recommendations for Improving Work-Life Balance

RESEARCH QUESTION FOUR was designed to compile perceived recommendations by former beginning teachers for improving work-life balance in the agriscience teacher career field. The conclusion of Part III in the questionnaire included statements for improving the balance of professional work and personal life of the agriscience teacher. Respondents could choose more than one recommendation as respondents were asked to check all that applied. As well, immediately following the last recommendation was an open-ended response option where respondents were given the opportunity to list other recommendations. Over half of the respondents checked the recommendation to set a maximum number of students per class period (63%) and decrease the number of class preparations/course sections taught by beginning teachers (60%). Reported closely behind these two recommendations was sharing the load of shows and contests equally among teachers (56%) and increase the number of teachers in the agriscience department (53%). The results of the recommendations to improve the balance of professional work and personal life in the agriscience teacher career field are provided in Table 13. The keyword frequency analysis for the open-ended comments is listed in Table 14.

Table 13

*Recommendations to Improve the Balance of Professional Work and Personal Life
(N=57)*

Recommendation	Response Percent	Response Total
Set a maximum number of students per class period	63.2%	36
Decrease the number of class preparations/course sections	59.6%	34
Share the load of shows and contests equally among teachers	56.1%	32
Increase the number of teachers in the agriscience department	52.6%	30
Focus on a successful program in your community instead of the number of shows and contests attended/won	38.6%	22
Provide resources to teachers that enable them to cope with change, challenges, and family issues	38.6%	22
Make available on-site daycare facilities	24.6%	14
*Other (please specify)	24.6%	14

Note. Other recommendations specified by respondents are listed in Table 14.

Table 14

Keyword Frequency Analysis on Open-Ended Comments for Recommendations to Improve the Balance of Professional Work and Personal Life (N=14)

Recommendation	Response Percent	Response Total
Teachers Need To Be Well-Rounded for Entire Program	14%	2
Maintain Positive Attitude	14%	2
Assistance with Lesson Planning	14%	2
Compensation Days	14%	2
Balance Priorities Before Teaching Begins	7%	1
No Dumping Students Who Do Not Want Agriscience Class	7%	1
Learn to Deal with High Teacher Expectations	7%	1
Rejuvenation	7%	1
Share Responsibilities/Load Between Teachers	7%	1
On-site Daycare Facilities	7%	1
Total	100%	14

Agriscience Teacher Attrition

RESEARCH QUESTION FIVE was designed to determine the chief reasons beginning agriscience teachers leave the agriscience teaching profession. Part II of the questionnaire provided statements about the effect of work-life on attrition. Scaled items were divided into two sections: (A) job related attrition and (B) personally related attrition.

(A) Job Related Attrition

Nine items were scaled to determine the importance of job related reasons to the beginning teacher's decision to leave agriscience teaching. Respondents were asked to choose "Not Important," "Somewhat Important," "Important," "Very Important," or "Extremely Important" for each of the nine job related reasons. The need for flexibility in the work schedule (56%) and work-related stress (54%) was most frequently reported as important, very important, or extremely important. Other reasons frequently reported included lack of resources to perform duties (39%), conflict with coworker or supervisor (32%), poor environmental conditions (28%), lack of recognition (27%), and original responsibilities changed (27%). Not important to teacher attrition was inadequate opportunities for training (69%) and inadequate training (67%); 12% found each, inadequate training opportunities and inadequate training, to be somewhat important. Table 15 depicts the respondents' perceptions regarding the importance of job related reasons to their decision to leave agriscience teaching.

Table 15

Job Related Reasons for Leaving Agriscience Teaching (N = 58)

	Not Important	Somewhat Important	Important	Very Important	Extremely Important	Response Average
Conflict with coworker or supervisor (s)	59% (34)	9% (5)	10% (6)	10% (6)	12% (7)	2.09
Inadequate training	67% (39)	12% (7)	14% (8)	3% (2)	3% (2)	1.64
Inadequate opportunities for training	69% (40)	12% (7)	14% (8)	5% (3)	0% (0)	1.55
Lack of resources to perform duties	40% (23)	21% (12)	22% (13)	10% (6)	7% (4)	2.24
Lack of recognition	62% (36)	10% (6)	17% (10)	5% (3)	5% (3)	1.81
Original responsibilities changed	59% (34)	14% (8)	17% (10)	5% (3)	5% (3)	1.84
Poor environmental conditions	55% (32)	17% (10)	21% (12)	7% (4)	0% (0)	1.79
Work-related stress	33% (19)	14% (8)	14% (8)	16% (9)	24% (14)	2.84
Need for flexibility in work schedule	26% (15)	19% (11)	28% (16)	16% (9)	12% (7)	2.69

(B) Personally Related Attrition

Five items were scaled to determine the importance of personally related reasons to the beginning teacher's decision to leave agriscience teaching. Respondents were asked to choose "Not Important," "Somewhat Important," "Important," "Very Important," or "Extremely Important" for each of the five personally related reasons. Personal circumstances were most frequently reported as important, very important, or extremely important (59%) to the decision to leave the profession. Other reasons most frequently

reported were improved benefits (49%), relocation (35%), and to further education (28%). Health reasons related to attrition was perceived as not important by 84% of respondents; 10% reported health reasons to be somewhat important. Table 16 depicts the respondents' perceptions regarding the importance of personally related reasons to their decision to leave agriscience teaching. Table 16 provides a summary of the personally related attrition data.

Table 16

Personal Reasons for Leaving Agriscience Teaching (N = 58)

	Not Important	Somewhat Important	Important	Very Important	Extremely Important	Response Average
Improved benefits	40% (23)	12% (7)	17% (10)	16% (9)	16% (9)	2.55
Further education	59% (34)	14% (8)	9% (5)	5% (3)	14% (8)	2.02
Health reasons	84% (49)	10% (6)	0% (0)	2% (1)	3% (2)	1.29
Personal circumstances	33% (19)	9% (5)	19% (11)	16% (9)	24% (14)	2.90
Relocation	57% (33)	9% (5)	7% (4)	12% (7)	16% (9)	2.21

Agriscience Teacher Attrition and Work Environment

Part II of the questionnaire included statements concerning the work environment of an agriscience teacher. Respondents were asked to choose "Too Much," "Just Right," "Too Little," or "No Effect on Decision To Leave" in order to complete the work environment statements. The completion statement "too much" was reported by a plurality of the respondents for the number of hours required on the job (69%), the pressure of balancing classroom and laboratory instruction, SAE supervision, and FFA activities (55%), and the amount of work-related travel required (43%). The completion statement "just right" was not reported as a plurality for any of the statements. The

completion statement “too little” was reported by a plurality for teacher salary (52%); 36% reported salary had no effect on their decision to leave agriscience teaching. The completion statement “no effect on decision to leave” was reported by a plurality for equitable treatment toward men and women in the workplace (62%) and job time required to spend on paperwork (59%). Frequencies for the work environment related to the decision to leave agriscience teaching is found in Table 17.

Table 17

Work-Life Variables Influencing Attrition Among Beginning Agriscience Teachers (N=58)

	Too Much	Just Right	Too Little	No Effect On Decision
The amount of job time required to spend on paperwork was	33% (19)	9% (5)	0% (0)	59% (34)
The amount of energy required on the job was	40% (23)	14% (8)	0% (0)	47% (27)
The salary you were paid was	0% (0)	12% (7)	52% (30)	36% (21)
The number of hours required on the job was	69% (40)	9% (5)	0% (0)	22% (13)
The amount of equitable treatment toward men and women in the workplace was	3% (2)	17% (10)	17% (10)	62% (36)
The amount of work-related travel you were required to do was	43% (25)	21% (12)	2% (1)	34% (20)
The amount of guidance or direction you received on the job was	5% (3)	26% (15)	24% (14)	45% (26)
The amount of control you had over your work was	0% (0)	34% (20)	26% (15)	40% (23)
The competitive nature of FFA competitions was	12% (7)	38% (22)	2% (1)	48% (28)
The amount of pressure to provide assistance outside the scope of your job was	40% (23)	17% (10)	2% (1)	41% (24)
The pressure of balancing classroom and laboratory instruction, SAE supervision, and FFA activities was	55% (32)	10% (6)	2% (1)	33% (19)

Chief Reasons for Leaving Agriscience Teaching

A compilation of chief reasons given by former beginning teachers for leaving the agriscience teaching profession was constructed. Part II of the questionnaire included reasons for the decision to leave agriscience teaching. Respondents could choose more than one reason as respondents were asked to check all that applied. As well, immediately following the last reason statement was an open-ended response option where respondents were given the opportunity to list other reasons. Nearly half of respondents (48%) checked that they wanted balance between professional work and personal life as the chief reason for leaving the agriscience teaching profession. Reported closely behind this reason were students being placed in agriscience but did not choose it as an elective (47%) and too much time taken away from family (41%). A summary of the chief reasons given for the decision to leave agriscience teaching is provided in Table 18. The keyword frequency analysis for the open-ended comments is listed in Table 19.

Table 18

Chief Reasons for Leaving Agriscience Teaching (N = 58)

Reason	Response Percent	Response Total
Wanted balance between professional work and personal life	48.3%	28
Students placed in agriscience that did not choose it as elective	46.6%	27
Too much time taken away from family	41.4%	24
Undesirable salary	37.9%	22
Too much time involved outside regular school day	29.3%	17
Too much stress	25.9%	15
Student discipline issues	20.7%	12
Teacher burnout	19%	11
To enter school administration	10.3%	6
To become a school counselor	1.7%	1
*Other (please specify)	62.1%	36

Table 19

Keyword Frequency Analysis on Open-Ended Comments for Reasons to Leave Agriscience Teaching (N=36)

Keyword	Response Percent	Response Total
Family Priority	19	7
Conflict w/ other Agriscience Teachers	14	5
Salary	14	5
Workload	11	4
Certification Test Failure	11	4
Lack of Administrator Support for Program	8	3
Parental Conflicts	6	2
Promotion	6	2
Part-time Work	3	1
Stress	3	1
Further Education	3	1
Horrible Experience	3	1
Total	100	36

Recommendations for Improving the

Preparation and Retention of Agriscience Teachers

RESEARCH QUESTION SIX was designed to compile perceived recommendations by former beginning teachers for improving the preparation and retention of agriscience teachers. Recommendation statements were found at the conclusion of Part II in the questionnaire. Respondents could choose more than one recommendation as respondents were asked to check all that applied. As well, immediately following the last recommendation was an open-ended response option where respondents were given the opportunity to list other recommendations. Over half of the respondents (65%) selected

salary increase. Other recommendations in order of frequency included providing mentor teachers (47%), more follow-ups by university teacher trainers (30%), providing more training in classroom management (28%), technical skills (26%), and special education (23%). Table 20 depicts data perceived as recommendations that would improve the preparation and retention of agriscience teachers. Table 21 depicts the keyword frequency analysis for the open-ended comments.

Table 20

Recommendations to Improve the Preparation and Retention of Agriscience Teachers (N=57)

Recommendation	Response Percent	Response Total
Salary increase	64.9%	37
Provide teacher mentors for first year teachers	47.4%	27
More follow-up needed from university teacher trainers	29.8%	17
Provide more training in classroom management	28.1%	16
More training in technical skills	26.3%	15
Provide more training in Special Education	22.8%	13
Provide an induction program for first year teachers	17.5%	10
*Other (please specify)	40.4%	23

Note. Other recommendations specified by respondents are listed in Table 21.

Table 21

Frequency Analysis on Open-Ended Comments for Recommendations to Improve the Preparation and Retention of Beginning Agriscience Teachers (N=23)

Recommendation	Response Percent	Response Total
More Training in Management of Whole Program	22	5
More Training in Public Relations	9	2
Training in Showing/Grooming of Animals for Stock Shows	9	2
More Preparation for Certification Test	9	2
Mentor Teacher Needs to be Agricultural Related	9	2
More Training in Time Management w/ Forced Family Time	4	1
More Training in Parental Conflicts	4	1
Limit Number of Contests Attended by Teachers	4	1
More Preparation in All subjects AgSci teachers Teach	4	1
Present more Realistic Picture of Job	4	1
Direct Communication w/ TEA to report Unethical Behaviors	4	1
More Follow-Ups	4	1
Do What It Takes	4	1
Offer Dual Credit Classes	4	1
More Experiences in the Classroom Before Certification	4	1
Total	100	23

Summary of Results

This chapter reported the results of statistical analysis on the data collected for the research project. The following statements summarize the major findings:

1. Secondary agriscience teachers from across Texas who taught no more than five years and left the profession during the 2001–2002 to 2005–2006 academic terms who responded to the questionnaire were between 30 and 39 years of age (48%), currently employed (97%), earned a salary as an agriscience teacher between \$30,000 and \$39,000 (57%), and completed their teacher training at Texas A&M University (26%). Half of the respondents

were male (55%) and 6% of respondents reported an ethnic identity other than White, European American, Non-Hispanic.

2. The average program in which respondents taught had an agriscience department consisting of two teachers (45%) and belonged to the Area V FFA Association (22%), was employed three years as an agriscience teacher (28%), and worked 51 to 60 hours, on average, per week (48%).
3. Former beginning agriscience teacher demographic and career characteristics were found to have had no statistically significant effects on work satisfaction, work-life balance, or agriscience teacher attrition.
4. In response to work satisfaction questions, most (97%) reported being satisfied or somewhat satisfied with their job as an agriscience teacher and satisfied or somewhat satisfied with their job environment (80%). Nearly two-thirds (64%) responded they were satisfied or somewhat satisfied with school administration.
5. Results of Spearman's rho correlation coefficient analysis provided evidence of a substantial inverse (Davis, 1971) relationship ($r_s = -.69, p < .001$) between work satisfaction and job related attrition.
6. The majority of respondents agreed or strongly agreed that a good work-life balance for agriscience teachers would help retain teachers in the profession (91%) and help provide a more effective and successful agricultural education organization (87%). Half (54%) reported that they were unable to balance work demands without making unreasonable compromises on family-personal responsibilities; 50% reported they were unable to balance quality time between work and family-personal commitments; 45% reported they were

unable to have a fulfilling personal life and adequately perform work responsibilities.

7. Evidence of a moderate (Davis, 1971) inverse relationship ($r_s = -.34, p < .01$) exists between work-life balance achievement and job related attrition.
8. Part-time or reduced work hours, compensation days, and generally flexible hours were reported to be not available for most of the respondents (83%), (69%), and (60%).
9. Weekend work, long work hours, and timing of work meetings/training hinder work-life balance as reported by the respondents (81%), (78%), and (60%).
10. To improve work-life balance in the agriscience teacher career field, over half of the respondents recommended a set maximum number of students per class period (63%) and decrease the number of class preparations/course sections taught by beginning teachers (60%). Reported closely behind these two recommendations is sharing the load of shows and contests equally among teachers (56%) and increase the number of teachers in the agriscience department (53%).
11. The need for flexibility in the work schedule (75%), work-related stress (68%), and lack of resources to perform duties (60%) was most frequently reported as having importance in job related attrition.
12. Personal circumstances (68%) and improved benefits (61%) were most frequently reported as having importance in personally related attrition.
13. The number of hours required on the job, the pressure of balancing classroom and laboratory instruction, SAE supervision, and FFA activities, and the amount of work-related travel required was believed to be too much for

beginning agriscience teachers as reported (69%), (55%), and (43%) respectively.

14. The chief reason for the decision to leave the agriscience teaching profession as reported by nearly half of all respondents was the wanting of balance between professional work and personal life (48%). Reported closely behind this reason was that students were being placed in agriscience but not having chosen it as an elective (47%) and too much time taken away from family (41%).
15. An undesirable salary was not the most frequently given reason for leaving the profession; however, to improve the preparation and retention of agriscience teachers, nearly two-thirds of the respondents (65%) recommended a salary increase. The recommendation following relatively closely behind salary and given by 47% was to provide mentor teachers, and; 30% recommended more follow-ups from university teacher trainers.

CHAPTER 5
FINDINGS, CONCLUSIONS, IMPLICATIONS,
AND RECOMMENDATIONS

Chapter 4 described the statistical treatment, analysis of data and the results of the study. The purpose of this chapter is to add meaning to the results of the study and to expand the existing knowledge base and understanding of the beginning agriscience teacher attrition problem. Chapter 5 provides a summary of the procedures and findings and provides the conclusions, implications, and recommendations for future research.

The purpose of this ex post factor quantitative study was to expand upon research examining reasons for the attrition of secondary agriscience teachers and to explore work-life variables that influence teachers' decisions to leave the profession. The population for this study consisted of beginning agriscience teachers from Texas who left the profession between the academic years beginning with the 2001–2002 term and ending with the 2005–2006 term. The following questions guided the study:

1. What are the demographic and career characteristics of former beginning agriscience teachers?
 - b. H_{01} : There is no significant difference between the means of the demographic and career characteristics on work satisfaction, work-life balance, or agriscience teacher attrition.
2. How does work satisfaction relate to beginning agriscience teacher attrition?

- b. H₀₂: There is no relationship between work satisfaction and beginning agriscience teacher attrition.
- 3. How does work-life balance relate to beginning agriscience teacher attrition?
 - b. H₀₃: There is no relationship between work-life balance and beginning agriscience teacher attrition.
- 4. What are the recommendations from former beginning agriscience teachers for improving work-life balance in the agriscience teacher career field?
- 5. What are the chief reasons beginning agriscience teachers leave the agriscience teaching profession?
- 6. What are the recommendations from former beginning agriscience teachers for improving the preparation and retention of agriscience teachers?

The target population for this study was defined as former beginning agriscience teachers previously employed by Texas public secondary schools. The years of employment were five separate academic year terms, beginning with the 2001–2002 academic term and ending with the 2005–2006 academic term. For this study, a beginning teacher was defined as a teacher with five or fewer years of teaching experience. No sampling methods were attempted due to the small number of feasible addresses. All former beginning agriscience teachers with available addresses were contacted to participate in the survey.

The instrument constructed specifically for this study was developed based upon related literature and previous studies. A panel of experts (N=7) examined the instrument

for content and face validity. And, the instrument was pilot tested with a group (N=15) of former secondary teachers.

The questionnaire was provided to participants electronically through the Internet. E-mail notices and letters were sent to the population, which included the URL to the Website on which the survey was located. Accessible responses were received from 58 teachers for an overall response rate of 68.24%. When analyzing all scaled items in the instrument for internal consistency, the overall alpha score was .69. A diligent attempt was made to obtain responses from teachers from the population who had not responded to the questionnaire. One additional response was received. This response was combined with those of respondents considered late responders. The responses to the scaled items of this combined group were compared with the responses to the scaled items of those considered early respondents using independent *t* tests. No evidence of a difference was found between the two groups at the .05 alpha level.

Findings

Research question one sought to describe selected demographic and career characteristics for the former beginning agriscience teachers in Texas during the 2001–2002 to 2005–2006 academic years. Demographic and career information was reported on the individual characteristics of the respondent and characteristics of the school and program in which the teacher taught as a beginning teacher. Demographic information for the individual respondents indicated that the mean age of the population was between 30 and 39 years. Ninety-seven percent were employed, 57% reported they earned a salary as an agriscience teacher between \$30,000 and \$39,000, and 26%

completed their teacher training at TAMU. Fifty-five percent were male, and 95% reported that their ethnic identity was best described as “White, European American, Non-Hispanic.”

The summarized career information showed that 45% of the schools in which respondents taught had an agriscience department consisting of two teachers; 35% taught in schools with one teacher, and 21% taught in schools with three or more agriscience teachers. One-fifth (22%) of the agriscience programs belonged to the Area V FFA Association. The typical respondent was employed three years as an agriscience teacher and worked 51 to 60 hours, on average, per week (48%).

Research question one also explored main effects the characteristics of the respondents had on work satisfaction, work-life balance, and agriscience teacher attrition. The null hypothesis, “ H_0 : There is no significant difference between the means of the demographic and career characteristics on work satisfaction, work-life balance, or agriscience teacher attrition” was accepted. There was no evidence of a difference shown by multivariate analysis of variance (MANOVA) calculations. For this population of former teachers, work satisfaction, work-life balance, and teacher attrition does not differentiate among numerous demographic characteristics including age, gender, ethnicity, employment, salary, or teacher training institution. Likewise, similarities are found among career characteristics including years of experience, agriscience department size, hours on the job, and FFA area association.

Research question two explored the relationship between work satisfaction and beginning agriscience teacher attrition, and includes the null hypothesis, “ H_0 : There is

no relationship between work satisfaction and beginning agriscience teacher attrition.”

The null hypothesis was rejected as the results of Spearman’s rho correlation analysis suggested evidence of a substantial (Davis, 1971) inverse relationship between work satisfaction and beginning agriscience teacher attrition ($r_s = -.69, p < .001$). As work satisfaction increases agriscience teacher attrition decreases. Furthermore, job related attrition ($r_s^2 = .48$) accounts for nearly half (48%) of the variability in work satisfaction.

Research question three explored the relationship between work-life balance and agriscience teacher attrition, and includes the null hypothesis, “ H_0 : There is no relationship between work-life balance and agriscience teacher attrition.” The null hypothesis was rejected as the results of Spearman’s rho correlation analysis suggested evidence of a moderate (Davis, 1971) inverse relationship ($r_s = -.34, p < .01$) between work-life balance and agriscience teacher attrition. Although attrition ($r_s^2 = .12$) accounts for only 12% of the variability in work-life balance, it was found that as work-life balance increases agriscience teacher attrition decreases.

Research question four asked respondents to offer recommendations for improving work-life balance in the agriscience teacher career field. Two-thirds of the respondents recommended to set a maximum student enrollment number per class period (63%) and decrease the number of class preparations/course sections taught by beginning teachers (60%). Half of the respondents made the recommendation to share the load of shows and contests equally among teachers (56%) and increase the number of teachers in the agriscience department (53%).

Research question five sought the chief reasons for the decision to leave the agriscience teaching profession. Half of all respondents reported the wanting of balance between professional work and personal life (48%) as the chief reason for leaving the profession. Placement of students in agriscience classes who did not elect to take the courses (47%) followed along with too much time taken from family (41%) were also given as reasons for attrition.

Research question six asked respondents to offer recommendations for improving the preparation and retention of agriscience teachers. An undesirable salary was not the most frequently given reason for leaving the profession; however, to improve the preparation and retention of agriscience teachers, 65% recommended a salary increase. The recommendation following salary and given by half of respondents was to provide mentor teachers (47%), and 30% recommended more follow-ups from university teacher trainers.

Conclusions

The conclusions of this study were based on the responses from the former beginning agriscience teachers participating in the study. Generalization beyond the population for this study is not statistically appropriate. Based on the findings of this study, the following conclusions were determined:

Congruent with Herzberg's Motivator-Hygiene Theory, it was shown in this study that former beginning agriscience teachers were satisfied by the work itself and dissatisfied with the work environment. The work itself is a job motivator that includes achievements, advancement, recognition, and responsibilities. The work environment serves as a hygiene or demotivating factor that includes adequacy of pay, interpersonal relationships, policy, quality of supervision, and work-life balance. It was reiterated in the open-ended comments that the number of hours required on the job, the pressure of

balancing classroom and laboratory instruction, SAE supervision, and FFA activities, and the amount of work-related travel required was believed to be too much and unsatisfactory for beginning agriscience teachers.

The wanting of balance between professional work and personal life, the chief reason for the decision to leave agriscience teaching, is an unsatisfied need as reported by the respondents. According to them, too much time was taken away from family, and they were unable to balance quality time between their work and their personal commitments. In addition, respondents believe a good work-life balance would help provide a more effective and successful agricultural education organization and would help retain teachers in the profession.

Implications

Educational leaders recognize that 30% to 50% of beginning teachers leave the profession before their fifth year of teaching and to motivate people, the opportunity to satisfy their current level of need must be offered as unsatisfied needs motivate people (Herzberg, Mausner, & Snyderman, 1959). Yet, the agricultural education profession does not possess a consolidated list of first through fifth year teachers, and do not know who leaves the profession or their reasons for doing so. There is no accountability for the teachers who leave. While active records of who are employed each year exist, there are neither records of who leaves the profession nor a required exit interview. Still, a teacher shortage exists, and student populations are increasing.

Having an important effect on student success, relationship-building practices should be maintained. Relationships that are built between the university teacher trainer and the aspiring teacher cease to exist after graduation. Once a class graduates, the teacher trainers begin looking at the next group of entering freshmen. Maintaining relationships between higher education and beginning teachers would help to make the

transition from student to teacher seamless. Recognizing this, we can use the attrition trend as an opportunity for setting beginning teacher needs as a priority to evolve practices that would attend to the unsatisfied needs of the beginning teacher. By engaging post-secondary leadership in this dilemma, strategies can be identified that allow beginning teachers to have a more motivating and endurable induction period.

Even so, concerns about career and technology education programs are being questioned as to their relevancy in secondary education at the highest levels of government. The continued funding of career and technology education is a growing concern. The fiscal proposal made by President George W. Bush calling for a cutting of all Carl Perkins career and technology funding for fiscal year 2007 called attention to a potential devastation of agriscience programs. Strategies are being identified as to how agricultural education programs can be made relevant for the next generation of students. In addition, opportunities abound for real growth in agricultural education as it strives to become the leader of academic integration entrenched in high-stakes state and federal accountability measures for virtually all public school systems in America. But, if we cannot keep teachers in the profession to carry out agriscience programs, relevancy and growth are trivial aims.

A compelling case can be made for including work-life balance as imperative for teacher retention. The agricultural education teaching profession demands an ample supply of leaders and teachers who are prepared with the knowledge and skills to teach America's youth. There is agreement that the workload is too much for our teachers. A more balanced work-life will keep teachers in the profession and it is possible to accommodate balance even in the face of federal budget cuts.

Beginning teacher attrition will continue to increase among all demographic and career characteristics if teacher preparation and retention efforts remain the same. This is

not a gender issue. Nor, is it an issue of ethnicity, age, salary, or any particular teacher training institution. However, when 30% to 50% of beginning teachers leave the profession within their first five years of employment, the profession cannot dismiss attrition as an accepted and unchangeable beginning teacher phenomenon. This percentage is detrimental in the face of teacher shortages and student population increases, something must come about in order to correct the problem. Since work-life balance has not been a priority for secondary education research, potential practicality exists.

Higher education is beginning to look at work-life factors and how the balance of professional work and personal life can be improved. As a result, changes in work place policies interfering with work-life balance are being identified and considered for revision. With many other career options available and attractive, secondary education must begin the process of seriously considering work-life variables as influencing attrition among beginning teachers in order to keep teacher education from becoming haphazard.

Recommendations

Recommendations one through ten are for school administrators, teacher educators, mentor teachers, state department staff, and professional organizations.

Recommendations eleven through sixteen are for future research:

1. Collect annual data on beginning agriscience teachers to provide feedback for teacher preparation programs in order to adjust teaching and research. Active records should include first through fifth year agriscience teachers as well as data from exit interviews when teachers leave the profession.

2. The implementation of a beginning teacher intervention program, within the employing school, aimed at the modification of stressors at an early time in order to prevent attrition.
3. The development of a task force to report on issues relating to balancing professional and personal life. This would be aimed at improving commitment and loyalty of beginning agriscience teachers by defining work-life standards, developing a guide used to assess work and life skills, and improving quality of life.
4. Provide professional development throughout the year, not just in the summer months, specifically for beginning teachers.
5. Make available lesson plans with scripts and timelines for beginning agriscience teachers.
6. Make beginning teacher attrition prevention a priority for achieving program growth and quality.
7. Identify critical resources and capacities needed to fully enable teacher attrition prevention as a priority.
8. Allocate financial and staff resources necessary to operate the local agricultural education program.
9. Provide program managers so as to take some of the workload off of the agriscience teacher in order to ensure that classroom/laboratory, SAE, and FFA components of the agriscience program can be fully implemented.
10. Explore new and additional core resources that can be leveraged for additional stipends paid to agriscience teachers.
11. A study with the nonrespondents of this population might provide additional support to this study.

12. Another study could be conducted with the agriscience teachers who left the profession but later went back to analyze the reasons they returned to teaching.
13. Following Herzberg's Motivation-Hygiene Theory, an instrument could be developed for obtaining additional data specifically around the motivating and demotivating factors.
14. Seeing as an increase in work satisfaction correlates with a decrease in teacher attrition, an unsettled point for future research would include the design of a study to specifically determine work-life balance effects on work satisfaction. If a more balanced work-life positively affects work satisfaction, then it could be seen as a viable solution for decreasing teacher attrition.
15. More studies including qualitative methodology need to be conducted concerning the balance between professional work and personal life among beginning agriscience teachers to increase our understanding of the beginning teacher attrition problem.
16. Research aimed at determining work satisfaction and work-life balance of teachers at other stages in their careers might provide useful information for developing support for teachers.

Summary of Findings, Conclusions, Implications, and Recommendations

The chief reasons that agriscience teachers leave the profession during their first five years of teaching were that they were unable to achieve balance between professional and personal life; they were required to teach students who were not interested in agriculture; they were unable to keep from making unreasonable compromises on family responsibilities; and their workload (51–60 hours a week) was too heavy for the amount of pay they received (\$30,000–\$39,000).

The chief recommendations former beginning agriscience teachers made to improve the preparation and retention of agriscience teachers were to raise teacher salaries, provide mentors for beginning teachers, continue teacher trainer relationships after graduation, provide more training in classroom management, and more training in technical skills.

The chief recommendations former beginning agriscience teachers made to improve the balance of professional work and personal life were to set a maximum number of students per class period, reduce the number of class preparations/course sections, share the load of shows and contests equally among teachers, and hire more teachers.

The conclusion is that expectations and demands are overwhelming for beginning teachers. They were satisfied with the work itself as an agriscience teacher but were dissatisfied with the workload and time demands. Moreover, they have a need not being met that is influencing attrition, the attainment of balance between professional work and personal life. Statistically, as work-life balance increases attrition decreases.

The implication is that a more motivating and endurable teaching environment is needed. Potential practicality exists for work-life balance strategies to assist individuals, programs, and school districts in overcoming beginning teacher attrition. Implementation of such strategies will have roadblocks but first we need to challenge the “that’s just the way work is” belief that continues to perpetrate the conflict between professional work and personal life balance.

Ten recommendations were given for school administrators, teacher educators, mentor teachers, state department staff, and professional organizations. Six recommendations were given for future research.

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APPENDIXES

APPENDIX A
 WORK-LIFE VARIABLES INFLUENCING
 ATTRITION AMONG AGRISCIENCE
 TEACHERS OF TEXAS SURVEY

The purpose of this study is to determine work-life variables having an effect on Texas agriscience teachers' decisions to leave agriscience teaching. This survey instrument is intended for former agriscience teachers who may be teaching another subject, teaching in higher education, or who are no longer in the teaching profession.

WORK SATISFACTION

Please select the appropriate response for the following:

1. Were you satisfied with your job as an agriscience teacher?
 Satisfied Somewhat Satisfied Somewhat Dissatisfied Dissatisfied

2. Were you satisfied with your job environment as an agriscience teacher?
 Satisfied Somewhat Satisfied Somewhat Dissatisfied Dissatisfied

3. Were you satisfied with your former school's administration?
 Satisfied Somewhat Satisfied Somewhat Dissatisfied Dissatisfied

EFFECT OF WORK-LIFE ON ATTRITION

Please indicate the importance of the following reasons to your decision to leave agriscience teaching. Check one box for each item.

Not Important 1	Somewhat Important 2	Important 3	Very Important 4	Extremely Important 5
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4.1 JOB RELATED REASONS

Conflict with coworker or supervisor(s)	1	2	3	4	5
Inadequate training	1	2	3	4	5
Inadequate opportunities for training	1	2	3	4	5
Lack of resources to perform duties	1	2	3	4	5
Lack of recognition	1	2	3	4	5
Original responsibilities changed	1	2	3	4	5
Poor environmental conditions	1	2	3	4	5
Work-related stress	1	2	3	4	5
Need for flexibility in work schedule	1	2	3	4	5

4.2 PERSONAL REASONS

Improved benefits	1	2	3	4	5
Further education	1	2	3	4	5
Health reasons	1	2	3	4	5
Personal circumstances	1	2	3	4	5
Relocation	1	2	3	4	5

Please respond to the following statements as to their effect on your decision to leave agriscience teaching:

5. The amount of job time required to spend on paperwork was
 Too much Just right Too little No effect on decision to leave
6. The amount of energy required on the job was
 Too much Just right Too little No effect on decision to leave
7. The salary you were paid was
 Too much Just right Too little No effect on decision to leave
8. The number of hours required on the job was
 Too much Just right Too little No effect on decision to leave
9. The amount of equitable treatment toward men and women in the workplace was
 Too much Just right Too little No effect on decision to leave
10. The amount of work-related travel you were required to do was
 Too much Just right Too little No effect on decision to leave
11. The amount of guidance or direction you received on the job was
 Too much Just right Too little No effect on decision to leave
12. The amount of control you had over your work was
 Too much Just right Too little No effect on decision to leave
13. The competitive nature of FFA competitions was
 Too much Just right Too little No effect on decision to leave
14. The amount of pressure to provide assistance outside the scope of your job was
 Too much Just right Too little No effect on decision to leave
15. The pressure of balancing classroom and laboratory instruction, SAE supervision, and FFA activities was
 Too much Just right Too little No effect on decision to leave

16. What was the chief reason for your decision to leave agriscience teaching? Check all that apply.

- Too much stress
- Teacher burnout
- Student discipline issues
- To enter school administration
- To become a school counselor
- Students were placed in agriscience but did not choose it as an elective
- Undesirable salary
- Too much time involved outside regular school day
- Wanted balance between professional work and personal life
- Too much time taken away from family
- Other (please specify):

17. What recommendations can you provide that would improve the preparation and retention of agriscience teachers? Check all that apply.

- More training in technical skills
- More follow-up is needed from university teacher trainers
- Provide teacher mentors for first year teachers
- Provide an induction program for first year teachers
- Provide more training in classroom management
- Provide more training in Special Education
- Salary increase
- Other (please specify):

WORK-LIFE BALANCE

Please select the appropriate response for the following:

18. You were able to balance quality time between your work and your family/personal commitments.

Strongly Agree Agree Neutral Disagree Strongly Disagree

19. You were able to balance work demands without making unreasonable compromises on family/personal responsibilities.

Strongly Agree Agree Neutral Disagree Strongly Disagree

20. You were able to have a fulfilling personal life and adequately perform your work responsibilities.

Strongly Agree Agree Neutral Disagree Strongly Disagree

21. A good work-life balance for agriscience teachers would help provide a more effective and successful agricultural education organization.

Strongly Agree Agree Neutral Disagree Strongly Disagree

22. A good work-life balance for agriscience teachers would help retain teachers in the profession.

Strongly Agree Agree Neutral Disagree Strongly Disagree

23. Did any of the following HELP your balancing work as an agriscience teacher and personal-family commitments?

	Yes	No	Not available to me
Flexible start times			
Flexible finish times			
Flexible hours generally			
Compensation (Comp) days			
Time off for family emergency & events			
Part-time or reduced work hours			
Time off during school holidays			

24. Did any of the following HINDER your balancing work as an agriscience teacher and personal-family commitments?

	Yes	No	Not applicable to me
Long work hours			
Compulsory overtime			
Weekend work			
Timing of work meetings/training			

25. What recommendations can you provide that would improve the balance of professional work and personal life in the agriscience teacher career field? Check all that apply.

- Focus on a successful program in your community instead of the number of shows and contests attended/won
- Increase the number of teachers in the agriscience department
- Share the load of shows and contests equally among teachers
- Decrease the number of class preparations/course sections
- Set a maximum number of students per class period

- ___ Provide resources to teachers that enable them to cope with change, challenges, and family issues
- ___ Make available on-site daycare facilities
- ___ Other (please specify):

DEMOGRAPHIC INFORMATION

26. What was your salary in your last position as an agriscience teacher?
Less than \$25,000 \$25,000–\$29,999 \$30,000–\$39,999
\$40,000–\$49,999 More than \$50,000 Decline to respond
27. What is your gender? Male Female Decline to respond
28. What is your age in years?
Under 30 30–39 years 40–49 years 50 or over Decline to respond
29. Which best describes your ethnicity?
White, European American, Non-Hispanic
Asian or Asian American
Black, African American, Non-Hispanic
Hispanic or Latino American
American Indian or Alaskan Native
Pacific Islander
Other (please specify) _____
Decline to respond
30. Are you employed? If yes, what are your career field and job title? If teaching, include subject(s).
Yes (please specify) _____
No
Decline to respond
31. Where did you complete your agriscience teacher training?
SFA SHSU TAMU TAMU-C TAMU-K TSU TTU WTAMU
Other (please specify) _____ Decline to respond

GENERAL CAREER INFORMATION

32. How many years were you employed as an agriscience teacher?
1 2 3 4 5 6–9 10–19 20–29 30 years or more
33. What was the size of the last agriscience department in which you taught?
1 teacher 2 teachers 3 teachers 4 teachers 5 or more teachers

34. How many hours per week, on average, did you work as an agriscience teacher (whether at the workplace or at home)?

Less than 40 hours 40–50 hours 51–60 hours More than 60 hours

35. Which FFA Area Association did you belong to in your last agriscience teaching position?

I II III IV V VI VII VIII IX X

Decline to respond

THANK YOU FOR YOUR TIME AND PARTICIPATION!

APPENDIX B

E-MAIL TO TEXAS EDUCATION AGENCY

From: Cindy Chaney
To: Texas Education Agency
1701 N. Congress Ave.
Austin, TX. 78701-1494
Subject: Public Information Request

Requestor Name: Cindy Chaney
Company Name: TTU and TAMU doctoral candidate
Address: PO Box 153
City/State/Zip: Whitesboro, TX 76273
Telephone: 903-564-4209 work, 903-450-6124 cell
Fax Number: 903-564-4288
Requestor Email Address: chaneyc@totalnet.us or chaneyc@whitesboroisd.org

Brief Summary of Request: For my doctoral dissertation I need contact information (email, physical address, and former school where taught) for beginning secondary agriculture teachers that have left the profession within the last 5 years (2001-2006).

These former beginning (5 or fewer years of experience) agriculture teachers may be teaching subjects other than agriculture or have left teaching in the secondary setting all together.

Thank you for any information you can provide,

Cindy Chaney

APPENDIX C
 ORIGINAL POPULATION REPORTED
 BY TEXAS EDUCATION AGENCY

Academic Term Year	Number of Beginning Agriscience Teachers Not Returning	Did Not Return to Public Schools	Teaching Subjects Other than Agriscience
2001	101	65	36
2002	100	63	37
2003	93	66	27
2004	104	71	33
2005	122	76	46
Total	520	341	179

APPENDIX D
E-MAIL TO STATE AGRISCIENCE
TEACHER EDUCATORS

To: Texas Teacher Educators, TEA CATE Director, and VATAT
From: Cindy Chaney, TTU/TAMU Doctoral Candidate
Date: August 28, 2006
Subject: Agriculture Teacher Attrition Study

Good evening,

I'm a doctoral candidate at TTU/TAMU through the Doc@Distance program in need of information. Dr. James H. Smith, my advisor, suggested I write you for names and any contact information available of new agriculture teachers that have quit teaching within the last 5 years. These former beginning teachers may be teaching subjects other than agriculture or have left teaching all together. They will be included in my dissertation. Tracking down these individuals is a difficult task, but one that I believe will be worthwhile. My interests are to identify strategies to keep teachers in the profession.

Thank you, for any information you can provide.
Cindy

If you have any questions or suggestions please contact me anytime at the following numbers and addresses:

Cindy Chaney
PO Box 153
Whitesboro, TX 76273

Whitesboro High School
#1 Bearcat Dr.
Whitesboro, TX 76273

903-564-4209 (office)
903-564-4288 (fax)
903-450-6124 (home cell)
Home Email chaneyc@totalnet.us
Office Email chaneyc@whitesboroisd.org

APPENDIX E
FOLLOW-UP E-MAIL TO STATE
AGRISCIENCE TEACHER
EDUCATORS

Dear Teacher Educators,

I realize your time is limited, but I am asking again for your help in locating former beginning agriscience teachers (five or fewer years experience) for my dissertation. I've attached the lists of names TEA provided. Some of you have already sent me information and I appreciate it very much. It is important that I exhaust my resources and therefore, hear from all teacher preparation programs. Please, look it over. Any of the following information would be helpful:

- Institution attended for teacher certification
- Email address
- Phone number
- Current Employer
- Mailing Address

I will not use the information for anything other than this research project and Institutional Review Board protocol will be followed. Please, email the information to chaneyc@totalnet.us or chaneyc@whitesboroisd.org or mail it to the address below. If possible, I would like to have this information by November 5. If you have questions or concerns, please feel free to email or call me at 903-564-4209.

Your assistance is greatly appreciated.

Sincerely,

Cindy Chaney
TTU/TAMU Doctoral Candidate

James H. Smith TTU Co-Advisor
Chanda Elbert TAMU Co-Advisor

APPENDIX F

E-MAIL TO PERSONNEL DIRECTORS

To: Personnel Directors of ISDs in Texas
From: Cindy Chaney, Whitesboro HS Asst. Principal
Subject: Teacher Attrition Study

Good afternoon,

I'm a doctoral candidate at TTU and TAMU through the joint Doc-at-a-Distance program in need of information. My superintendent, Dr. Ray Lea, suggested I write you for names and any contact information available of beginning (five or fewer years of experience) agriscience teachers that have left the profession within the last 5 years, 2001–2005.

These former beginning agriculture teachers may be teaching subjects other than agriscience or have left teaching all together. They will be included in my dissertation. Tracking down these individuals is a difficult task, but one that I believe to be worthwhile. My interests are to identify strategies to keep teachers in the profession.

Thank you for any information you can provide,
Cindy Chaney

If you have any questions or suggestions please contact me anytime at the following numbers and addresses:

Cindy Chaney
PO Box 153
Whitesboro, TX 76273

Whitesboro High School
Asst. Principal
#1 Bearcat Dr.
Whitesboro, TX 76273

903–564–4209 (office)
903–564–4288 (fax)
903–450–6124 (home cell)
Home Email chaneyc@totalnet.us
Office Email chaneyc@whitesboroisd.org

APPENDIX G

PANEL OF EXPERTS

Jill Jarvis Brown
High School Counselor
Whitesboro High School
Whitesboro, Texas

Peggie Price, PhD
Associate Professor
Department of Curriculum and Instruction
Texas Tech University

Rendell Cole
High School Principal
Whitesboro High School
Whitesboro, Texas

Barbara Roland, MBS, LPC
Clinical Director
The Family Forum
Sherman, Texas

Chanda Elbert, PhD
Associate Professor
Department of Agricultural Leadership,
Education, and Communications
Texas A&M University

Douglas Perret Starr
Professor
Department of Agricultural Leadership,
Education, and Communications
Texas A&M University

Ray Lea, EdD
Superintendent of Schools
Whitesboro ISD
Whitesboro, Texas

APPENDIX H

E-MAIL TO PANEL OF EXPERTS

Dear [FirstName],

I am planning to conduct a statewide study of beginning secondary agriscience teachers. This study is for my doctoral dissertation in agricultural education through the joint Doc-at-a-Distance doctoral program through Texas Tech University and Texas A&M University under the direction of Dr. James H. Smith and Dr. Chanda Elbert. As a result of your knowledge, I am asking you to serve on the panel of experts for this study. If you are willing to do so, your role will be to review the data collection instrument I have developed for face and content validity.

I am specifically interested in knowing which questions might create difficulty due to lack of clarity, which questions might be better left out completely, or which questions you feel I should be asking but haven't.

Any suggestions you can provide would be greatly appreciated. If you have additional questions, please feel free to e-mail or call.

Thank you for your time and assistance with this study.

Sincerely,

Cindy Chaney

E-mail: chaneyc@totalnet.us

Phone: 903-564-4209

APPENDIX I

PILOT TEST PARTICIPANTS

Kim Alexander
Roscoe ISD
Roscoe, Texas

Mike Powell
Caddo Mills Middle School
Caddo Mills, Texas

Jack Boston
S & S High School
Sadler, Texas

Sotera Ramirez
Sulphur Bluff High School
Sulphur Bluff, Texas

James Hafer
U.S. Department of Education
Washington, DC

Joe Russell
Whitesboro High School
Whitesboro, Texas

Ed Miller
Whitesboro Middle School
Whitesboro, Texas

Doug Simmerman
Commerce High School
Commerce, Texas

Patty Mitchell
Whitesboro Middle School
Whitesboro, Texas

Debbie Welper
Callisberg High School
Callisberg, Texas

Shelby Morgan
Whitesboro ISD
Whitesboro, Texas

Bud Weston
Farmersville High School
Farmersville, Texas

Keith Park
Callisberg High School
Callisberg, Texas

Greg Williams
Leonard High School
Leonard, Texas

APPENDIX J
E-MAIL TO PILOT TEST PARTICIPANTS

Dear [FirstName],

I need your help in pilot testing an online research questionnaire before it is sent out for a statewide study of beginning secondary agriscience teachers. You are one of a few selected to pilot this survey instrument. Your feedback is extremely important in making sure the questionnaire is valid and reliable.

I would appreciate it if you would take a few minutes to respond to the online questionnaire found at [SurveyLink].

I would especially appreciate any comments you can provide that will help make taking the survey more understandable for study participants. If possible, please respond to this survey before Wednesday, November 1, 2006.

If you have any questions about the survey, please contact me at (903) 564-4209—or by e-mail at chaneyc@totalnet.us. If I am not available when you call, please leave a message and I will call back.

Thank you for your help. I appreciate your cooperation.

Sincerely,

Cindy Chaney, TTU/TAMU Doctoral Candidate

James H. Smith, TTU Co-Advisor

Chanda Elbert, TAMU Co-Advisor

Please note: If you do not wish to participate, please click the link below, and you will be automatically removed from my mailing list.

[RemoveLink]

APPENDIX K
PRE-NOTICE E-MAIL MESSAGE

Dear [FirstName],

In a few days you will receive via e-mail a request to complete an online questionnaire for an important statewide research project being conducted by a doctoral candidate from both Texas Tech University and Texas A&M University.

It concerns work-life variables having an effect on Texas agriscience teachers' decisions to leave agriscience teaching. This survey instrument is intended for former agriscience teachers who may be teaching another subject, teaching in higher education, or who are no longer in the teaching profession.

I am writing in advance because many people like to know ahead of time that they will be contacted. The study is an important one that will help teacher educators as well as state and district staff better understand the needs of agriscience teachers.

Thank you for your time and consideration. It's only with the generous help of people like you that the research can be successful.

Sincerely,

Cindy Chaney, Doctoral Candidate

James H. Smith, TTU Dissertation Co-advisor
Chanda Elbert, TAMU Dissertation Co-advisor

APPENDIX L
SURVEY COVER E-MAIL AND
CONSENT DOCUMENT

Dear [FirstName],

It is not known why up to half of all beginning teachers leave the profession in their first five years of teaching. There is no required exit interview to analyze the reasons, nor is there any official listing of teachers who have left the profession. It has taken a considerable amount of time and effort to discover that you chose to leave teaching agriscience.

As a former agriscience teacher myself, I am asking your help in determining work-life variables having an affect on Texas agriscience teachers' decisions to leave agriscience teaching. We would appreciate it if you would respond to the online questionnaire. Here is a link to the survey: [SurveyLink]

Your responses, together with others, will be combined and used for statistical summaries only. **Your participation in this study is voluntary and you may refuse to answer any question.** Your input is important to the study and to the profession.

The answers you provide will be kept confidential to the extent permitted by law. Special precautions have been established to protect the confidentiality of your responses. Your responses will be destroyed once the data have been tallied. There are no foreseeable risks to you as a participant in this project; nor are there any direct benefits.

If you have any questions, please contact me at 903-564-4209 or by e-mail at chaneyc@totalnet.us. If I am not available when you call, please leave a message and I will call back. If you have questions about your rights as a participant in this research project, please contact the Texas Tech University Institutional Review Board Human Protections Administrator at 806-742-3884 or by e-mail at ORS@ttu.edu.

Sincerely,

Cindy Chaney, Doctoral Candidate
James H. Smith, TTU Dissertation Co-Chair
Chanda Elbert, TAMU Dissertation Co-Chair

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. [RemoveLink]

APPENDIX M

FIRST FOLLOW-UP E-MAIL

Dear [FirstName],

Earlier in the week a link to an online questionnaire seeking your opinions about the attrition of agriscience teachers was sent to you.

If you have already completed and submitted the questionnaire, please accept our sincere thanks. If not and if possible, please take 3 to 5 no more than 10 minutes to complete it today. There are only 20 questions and your responses are very important.

The survey link is here:
[SurveyLink]

A great deal of research exists on why agriscience teachers stay in the profession but virtually none on why they leave. Being a former agriscience teacher myself, I believe your opinions are valuable. Your responses are very important not only to the AgEd profession but to me. If I do not have a high response rate, my committee will not accept my dissertation.

Thank you again for your time and consideration.

Sincerely,

Cindy Chaney, Doctoral Candidate

James H. Smith, TTU Dissertation Co-chair
Chanda Elbert, TAMU Dissertation Co-chair

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.
[RemoveLink]

APPENDIX N
SECOND FOLLOW-UP E-MAIL

Dear [FirstName],

We sent a link to an online questionnaire to you and other former agriscience teachers in the state that asked your opinion of what needs to change in the profession. To the best of our knowledge, you have not yet completed this survey.

We are writing again because of the importance that your questionnaire has for helping to get accurate results. Although we sent questionnaires to teachers in every area association and many have responded, it's only by hearing from nearly everyone that we can ensure that the results are truly representative of Texas. We hope that you will complete the questionnaire soon. **If you no longer have the link to the questionnaire, it can be found at:** [SurveyLink]

If you are not a former agriscience teacher, or if for any reason you choose not to answer the questionnaire, please send an e-mail to chaneyc@totalnet.us. Please also let us know if you have difficulty accessing or submitting the questionnaire. I can fax it to you if you prefer, just e-mail to let me know.

Protecting the confidentiality of people's answers is very important to us, as well as to Texas A&M University and Texas Tech University. Your identity in no way will be associated with your answers. Your identity will never be revealed.

If you have any questions about the survey, please contact me at 903-450-6124 or by e-mail at chaneyc@totalnet.us. If I am not available when you call, please leave a message and I will call back. If you have questions about your rights as a participant in this research project, please contact the Texas Tech University Institutional Review Board (IRB) Human Protections Administrator at 806-742-3884 or by e-mail at ORS@ttu.edu.

Sincerely,

Cindy Chaney, Doctoral Candidate
James H. Smith, TTU Dissertation Co-Chair
Chanda Elbert, TAMU Dissertation Co-Chair

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. [RemoveLink]

APPENDIX O
FINAL FOLLOW-UP E-MAIL

Dear [FirstName],

We realize your time is limited, but we are writing again to ask for your help in responding to an online questionnaire. We would like to have the input from every former agriscience teacher in the state. To the best of our knowledge, you have not yet completed this survey. Although we have asked former teachers from all areas of Texas, it's only by hearing from nearly everyone that we can be sure that the results are truly representative.

A great deal of research exists on why agriscience teachers stay in the profession but virtually none on why they leave. Being a former agriscience teacher myself, I believe your opinions are valuable and can help the profession. If I do not have a high response rate however, my dissertation will not be accepted. Please, consider this short survey.

Link to the survey: [SurveyLink]

If you have been identified incorrectly, meaning if you are not a former agriscience teacher with 5 or fewer years of experience, please send an e-mail to chaneyc@totalnet.us. Please also let me know if you have difficulty accessing or submitting the questionnaire.

If you have any questions about the survey, please contact me at (903) 450-6124 or e-mail chaneyc@totalnet.us. If I am not available when you call, please leave a message and I will call back.

Thank you again for your time and consideration.

Sincerely,

Cindy Chaney, Doctoral Candidate

James H. Smith, TTU Dissertation Co-chair
Chanda Elbert, TAMU Dissertation Co-chair

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. [RemoveLink]

APPENDIX P
CHIEF REASONS FOR LEAVING AGRISCIENCE
TEACHING OPEN-ENDED COMMENTS

Supt. transferred me to dir. of trans.

Did not get along or agree with teaching partners "beliefs" and "morals" regarding students, parents, and administrators.

Did not pass ExCet Certification Test. Missed it by 1 question four times! Grade = 69

Did not pass the "EXCET" test and was released by superintendent. However the impact on the program was so significant that the principal still calls me and asks if I would go back...the answer is YES!!!! if I could pass the darn "TEST". Somewhat poor training from my educational institute had part with the results I've been receiving on exams. Not adequate supplies funding for classes or chapter supplies competitions etc.

POOR SUPPORT FOR THE PROGRAM FROM ADMINISTRATION, CHANGING OF POLICIES AND PROCEDURES TO ADVERSLY EFFECT THE PROGRAM BY ADMINISTRATION

I still teach agriscience part-time. My campus only houses freshman, so we only offer Introduction to World Ag. and Applied Ag. Most of my time, now, is spent working with special ed. students.

I had a chance to better my family.

As a parent who had a child showing, I could not handle the stress of parents implying that I would do a disjustice to their child b/c I had a personal interest. In large part the unappreciation for the time I spent with their family while short changing my own family. This is an extremely difficult job to hold competitively while raising a family. At some point, something has to give, and for a few years, I let my family slide to the waste side while I ran a very productive chapter. When my husband became disgruntled at the hours it required, and the parents boldly accused me of not helping them anymore because they beat my daughter in the show ring, I decided I needed to be at home more!!!!

Relocation due to marriage

CHIEF REASONS FOR LEAVING AGRISCIENCE

TEACHING OPEN-ENDED COMMENTS

(CONTINUED)

Too many parental conflicts.

The program grew and was prospering; however, additional assistance (2nd Teacher) was denied and the workload became to great.

I had a hard time passing the ExCET and had lost my job over it. I eventually passed it, but by that time I had a M.S. in Edu. Admin. and was ready to take the principal ExCET. I feel had it not been for the ExCET I would have never entered into administration.

I love ag and I love teaching ag! But, there is too much time involved in order to run a successful well-rounded program! You have to eat, sleep, and breathe ag to be good. I never had time for my own personal ag pursuits and hobbies.

Entered another field of teaching. Needed to move and Ag science teaching field was not open in area.

The pay scale was a joke and parents, administrators and legislators do not respect what we do.

Teaching partner had 12 years experience -- made about 10K more than I did and did absolutely nothing but come to school and leave immediately following his last class. I was very frustrated that the admin had problems with this as well but was unable or unwilling to help the problem.

Did not pass the exit exam

To move my pregnant wife closer to both of our families, but the tacky, unprofessionalism of the superintendent was a very close second.

Better Job offer with more money, less work

Attitudes of other agriscience teachers. Many professed to be honest, but cheated, saying it was for the students. About 50% were wonderful people. Sometimes honest teachers were made to be creative (dishonest on recordbooks etc. to keep state and administrators off their backs).

CHIEF REASONS FOR LEAVING AGRISCIENCE

TEACHING OPEN-ENDED COMMENTS

(CONTINUED)

Took another position with a grant program.

I found extension to be a good alternative. The pay was higher and got me into helping real agriculture and youth. Texas A&M did a poor job of training us to work in the shop. Plus the People teaching us to be ag teachers would have been poor examples.

Pursued graduate education

Horrible experience in the school i was employed by.

Conflicts with teaching partner and administration.

I experienced a lack of administrative support from my district. I feel that a successful ag program requires a great deal of administrative support beause of the scope and nature of interaction between teacher, students, parents, and community.

I felt a constant inner battle in choosing work over my own children. With my first child I constantly paid extra to have a babysitter in the evening and weekends. However, I chose to stay teaching Ag not only because I loved it but because I felt like I had something to prove to everyone in the field that I could do it all (be a mom, be a great Ag Science teacher and stay competitive). I did that but I missed alot with my first child in order to prove that. After I got pregnant with my second child, I decided that I didn't want to miss out on all those baby and toddler moments that I had missed with the first child. I would never be able to get that time back. Because of all of the extra time expected outside of school, other people were raising my children and I couldn't take the constant moral struggle. The situation was even more complicated because my husband is an Ag teacher also. We had to juggle both of our schedules. It was the harderst decision of my entire life because my passion is high school Agriculture and FFA. However, I knew that for me - I had to make my family my first priority. Luckily, since my husband is still an Ag teacher I can still be involved with the program.

Teaching partner and teachers in the area were very unethical and local administration did not care to realize this

CHIEF REASONS FOR LEAVING AGRISCIENCE

TEACHING OPEN-ENDED COMMENTS

(CONTINUED)

As you well know the job requires so much time away from your family. I had a baby and plans to have another. It just was not feasible for me to continue in that field. I was in a single teacher program and participated in every aspect at all levels. If I had been in a two-three teacher program with specific areas to cover rather than having it all I might have stayed in the profession. I enjoyed my career and felt like I did a very good job, but my family is far more important to me. It is easy for male ag teachers because mom is at home with the kids. I refused to wake up one day and my kids be in high school.

I am always looking for other opportunities to explore in education and felt that timing was right to move forward in other areas due to road blocks set by an ag science co worker.

Lack of benefits

Generally speaking, parents of extra-curricular students seem to not be able to stay out of the teacher's business causing burn-out and too much time away from family

Not enough salary for hours spent on job, no incentive to advance education or be innovative in classes

I have two small children and need more time with them. I also coach and there was no way that I could do both. Especially with a family!! I loved teaching ag, and would get back into it if I could be in atleast a two teacher department. And not coaching and would have more time with my family!

My husband was in the Army and I had a child so I chose to stop teaching ag.

APPENDIX Q
RECOMMENDATIONS TO IMPROVE THE
PREPARATION AND RETENTION OF
AGRISCIENCE TEACHERS OPEN-
ENDED COMMENTS

Help with public relations, more prep. with student relations, school relation issues. They need to be taught to work with people!!!!

Need training in showing animals. You get no training in your teaching classes/block, nothing in certification test, nothing in pedagogy. First years of teaching you're busting your butt to learn showing, training, feeding, selecting, and grooming several different species and breeds of animals yourself. If you screw up the kids' projects - you're in TROUBLE! Lots of pressure!

Mentor teacher needs to be in Ag related field.

Salaries are just an incentive for doing a good job....so a "salary" for any type of job does not really matter to me..however advice for any college student ...in "ANY" field of study would be to start studying for the "EXCET" or "TEXES" test as soon as possible because it is not fair that you go through your 4 or 5 years of education and plan to teach youth...and just because of one test... you need to choose another career; as compared to individuals that go the "not education" route and then decide they do want to teach.. the state of Texas allows them "3" yes 3..I'll repeat 3 years to go through the "alternave" program as long as they attend courses to teach youth.. I really think there is some kind of discrepencies there that need looking at.... but that is probably another type of survey....

Help with all the extras LDE CDE deadlines registration, submitting dues, paper work for scholarships, recordbook, all this is extra to curriculum. The district is totally unaware of an ag teachers respnsabilities to district area etc.

PREPARE TEACHERS IN DEALING WITH UNSUPPORTIVE ADMINISRATION

There is a wealth of information that an agriscience teacher must have upon entering the field. Propably much more than can be learned from a university. From observing other programs, the teachers who are most successful are the ones who learned a great deal of the information prior to college, especially the things needed to get students ready for stock shows and contests.

RECOMMENDATIONS TO IMPROVE THE
PREPARATION AND RETENTION OF
AGRISCIENCE TEACHERS OPEN-
ENDED COMMENTS
(CONTINUED)

Teacher mentors sounds good. Be sure the people selected to be mentors are worth their salt. Don't just have someone who failed in the classroom helping run someones program.

For women, they should have a college course designed to teach future teachers about about time management with a family and perhaps a few scenerios on the proper way to handle a parent situation. I know I let many parents run over the top of me at first due to lack of confidence. And often just trying to keep peace among the masses. Often when that occurs you look up and you have lost respect by always being a people pleaser. If I could change any of my initial calls it would be set up a time mangement plan which forced family time for those workaholics and create a canned reaction to a parent who is a spur in the side....

Need more training as to how to handle parental conflicts.

Limit the number of preps a first year ag teacher has. Offer more planning periods. Include in the daily schedule a period for checking projects. Prepare the new teacher how to say, "No." One must not do all and be all to everyone. Also, need more prep in the management of the "whole ag program".

Have potential teachers take and pass the exit before graduation

Most all of the recommendations noted will assist in improved preparation of teachers, however retention is something that will always be an issue as long as the scope of the job is as broad as it is. The pressure or feeling that as an ag teacher you need to provide as many opportunities as possible drives the stressors that go along with trying to do too much or spreading yourself to thin, which contributes to the burn-out and resulting attrition.

Focus on teaching class rather than only on contests. Revise the FFA recordbook. Allow parents or someone other than Agriculture teachers to enter students in major stock show contests. Require a minimum and a maximum number of contests that should or can be attended by the teachers.

RECOMMENDATIONS TO IMPROVE THE
PREPARATION AND RETENTION OF
AGRISCIENCE TEACHERS OPEN-
ENDED COMMENTS
(CONTINUED)

There needs to be more diversified classes. Its not all animals and projects any more. There has to be more diversification and more classes related to the subject we teach as well as more education related classes as far as getting ready for the excet tests.

Hands on basic information on how to go about day to day operations: Lesson planning, Sp.Ed. Mods, Entry Rules and Forms, Letters to Parents,etc.

I feel that educators could perhaps present a more realistic picture of teaching and the issues they will encounter, to the future teachers that they are training.

Teachers need direct communication with Texas Education Agency to report unethical behavior; state needs to due away with probationary contracts as school districts abuse the power of these and make it very hard on beginning teachers to succeed

It is not that I couldn't do the job or didn't have enough training. I did a great job it is simply a job that requires too much and it is never enough for some parents. When you do a good job the kids want to do more. Your program grows and grows. I feel it is almost impossible to make it in a single teacher program.

All of these are great ideas but I believe that if somone wants to be a successful teacher they will do what it takes to accomplish these things as they grow as an educator. I believe that today we provide to many excuses for crappy teachers and that if you have one that truly cares about the educational expierence that they are providing their students they will do what it takes accomplish it.

All of the training you give at the university level does nothing compared to what you learn the first two years of teaching.

Promote advancement of classes other than FFA and stock shows, such as adoption of classes as core curriculum, and dual credit classes with colleges and univerities

All of it!! Also I think that there should be lots and lots of follow ups! It is hard being out here in West Texas where the schools are spaced out and far away from eachother. I was and still am constantly on the phone gettin help from others.

APPENDIX R
RECOMMENDATIONS TO IMPROVE THE
BALANCE OF PROFESSIONAL WORK
AND PERSONAL LIFE OPEN-ENDED
COMMENTS

Time management, student/sex issues, drinking issues, contest year around, our teachers are not totally rounded for the entire program of today. The program is too big for a teacher.

People need to have a broader view/vision of ag teaching and FFA in general before they enter the profession.

If your co-worker is an ag teacher just for the "check" influence them to change their careers.....I had that kind of co-worker.

Have service center provide curriculum or cluster track options. Small schools need several preps to survive and attract all different types of students but we need help with current lesson plans and time lines like core classes are currently being provided

I taught five different courses during my first year. Because I was living away from my fiancée and family at the time, I was able to prepare for each of my classes, but this did lead to burnout more quickly than I expected.

Provide comp days. When one works 24/7 at major livestock shows etc., one should be able to earn time off without being docked substitute pay in order to "catch-up" with oneself, rest, and recharge.

Respect for what we are doing and compensation for the hours away from home.

A big issue for me was when my wife and I started a family. Prior to that time, I was more willing to devote additional time to the job. However having my own children, encouraged me to re-think my priorities and seek a career change.

RECOMMENDATIONS TO IMPROVE THE
BALANCE OF PROFESSIONAL WORK
AND PERSONAL LIFE OPEN-ENDED
COMMENTS (CONTINUED)

Stop using ag or any elective as a dumping ground for students that do not want to be in the class.

Because of the caliber of program that I was teaching at, there were unspoken expectations for the Ag Science teachers from the community. Although this did have an impact on my decision to leave, the program is very strong in all aspects because of the dedication of the teachers to the program.

I managed my family and work it was just too hard and it wears on you.

I did not check the box for increase number of teachers in a department due to the fact that we did increase the number of teachers but did not share responsibilities so this did not help with the balance.

Going into the ag. teaching profession, you know there will be many hours spent after work and on weekends. Do not let yourself "whine" about long work hours.

The on site daycare would be awesome!!! that would help so much!!

APPENDIX S
CURRENT CAREER FIELD AND JOB TITLE
OF FORMER AGRISCIENCE TEACHERS

Manufacturing Engineer
Director of Transportation
Ag. Industry
Teaching, Librarian
Manager college farm
I left ag teaching and went to extension service for 4.5 years and now out of agriculture completely...at least for a while. I am working for a concrete company as a dispatcher and salesman.
SDISD
Farm Insurance
Special ed teacher
Marketer for Home Health Agency
Science Teacher
Part time, co-owner Fish Farm
Field Rep. for Texas Farm Bureau
AP and Pre AP Biology Teacher
Pharmaceutical Sales Rep
Middle School Science teacher
1st Grade Teacher
Refinery Operations
Edu. Admin. Assistant Principal
High School Counselor
School administration
Superintendent of Schools
Social Studies
Principal
School Administration
Insurance Agent
Science Teacher
Teaching Science
Agricultural Finance Vice President of Commercial Credit
Banking - Farm Credit System
Science teacher
Jr. High Science
Ag sales
Mfg. Distribution Coordinator

CURRENT CAREER FIELD AND JOB TITLE
OF FORMER AGRISCIENCE TEACHERS
(CONTINUED)

5th grade (all subjects)
Superintendent of Schools
College- Upward Bound Program
Texas Cooperative Extension and Love it
Pursuing a PhD degree- teaching courses at a university
I teach elementary education
I now own a feed store with my husband
Teacher, Communications
Science teacher
School counselor
Agricultural Sales and Marketing
Realtor
Texas Cooperative Extension County Extension Agent- Agriculture
Assistant professor
County Extension Agent
Investment Representative with Edward Jones Investments
Research Associate- Plant and Soil Science Department
Resource Teacher High School Head Volleyball Coach Assistant basketball coach
School Administration
Assistant Principal
Biology, IPC
Science Teaching