

AN ANALYSIS OF INDUCTION-YEAR AGRICULTURAL EDUCATION  
TEACHERS' ATTITUDE TOWARD TEACHING DURING THE 2011–2012  
SCHOOL YEAR IN TEXAS, OKLAHOMA, AND NEW MEXICO

A Dissertation

by

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## ABSTRACT

Teacher shortages are a critical issue for education, and agricultural education has not been exempt from this trend. Many factors possibly contribute to this lack of qualified teachers. Researchers suggest that retention practices, stress factors associated with agricultural education, and job satisfaction may be areas for improvement within the profession. A deeper understanding of the problems beginning teachers experience is a critical first step in raising the retention rate for new teachers. An original researcher-designed instrument based on Moir was composed of 66 items intended to measure induction-year teachers' attitude toward teaching and was administered at six different points in time to induction-year agriculture teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year. Data collection occurred via a mixed mode design following the Tailored Design Method. The overall response rate was 52.5% with 197 responses to the instrument. All 66 scale items from the original questionnaire were included in the principal component analysis (PCA) with varimax rotation; coefficients with an absolute value less than 0.45 were suppressed. The Kaiser–Meyer–Olkin (KMO) of sampling adequacy was 0.787 and Bartlett's test of sphericity was significant ( $p < 0.001$ ). Factor analysis yielded a nine factor solution using varimax rotation. Forty-five items composed the Agricultural Education Induction-Year Teacher Attitudinal Scale. Descriptive names for the constructs were the product of 20 experts in the field of agricultural education: "Professional Efficacy," "Balanced Reflection," "Professional Commitment," "Professional Confidence," "Anticipated Change," "Work-Life Balance," "Strategic Renewal," "Problem Solving," and "Professional Resolve." Overall

reliability coefficient for the proposed new instrument was 0.88. Overall attitude toward teaching was not statistically significantly different across measures. No significant predictors of attitude toward teaching based on selected demographic variables were generated as a result of forced entry regression. Grand mean scores per round did not statistically differ from one round to another. A model of induction-year agricultural education teacher's attitudes was proposed along with a scale adjusted model of agricultural education teacher attitude toward teaching. A model of all attitude constructs was presented to illustrate the effect of time on the attitude of the induction-year agricultural education teachers.

## DEDICATION

This work would not have been possible without the support, sacrifice, and love of my wife, Carol. I dedicate this work to her. Though I know she will not keep the praises and allow it to puff her up—she is a humble servant who shies away from the spotlight—she is worthy of it. She has followed me many places because of our mutual faith in Christ and His Guidance. Her faith is strong. I am thankful for her, and I hope this milestone in our lives will allow her to continue in her calling as a mother. Carol, I love you very much and am very fortunate indeed. Emma, Clay, and Hoyt: You may or may not remember all the aspects of this time in Texas, but I hope you at least remember the happy times and all the love people have shown us. You are very fortunate to have a momma that cares for you and can juggle so many things so well. I love you all and look forward to the future. I am thankful to Christ for this opportunity and for all of your support.

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## CHAPTER I

### INTRODUCTION

#### Background and Setting

Teacher shortages are a critical issue for education, and agricultural education has not been exempt from this trend (Wolf, 2011; Boone & Boone, 2007). “Currently there is a national shortage of agricultural educators: there will be hundreds of unfilled positions across the United States this year, simply because not enough students are choosing to be agricultural educators” (National Teach Ag Website Homepage, 2012). There were more open agricultural education teaching positions than qualified teachers to fill those positions in 2001 (Camp, Broyles, & Skelton, 2002). Myers, Dyer, and Washburn (2005) cited the shortage of qualified teachers to fill the existing and future secondary agricultural education vacancies as one of the most pressing issues facing agricultural education as a profession.

Professional concern for the supply and demand of teachers in the field of agricultural education is not a new phenomenon although the true severity has been debated for quite some time (Kantrovich, 2010; Joerger & Bremer, 2001). To add to the debate, Brown (1995) suggested that the issue was not too few qualified graduates, but rather insufficient recruitment of qualified individuals into the profession. Franklin and Molina (2012) supported this finding by stating that 53% of agricultural education graduates pursued a teaching career. It is important to remember teacher shortages are not uniform; Some rural and urban areas as well as certain content areas (special

education, science, mathematics, and career and technical education) experience the most shortages (Joerger & Bremer, 2001).

Many factors possibly contribute to this lack of qualified teachers. Researchers suggest that retention practices, stress factors associated with agricultural education, and job satisfaction may be areas for improvement within the profession (Walker, Garton, & Kitchel, 2004; Boone & Boone, 2007; Nesbit & Mundt, 1993; Peiter, Terry, & Cartmell, 2005; Mundt, 1991; Moore & Swan, 2008; Greiman, Walker, & Birkenholz, 2005). Scott (1988) suggested that providing induction programs that adequately support new teachers in agricultural education is critical and challenging since these programs must also identify and address normal stressors such as classroom management and content development.

Though it is not clear how many agricultural education teachers leave, or never enter, the profession before retirement age, some evidence suggests that the percentage is high (Kelsey, 2006; Kantrovich, 2010; Franklin & Molina, 2012). Peiter, Terry & Cartmell (2005) posited that teacher shortages and attrition could be addressed through more successful induction programs that provide a transition to help new teachers succeed. Induction programs can address problems, contribute to teacher success, and encourage teachers to stay in the profession (Nesbitt & Mundt, 1993). Many educational institutions have implemented induction programs to help new/inexperienced teachers become more successful in the teaching profession (McCandless & Sauer, 2010). In agricultural education, Franklin and Molina (2012) found that 65% of American



Association for Agricultural Education (AAAE)-affiliated, teacher-preparation institutions provide beginning teacher assistance at some level.

Studies conducted in agricultural education have attempted to identify some of the problems that new teachers face (Joerger, 2002; Joerger & Boettcher, 2000). Brock and Grady (1998) identified the top five problems of first year teachers. They reported top concerns as classroom management, working with mainstreamed discipline, identifying appropriate expectations for students, dealing with stress, and handling angry parents. Mundt and Connors (1999) identified several problem areas associated with leading a complete agricultural education program including: managing the overall activities of the local FFA Chapter; balancing professional and personal responsibilities; maintaining personal motivation; time management; and building the support of school faculty and administration. Furthermore, agriculture teachers usually have a greater workload and work longer hours than other secondary education teachers (Torres, Ulmer, & Aschenbrener, 2007). Understanding how new teachers develop stress and learn how to overcome these problems can allow preservice and first year teachers to handle possible problems and increase overall job satisfaction (Boone & Boone, 2007).

Though new teachers often experience feelings of confusion, frustration, and isolation (Mundt, 1991), research suggests that agricultural education teachers generally are satisfied with their careers regardless of whether they chose to stay in or leave the profession (Bennett, Iverson, Rohs, Langone, & Edwards, 2002; Berns, 1990; Cano & Miller, 1992; Croom, 2003; Walker, Garton, & Kitchel, 2004). Nonetheless, working to recruit and retain quality teachers has profound implications for student achievement,

sustained educational reform, and alleviating the teacher shortage over the long term (Peiter, Terry & Cartmell, 2005).

Fuller (1969), Huberman (1989), and Moir (1999) studied teachers, and the various stages they go through, for many years. Their research is foundational for this study. Evaluation of the induction year of agricultural education teachers could expand the scope of induction year teacher research. The literature suggests that not all new teachers experience their first year the same, nor do their attitudes toward teaching match that of their cohort members (Moir, 1999; Walker, Garton & Kitchel, 2004; Bennett et al., 2002; Berns, 1990; Cano & Miller, 1992; Croom, 2003). A review of literature did not yield an instrument for quantitative evaluation of agricultural education teachers' attitude toward teaching during the induction year. Attitude toward teaching is important for understanding and helping induction-year teachers (Moir, 1999; Greiman, Walker, & Birkenholz, 2005). Development of an instrument tailored to agricultural education could help induction programs and teacher education programs across the nation better understand what goes on in the careers of new teachers throughout their first year.

#### Need for Study

The first year a teacher spends in the classroom is often challenging (Moir, 1999; Franklin & Molina, 2012; Greiman, Walker, & Birkenholz, 2005). In terms of hours worked, some agricultural educators report working up to 17 hours more than a traditional 40-hour workweek (Murray, Flowers, Croom, & Wilson, 2011). Some teachers who leave the profession early feel that being overwhelmed caused them to be

ineffective as a teacher (Bennett et al., 2002). According to the National Center for Educational Statistics [NCES] (2007), 65% of the teachers who left the profession in 2004–2005 felt the workload in their new occupation was more manageable, and they were better able to balance their personal and work lives. Furthermore, in 2010, the NCES released findings that 41% of public school teachers who left teaching reported better learning opportunities from colleagues were available in their new job.

Joerger (2002a) called for research initiatives to “examine the nature of the relationships that exist between the demographic characteristics, stages of teacher development, levels of teaching performance and in-service needs of beginning and professional agricultural education teachers” (p. 22). A deeper understanding of the problems beginning teachers experience is a critical first step in raising the retention rate for new teachers (Myers, Dyer, & Washburn, 2005). If researchers attempt to understand, in total, the concerns of beginning teachers, then better preparation of preservice teachers, better mentoring, and improved professional development for beginning teachers should emerge from that research (Meister & Melnick, 2003).

#### Statement of the Problem

After years of qualitative research, Moir’s theory of attitudinal phases experienced by induction-year teachers has not been subjected to quantitative testing. An adequate tool does not exist to measure the specific phases induction-year agricultural science teachers experience based on Moir’s (1999) theory.

## Purpose and Objectives

The purpose of this study was to describe and analyze the induction-year of agricultural education teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year. The following objectives guided this study:

1. Assess the factor-analytic and psychometric properties of attitude toward teaching based on the perceptions of induction-year secondary agricultural education teachers.
2. Using the outcome of research objective one, determine if differences existed between longitudinal measures of attitude toward teaching.
3. Determine if demographic characteristics (*age, gender, time, marital status, level of educational attainment, presence of children, number of teachers in the department, and intended years to teach*) of induction-year agricultural education teachers are significant predictors of attitude toward teaching.
4. Determine if induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico experience stages as proposed by Moir (1999).

## Definition of Terms

1. Agricultural Education—Agricultural education – a program of instruction in and about agriculture and related subjects commonly offered in secondary schools, though some elementary and middle schools and some postsecondary institutes / community colleges also offer such instruction (Talbert, Vaughn, Croom, & Lee, 2007).

2. Agricultural education student—“a secondary education student enrolled in agricultural education courses” (Lewis, 2012, p. 8).
3. Agricultural education teacher—a Career and Technical Education (CTE) teacher that teaches within the context of agriculture; may or may not be involved with the Career Technical Student Organization (CTSO) known as FFA.
4. Career and technical education youth organizations—student organizations established to support and enhance learning in career and technical fields. These organizations are: 4-H clubs, Distributive Education Clubs of America (DECA); Family, Career and Community Leaders of America (FCCLA); Future Educators of America (FEA); Future Business Leaders of America (FBLA); Health Occupations Student of America (HOSA); The National FFA Organization (FFA); SkillsUSA; and Technology Student Association (TSA) (Lewis, 2012, p. 8).
5. CDE—Career Development Event. An event related to FFA designed to help prepare students for careers in agriculture that reinforces classroom instruction through demonstration of content knowledge and skill in a competitive setting (Rayfield, Frazee, Brashears, & Lawver, 2009).
6. Comprehensive Induction Program—“Requires the collaborative effort of teacher educators, state departments of education, local education agencies, teacher organizations, and local teachers” (Waters, 1988, p. 3).
7. FFA—National FFA Organization, formerly known as the Future Farmers of America. A national youth leadership organization dedicated to “making a

positive difference in the lives of young people by developing their potential for premier leadership, personal growth and career success through agricultural education” (National FFA Organization, n.d., ¶ 1).

8. Induction—“a comprehensive process of sustained training and support for new teachers” (Wong, 2004, p. 41).
9. Induction Year—the first year a teacher is formally in the classroom as a teacher.
10. Induction year agricultural education teacher (IYAET)—An Agricultural education teacher involved in the broad process of learning about a career as an agricultural education teacher during the course of an academic school year (Peiter, Terry, & Cartmell, 2005).
11. Mentoring—“the personal guidance provided, usually by seasoned veterans, to beginning teachers in schools” (Ingersoll & Strong, 2011, p. 5).
12. Preservice teacher—a prospective teacher enrolled in teacher preparation courses, who has not yet received teaching certification or licensure (Knobloch, 2002).
13. School resources for student SAE program use—facilities used in teaching science and math principles and concepts associated with agriculture (Talbert et al., 2007); also may be used by students with SAE projects. Types of resources include, but are not limited to, on-campus land labs, school farm/project centers, greenhouses, aquaculture tanks, mechanic/woodworking labs, floral design labs, meat/food science labs, and veterinary technology labs.

14. Student teacher—a preservice teacher placed in a public school for a clinical experience over an extended period under the supervision of a cooperating teacher and a university supervisor (Knobloch, 2002).
15. Supervised Agricultural Experience (SAE)—the application of the concepts and principles learned in the agricultural education classroom in planned, real-life settings under the supervision of the agricultural teacher; should improve agricultural awareness and/or skills and abilities required for a student’s career (Talbert et al., 2007).
16. Teacher Attrition—teachers who leave the teaching profession altogether (Ingersoll, 2003).
17. Teacher preparation—comprehensive university programs in which students receive instruction on technical, professional, and pedagogical subjects and participate in various clinical experiences (Rocca, 2005, p. 9).

#### Limitations of the Study

The researcher conducted the study on a predetermined population. The participants were selected based on two criteria: (a) Their employment status at the end of the Institutional Review Board Approval period, and (b) if they were induction year teachers in Texas, Oklahoma, or New Mexico. The population was not representative of the entire population of induction-year secondary agricultural education teachers in the United States; caution should be used when interpreting the results and the interpretations should not extend beyond this study. Not all teachers responded to all

questions, which resulted in missing data. The descriptive statistics reported are representative of the respondents.

#### Basic Assumptions

The following assumptions were accepted as true. No documentation was required due to the acceptance of the statements. The following assumptions about respondents guided the study:

1. All respondents were certified agricultural education teachers in their respective states.
2. All respondents were completing their first full academic year of autonomous service as agricultural education teacher.
3. The respondents completed the instrument in an objective and honest manner.
4. Many agricultural education teachers have expectations beyond the traditional classroom setting.

#### Significance of the Problem

“High rates of teacher turnover have high costs to the nation and undermine efforts to guarantee quality teaching for every child (Fulton, Yoon, & Lee, 2005, p. 16). Students and school systems are the real losers in the situation because of the financial drain on the school and detriment to student achievement (Barnes, Crowe, & Schaefer, 2008). “Regardless of the statistics, an abundant supply of well-prepared teachers is necessary to maintain a well-educated populace” (Joerger & Bremer, 2001, p. 2). Fewer teachers could mean fewer students could want to enter the profession of agricultural education or agriculture in general (Esters & Bowen, 2004). This in turn, leads to fewer



students enrolling in post-secondary institutions, which ultimately leads to fewer qualified agricultural education teachers (Dyer, Lacey, & Osborne, 1996).

Furthermore, Priority 5 of the National Research Agenda for Agricultural Education (Doerfert, 2011) calls for efficient, effective programs. Developing an instrument to assess the attitudes of induction-year agricultural education teachers toward their job could answer the challenge of equipping teacher preparation graduates for the field of agricultural education. “Defining the characteristics of effective agricultural education programs and teachers and the means to correctly assess the current state of these characteristics (Doerfert, 2011, p. 2)” could be addressed by having an instrument to assess the attitudes of induction year of agricultural education teachers.

The career and technical education research agenda outlines 53 research activities to provide direction for Career and Technical Education (Lambeth, Elliot, Joerger, 2008). Research activities related to this study are rooted in the Research Priority Area Five: Program Relevance and Effectiveness (Lambeth, Elliot, Joerger, 2008). More specifically, this study will help meet the research objective 5.1 by examining induction year agricultural education teachers with an ultimate focus being aligned with recruitment and retention of teachers (RA 5.1.2, Lambeth, Elliot, & Joerger, 2008).

## CHAPTER II

### LITERATURE REVIEW

#### Purpose and Objectives

The purpose of this study was to describe and analyze induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year. The following objectives guided this study:

1. Assess the factor-analytic and psychometric properties of attitude toward teaching based on the perceptions of induction-year secondary agricultural education teachers.
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4. Determine if induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico experience stages as proposed by Moir (1999).

Few people involved in education have not heard the “sink or swim” metaphor (Howe, 2006). Beginning teachers sometimes question the relevancy of their educational training when they compare it to their on-the-job experiences (Howe, 2006). To help alleviate the strain placed on new teachers, induction programs have become more

common over the past 30 years. The induction year of teaching has become a more widely researched topic across many fields.

According to Peiter, Terry, & Cartmell (2005), induction could be defined as the broad process by which beginning teachers are socialized into the profession. Nielsen, Barry, and Addison (2006) describe induction as “a period when teachers have their first teaching experience and adjust to the roles and the responsibilities of teaching” (p.15). Furthermore, induction is “a systemwide, coherent, comprehensive training and support process that continues for 2 or 3 years and then seamlessly becomes part of the lifelong professional development program of the district to keep new teachers teaching and improving toward increasing their effectiveness” (Wong, 2004, p. 42). Succinctly put, “induction is a comprehensive process of sustained training and support for new teachers” (Wong, 2004, p. 41). However, “teacher induction, it is important to clarify, is distinct from both preservice and in-service teacher training” (Smith & Ingersoll, 2004, p. 682). Some researchers believe that induction should be “grounded in the conception of teaching as a moral, political, and intellectual enterprise” (Lawson, 1992, p. 163); others are “systematically trying to initiate, shape, and sustain teachers in the profession (Nielsen, Barry, & Addison, 2006, p. 15).

The induction year is important because “the expectation of the beginning teacher from the educational community is the ideal teacher. No other profession puts its beginners into a position where they are immediately expected to perform like a veteran” (Mundt & Stenberg, 1992, p. 24). Some researchers compare the first year of teaching with breaking horses for riding (Houston and Felder, 1982); others cite a profession that

eats its young (Joerger & Bremer, 2001). Despite the rhetoric, Wong (2002) suggests that all effective induction programs should be characterized as being comprehensive, coherent, and sustained. Adding to the characterization of induction programs, Wong, Britton, and Ganser (2005) found that quality induction programs in the United States and abroad had “three major similarities—they are highly structured, they focus on professional learning and they emphasize collaboration” (p. 383). Mager (1992) suggested that the three primary goals of a quality induction program would improve competence, performance, and effectiveness.

The induction year is an important component of keeping new teachers in the profession as well as in their long-term success (Mundt, 1991; Wong, 2004; Hoy & Spero, 2005; Moir, 1999). As many as 15% of new teachers leave the profession during the first or second year of teaching (Darling–Hammond, 1997) and up to half of all teachers leave by the end of their sixth year (Marso & Pigge, 1997). According to the National Commission on Teaching and America’s Future (NCTAF, 2005), “almost one out of every two new teachers has left the classroom by the end of five years” (p. 2). Furthermore, by 2020, it is estimated that 50% of all teachers will have less than 10 years of experience (New Teacher Center, Services, 2012).

The importance of the induction year being successful is highlighted by its effect on student achievement and performance (Darling–Hammond, 1997; Joerger & Bremer, 2001; Wong, 2004). Quality induction programs can lead to highly skilled and satisfied teachers that help students attain higher levels of achievement on standardized assessments (Darling–Hammond, 2000). In related research, Cheng (2010) found

schools high in professionalism often had teachers with positive job attitudes and less disengagement. Additionally, early findings about the benefits of high-quality induction programs actually led to the advent of many formal induction programs across the United States (Joerger, 2003). A central theme in the literature is that induction is important, tied to student performance, and should continue to be researched.

#### Induction Year of Agricultural Education Teachers

Beginning agricultural education teachers' experiences are relatively similar (Joerger, 2002). Novice agricultural education teachers have indicated that joining the teaching profession is demanding (Greiman, Walker, & Birkenholz, 2005). The process of becoming socialized into the profession is one of the most difficult stages for agriculture teachers (Talbert, Camp, & Heath-Camp, 1994). Kardos and Johnson (2007) found that new teachers reported their work was solitary. Kirby and LeBude (1998) reported that beginning teachers were impacted the most by assistance strategies that included adequate materials, facilities that supported the curriculum, being reimbursed for continuing their education, and working in a positive climate.

Knobloch and Whittington (2002) found that novice teachers gained confidence as they received positive feedback and support. Wolf (2011) posited that a high sense of teacher self-efficacy could be important for beginning agriculture teachers' success and retention in the profession. Furthermore, Edwards and Briers (2001) found that new agricultural education teachers exhibited a stronger commitment to remaining teachers than did other new teachers. However, beginning agricultural education teachers are not prepared for socialization and isolation issues (Greiman, Walker, & Birkenholz, 2005;

Talbert et al., 1994) and they need help knowing how to deal with support group issues (Myers, Dyer, & Washburn, 2005).

Joerger and Boettcher (2000) described the forms of assistance beginning teachers received during their first year as an agricultural education teacher. They reported that during the early weeks of the new school year, new teachers had elevated levels of stress as well as moderate amounts of job satisfaction. They also concluded that selected forms of assistance and events could influence the initial year of teaching. Assistance in the forms of parental support, administrator feedback, planning time, classroom/teaching supplies, materials, as well as curriculum guides, were cited as having had a major impact for beginning teachers (Joerger & Boettcher, 2000; Kirby & LeBude, 1998).

According to Joerger and Boettcher (2000), beginning Minnesota agricultural education teachers often or always felt as though they were in control of the program, had respectful students, had self-confidence in their teaching, and experienced satisfaction from successful activities and seeing their students succeed in their classes. This shifting may be due to the pressure the new teachers' sense from the profession to perform at the same level of more experienced colleagues (Joerger & Boettcher, 2000).

Joerger (2003) also studied in-service needs of induction year agriculture teachers during the 2000–2001 school years. He found that new teachers had a great need for in-service training. They viewed the competencies they were presented with as “important for their survival and success” (Joerger, 2003, p. 11) and were somewhat competent in carrying out those competencies. Aligning with Nichols and Mundt (1996),

Joerger found the highest common needs for in-service education were program design and management, teaching, and classroom management. Joerger recommended each new cohort of induction year teachers be assessed for their needs (2003) because the needs of cohorts will change over time.

#### Attrition Factors

“There is widespread agreement among policy-makers in Canada, Australia, New Zealand, the United States, and the United Kingdom that early career teacher attrition is of economic, social, and educational concern” (Long et al., 2012). The average cost to recruit, hire, prepare, and lose a teacher is \$50,000 (Fulton, Yoon, & Lee, 2005).

Attrition is a serious problem and one that can have significant economic impact on school districts (Ingersoll, 2004; Epps, Foor, & Cano, 2009). Each year 15% of teachers change jobs, which is higher than most other professions (Fulton, Yoon, & Lee, 2005).

Teachers often change jobs for a variety of reasons. In a longitudinal study of 551 teacher candidates by Marso and Pigge (1997), 29% of the candidates transitioned into full time teaching. Fulton, Yoon, and Lee (2005) found that some established teachers leave due to personal reasons, decide to change careers, retire, or move to another school, which is counted as attrition in some circumstances. In a study conducted by the National Center for Educational Statistics (NCES), 26.2% of movers (teachers who still work in education, but not in the same school) in public schools left for personal reasons as compared to 16% of private school teachers (2010).

Other attrition factors studied by NCES in 2010 included non-renewed contracts, personal life factors, assignment factors, salary and benefits, classroom factors, school

factors, student performance factors, and “other” factors. Student performance factors and classroom factors were mentioned the least among teachers who moved or quit teaching (NCES, 2010). Thobega and Miller (2003) conducted a study and noted that poor administrative support was a major factor in why teachers left the profession. Unfortunately, “agricultural education literature provides little explanation of the factors that contribute to the teacher shortage” (Rocca & Washburn, 2005, p. 270).

Being an agricultural education teacher is demanding as well as challenging (Croom, 2003). Research continues to point to stress as a factor in attrition of teachers (Croom, 2003; McKim, et. al, 2012) as well as having a link to burnout. As the distance between public expectation for education and the teacher’s ability to provide that expectation, burnout will continue to be a concern for teachers (Croom, 2003). “Burnout is common among those who are unable to cope with extensive demands and pressure on their energy, time, and resources and those who require frequent contact with people” (Azeem, 2010, p. 36) and occurs in response to extended stress exposure in the work place (Azeem, 2010). Because of the extra demands of the job, agricultural education teachers are prone to burnout (Croom, 2003).

In an effort to curtail the number of teachers who leave the profession and to increase the job satisfaction of new teachers, organized induction programs are becoming more prevalent (Arends & Rigazio–DiGilio, 2000). “The benefits of superior teacher induction include attracting better candidates, reduced attrition, improved job satisfaction, enhanced professional development, and improved teaching and learning” (Howe, 2006, p. 287).



It is important to clarify that some confuse induction programs with mentoring programs and use the terms interchangeably, although incorrectly (Smith & Ingersoll, 2004). Induction programs often vary in quality due to who establishes the program and how much knowledge and expertise they have (Waters, 1988; Auen, 1990). As early as 1991, 31 states reported beginning teacher programs (Furtwengler, 1995).

High levels of attrition and low levels of teacher effectiveness have been associated with induction processes that fail to be organized and structured (National Commission of Teaching and America's Future, 1996). According to Huling–Austin (1988), the five goals an induction program could reasonably expect to accomplish for beginning teachers are: (a) improve teaching performance; (b) increase retention of good teachers; (c) promote professional and personal well-being; (d) fulfill the requirements of mandated state certification programs; (e) provide a means of sharing the culture of teaching.

The National Commission on Teaching and America's Future (NCTAF) (2005) found that induction was a stage in a continuum of teacher development, and it should help new teachers to enter into a learning community. NCTAF (2005) also found that induction is a good investment and that external networks supported with online technologies can help the induction process. Numerous studies related to induction-year agriculture teachers (Joerger & Boettcher, 2000; Joerger & Bremer, 2001; Joerger, 2000a; Joerger, 2000b; Joerger, 2003; Knobloch, 2002; Knobloch & Whittington, 2002; Greiman, Walker, & Birkenholz, 2005; Myers, Dyer, & Washburn, 2005; Talbert, et al., 1994) exist. However, studies within agricultural education literature which document

the efforts to measure induction-year teachers' perceptions to determine if they experience the stages posited by researchers such as Fuller (1969), Fuller (1974), Huberman (1989), and Moir (1999) are difficult to locate. Perhaps the state of agricultural education induction year research is best summed up by Tickle (2000) in that "... consistent failure on a systematic scale to find better arrangements than simply casting people into practice in the hope that practice will make them perfect has left provision mainly to chance ..." (p. 4).

### Theoretical Framework

The theoretical framework for this study rests in acculturation theory as defined by Redfield, Linton, and Herskovits (1936). "Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either of both groups" (Redfield, Linton, & Herskovits, 1936, p. 149). New teachers enter the culture of a new environment and will meet many new people who are different than they are. Furthermore, teacher induction has been deemed a socialization process (Greiman, Walker, & Birkenholz, 2005; Myers, Dyer, & Washburn, 2005; Talbert, et al, 1994). The first year of teaching has also been referred to in the literature as "reality shock" (Whiteside, Bernbaum, & Noble, 1969; Weinstein, 1988; Veenman, 1984). The shock an induction-year teacher goes through could be caused by unrealistic expectations (Weinstein, 1988; Joerger & Boettcher, 2000). There are some similarities with a new teacher walking into a classroom full of new students the first day of class and a traveler arriving to a new foreign destination.

Though acculturation usually pertains to immigrants arriving in a new country, it was chosen as appropriate for this study. Tickle (2000) suggested induction year teachers view the process of induction as school-based acculturation and assessment of performance. He said that the induction process means that the new teacher will be assimilated into existing conditions that could potentially clash with their “identities, ideals, and ambitions as members of the new graduate force in education” (p. 7). He later argued that new teachers, who may be at their very best, will still go through a period of “negotiation and adjustment” (p. 7). Howe (2006) called for a gradual “acculturation” (p. 292) into the teaching profession accompanied by a structured and well-supervised clinical induction period.

It is widely accepted that some type of progression exists in relation to teachers. The conceptual basis for this study is that teachers experience stages. What those stages or phases (Moir, 1999) are remains to be seen for agricultural education teachers. Additionally, the research that discusses if teachers experience stages (Fuller, 1969; Fuller, Parsons, & Watkins, 1974; Huberman, 1989; Moir, 1999) provides a well-defined frame to investigate the phenomena of first-year induction teaching.

### Conceptual Framework

Fuller (1969) studied student teachers and their stages. She conceptualized that student teachers had two types of concerns: benefit to self and benefit to students. The student teachers moved from being concerned about class control, subject matter adequacy, finding their place in the school, and meeting external expectations to being concerned about student learning, progress of students, and how to implement more

opportunities for student progress (Fuller, 1969). Fuller said, “teachers who retain early concerns [self] may drop out of teaching” (p. 218). The question was whether the phases observed in her study would hold true for college professors, school administrators, and people who did not teach.

Fuller, along with her colleagues, (1974) felt that these stages were too narrow and studied preservice teachers again. In a study of 1,359 teacher-concern statements collected by using the TCS instrument, factor analysis substantiated that preservice teachers are more self-focused and in-service teachers are more student-focused (Fuller, Parsons, & Watkins, 1974). Fuller, Parsons, and Watkins (1974) initially posited a sequence of “R, A, L, T, N, and E” (p. 38). [R = Concerns about Role; A = Concerns about Adequacy; L = Concerns about being Liked; T = Concerns about Teaching; N = Concerns about student Needs; E = Concerns about Educational improvement].

It was initially thought that the teachers moved through the sequence. Upon further examination and analysis, it was posited there should be three stages of teacher concern; *R+A*; *T*; and *N*. These stages later became identified as *self*, *task*, and *impact* as the three major phases of development for education students and teachers (Waters, 1988). Others later substantiated their work (Kirby & LeBude, 1998; Greiman, Walker, & Birkenholz, 2005). Greiman, Walker, & Birkenholz reported new teachers realized during their first year they were an “important and central” (p. 103) figure for students.

Although their research on teacher stages was important, Fuller, Parsons, and Watkins (1974) had concerns about the limitations of the Teacher Concerns Statement Instrument (TCS) as well as the coding of the statements. Readers were admonished to

not accept the face value of the findings, but rather take it as a further substantiation of the findings in Fuller (1969).

Fuller, Parsons, and Watkins called for the development of a “structured instrument which has better psychometric properties than does the TCS” (1974, p. 44). Additionally, Fuller, Parsons, and Watkins (1974) forewarned that developing items about self-concern, teaching concern, and student concern would be an obstacle due to the social desirability of those constructs. They said that if teachers were given the choice to select the type of concern, the teachers would want to choose them all and what they chose from a list would not be the same as what they spontaneously wrote down.

Fuller, Parsons, and Watkins (1974) recommended that preservice teachers be given “survival training” (p. 46) lectures. They gave attention to the notion of tailoring teacher education programs to the needs of the students. They recognized that all new teachers are different, yet many of them have the same general needs. Research-driven teacher-education programs were alluded to by the authors through an analogy of a suit. They suggested that research-driven practices (survival-training lectures, etc.) may not be needed by all teachers however, a “size 42 suit fits a size 42 man, not perfectly, but better than a randomly selected suit—or lecture—does” (p. 46). Fuller, Parsons, and Watkins (1974) believed such prescriptive training would be useful as soon as the preservice teachers first had contact with teaching; at such time is when survival concerns seem particularly intense. They called for teacher-education programs to

continue to offer the “sophisticated substance of professional education” (p. 47) during the in-service years.

Though Fuller and colleagues devoted substantial resources to studying preservice and beginning teachers, Huberman (1989) approached teacher-developmental research from a broader spectrum. Huberman (1989) proposed that the career of a professional teacher is sectional in concept, dichotomous in application, and the final stage is the end of the career. All teachers may not fulfill the stages of the teacher career. According to Huberman, some teachers progress and others may regress (1989). The career stages he proposed were Survival and Discovery, Stabilization, Experimentation/Activism, Serenity, Conservatism, and Disengagement. Research suggests (McCormick & Barnett, 2006) that career stages are not linear but cyclical. Huberman (1989) as well as McCormick and Barnett (2006) believed that career stages are not static nor do people experience all stages. Some teachers may even regress or never progress past certain stages.

As we look deeper into the phenomena of teacher career cycles, attitude toward a job could play an important part later in the career cycle. Huberman (1989) said that once teachers pass the “stabilization” stage, they would enter either the “activism” stage or the “self-doubts” stage. Teachers in the activism stage have become better teachers and have experience to back up their actions (Huberman, 1989). These teachers tend to be focused on increasing their impact and often work to change school/district policies they view as flawed. On the other hand, teachers who are in or move to the reassessment/“self-doubts” phase are often dissatisfied because of a sense of routine;

they are often unsettled about leaving or staying in the profession (Huberman, 1989). In both of these scenarios, Huberman conceded that both phases may result in “stock-taking” (1989, p. 35) and the realization that the opportunity to change careers may be missed if one does not act quickly.

Serenity/relational distance and conservatism are two phases of the teaching career cycle that are not reached by many teachers due to the fact that 50% of teachers never continue past year five (NCTAF, 2005). As teachers are approaching the latter part of their career, they exhibit self-preservation behaviors. However, bitterness is often associated with “conservatism” and self-acceptance attitudes with “serenity” (Huberman, 1989). Teachers who are in the conservatism phase will blame the students for the problems and become very critical of outside forces such as the public, administrators, and parents (Huberman, 1989). Inversely, serenity positioned teachers will not worry too much about issues out of their control and will distance themselves (in a non-bitter way) from the students. Though both stages eventually lead to total disengagement, two teachers, one in the serenity area and one in the conservatism camp, will get to the end of their career and be either positive or negative, respectively, about their career.

As teachers enter their first year of teaching, regardless of their preparation, it seems plausible the teacher would experience many new events and situations that could cause a fluctuation in attitudes. Those attitudes, Huberman said, can change over the course of a career. Furthermore, based on Huberman’s (1989) theory, the respondents should all be in the first stage of the model, “Survival and Discovery.” Burris, McLaughlin, McCulloch, Brashears, and Frazee (2010) suggested that teachers in

Huberman's survival and stabilization phases were in two of the most critical phases related to retention of teachers. Though Huberman looked at the overall stages that career teachers move into, Steffy and Wolfe (1997) proposed a different model of teacher development.

Steffy and Wolfe (1997) used information from the literature and personal experience to posit a six-stage model (Figure 1). Their model assumes that the teacher is a committed teacher. The stages overlap, vary in levels of content knowledge, and last the entire career. The six stages were novice, apprentice, professional, expert, distinguished, and emeritus. It is important to clarify that six assumptions underlie their model. Joerger (2002) helped clarify these assumptions.

Teachers desire to improve their skills. Preparation, school contexts, personal attributes, and systems of support affect development. Inquiry about teaching encourages learning among teachers and students. Levels of teaching influence are affected by the ability of the teacher to learn and complete scholarly work, and their commitment to growth. The context of the teaching environment affects professional growth and/or separation. Excellence in teaching is achieved through caring for students, self, ideas, and the profession (Joerger, 2002, pp. 4–5).

Given these assumptions, Joerger (2002) contextualized the stages for agricultural education relevancy. A teacher progresses through the stages if the conditions of the assumptions are met. All students pass through the novice teacher stage if they enter an autonomous classroom. However, Joerger pointed out disillusionment



with the “heavy demands of the profession ... changes in career development and their adult roles cause many apprentice teachers” (p. 4) to leave the profession. To help alleviate the attrition that happens during the apprentice period, Joerger proposed individualized interventions and programs for support of the new teachers.

Steffy and Wolfe (1997) proposed that teachers move from apprentice teachers to professional teachers, to expert teachers, and to distinguished teachers (Figure 1). All teachers in these stages are well regarded and focus on bringing a wider educational impact to their students. They also participate in the local, regional, state, and/or national leadership roles. The culmination of the teaching career is the advancement into Emeritus status and is characterized by individuals who “have left a mark upon the profession after a lifetime in the profession” (Joerger, 2002, p. 5).

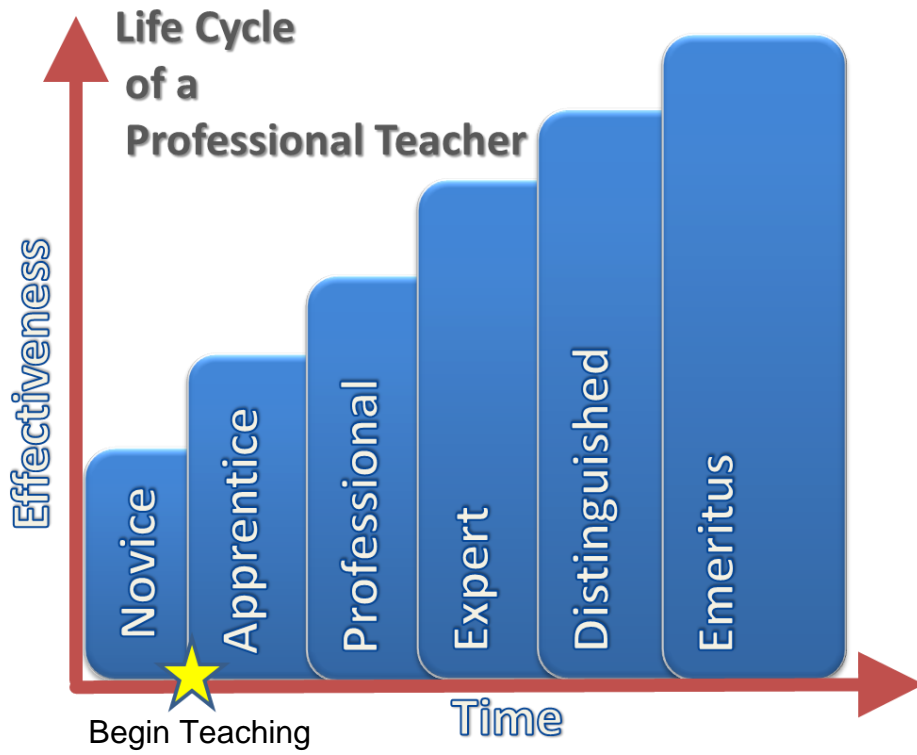
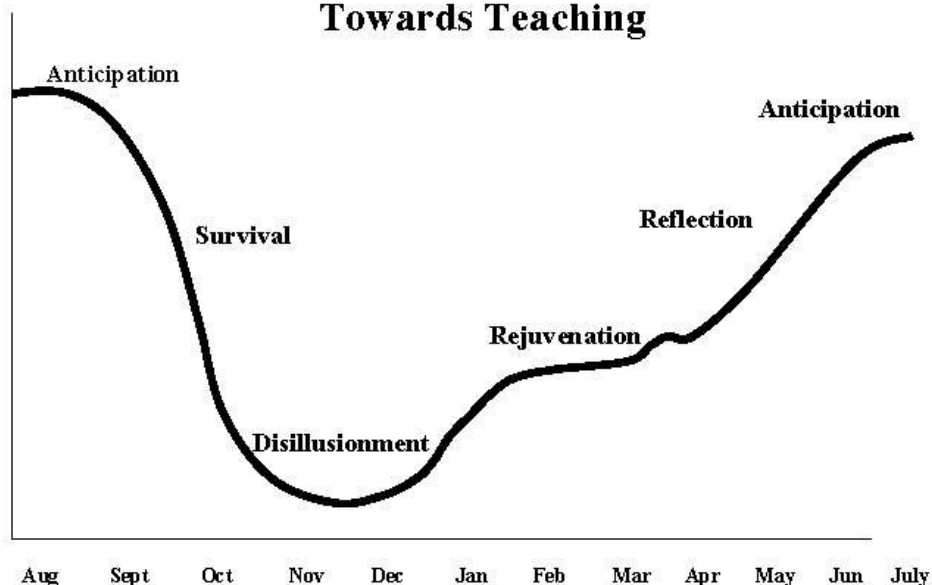


Figure 1. Life Cycle of a Professional Teacher. Adapted from: The life cycle of the career teacher: Maintaining excellence for a lifetime. (Steffy & Wolfe, 1997).

## Phases of First Year Teacher's Attitudes Towards Teaching



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Figure 2. Phases of First Year Teacher's Attitudes Toward Teaching. (Reprinted with permission, Ellen Moir, 2012)

Moir (1999) worked with 1,500 new teachers in California and took excerpts from their journals and program evaluations in an effort to understand what new teachers go through during their first year. She placed these excerpts into themes and proposed six distinct phases of teacher attitudes toward teaching. After analysis, she took the phases induction-year teachers went through and placed those stages in a linear fashion that corresponded with the school year (Figure 1). After analyzing 1,500 teachers'

journal entries, she published her findings and laid the foundation for understanding the induction year of teachers.

Moir (Figure 2) proposed that first year teachers move from *Anticipation*, *Survival*, *Disillusionment*, *Rejuvenation*, *Reflection*, and back to *Anticipation*. She that not every teacher goes through all of the phases in the same order, however most will experience the stages during their first year.

The anticipation phase actually begins during the student teaching part of teacher preparation and climaxes as school starts. Idealistic views of the profession (Moir, 1999) and perhaps unrealistic expectations can lead to a new teacher experiencing this phase (Weinstein, 1988; Joerger & Boettcher, 2000). The idealistic views will help get the new teacher through the first few weeks of school (Moir, 1999). However, the literature suggests that, despite the efforts of teacher education programs, beginning teachers will be caught off guard by the realities of teaching (Moir, 1999). “New teachers sometimes report being taken by surprise—ambushed even—by situations in which they feel inadequately prepared for judicious action” (Tickle, 2000, p. 13).

Many teachers enter the survival phase of their careers. The overwhelming bombardment can cause teachers to feel as though they are barely surviving and have little time to reflect on their experiences (Moir, 1999). Many new teachers spend up to 70 hours per week on school-related work (Moir, 1999), which leaves little time for reflection, an essential component of experiential learning theory (Kolb, 1984). Fortunately, first year teachers are able to maintain energy and commitment because of

the hope they harbor for the turmoil to subside. Most teachers will enter another phase due to the stress and become disillusioned (Moir, 1999).

The disillusionment phase may be one of the hardest obstacles for a new teacher to overcome (Moir, 1999). New responsibilities, long hours, stress, and nonstop work compound so much that many first year teachers get sick and become disillusioned. Intense situations such as back-to-school nights, formal evaluations, and parent conferences can sometimes adversely affect the teacher who may already be suffering from damaged self-esteem (Moir, 1999) and low teacher efficacy (Knobloch & Whittington, 2002). Agricultural education teachers may experience this earlier in the year than other teachers because they tend to spend more time at work and have, as a whole, more duties to manage (Murray et al., 2011; Bennett et al., 2002) than other teachers, including a total program (Roberts & Dyer, 2004). Additionally, teachers may have family and friends who are beginning to demand more time of them (Moir, 1999), which causes additional stress.

Moir found that having a winter break can make a tremendous difference for new teachers and allow them to have somewhat of a normal lifestyle again while regaining some lost appreciation for the profession (1999). The rejuvenation phase is characterized, usually, by some reflection as well as some abstract conceptualization (Kolb, 1984) for dealing with the remainder of the school year (Moir, 1999). New teachers will generally finish the majority of the year on a positive note because they have a better grasp of expectations and have devised a plan to conquer the rest of the year.

As formal instruction concludes for the first year teacher, teachers have a chance to reflect over the year and begin to develop a plan for the next year (Moir, 1999). As the plan continues to be developed for the upcoming school year, anticipation begins to build once again inside the new teachers as they prepare. It is possible that some teachers will reflect and not want to continue in the profession, however, recognizing the phases new teachers go through will serve as a framework for designing support programs to help make the first year of teaching better (Moir, 1999). In an attempt to understand better what happens to an agricultural education teacher, Lawrence (2012) proposed the following theoretical framework integration, Figure 3.

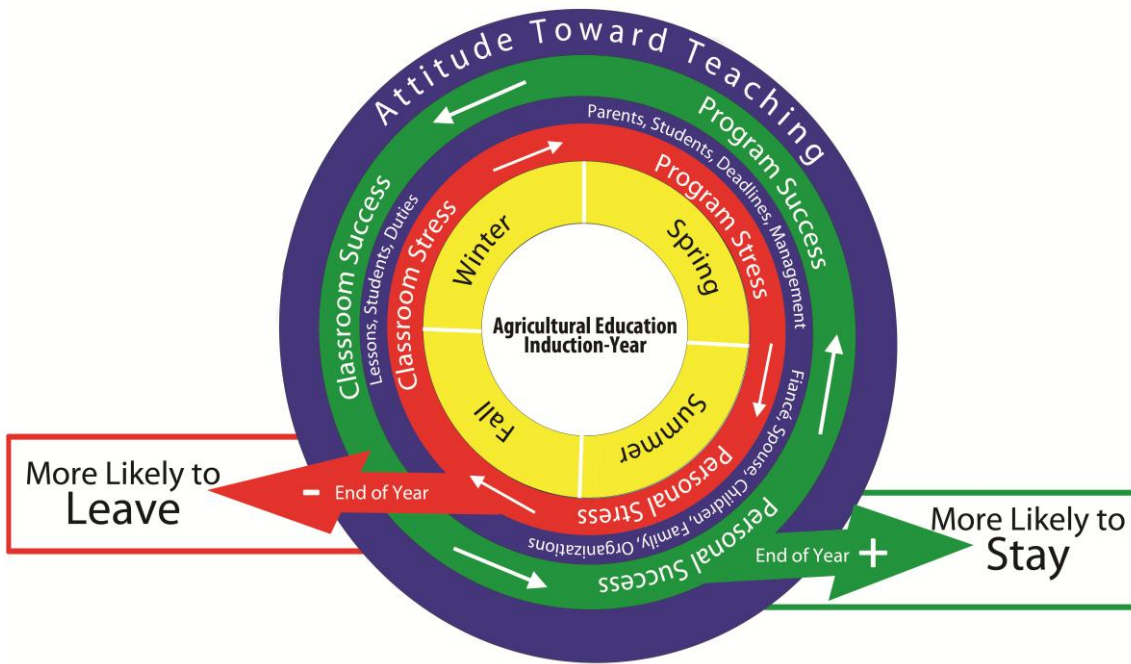


Figure 3. Conceptual model for the induction-year of agricultural education teachers in Texas, Oklahoma, and New Mexico.

Based on this model, Huberman (1989), Steffy and Wolfe (1997), Fuller (1969), Fuller, Parsons, and Watkins (1997), and Moir (1999) all contributed to the structure of the first year of being an agricultural education teacher. Stresses or successes can begin immediately once the teacher starts the new job. Teachers who have a good attitude toward teaching could take longer or, perhaps, never develop a negative attitude about the career. Stresses and successes are sure to have an impact on the attitude toward teaching. First year agricultural education teachers must mitigate normal classroom instruction and other duties that teachers are required to fulfill. Roberts and Dyer (2004) posited that the model for effective teaching in agricultural science included instruction, FFA, supervised agricultural experience (SAE), developing community partnerships, program marketing, professional growth, planning the program, and personal qualities. These extra duties could be sources of stress or success, depending upon how well the new teacher is able to meet each area's requirements.

#### Induction Year Self-Assessment Development

Psychometric theory also guided the objectives of the study. Psychometrics allows researchers to measure concepts indirectly rather than through physical characteristics (Nunnally, 1967). Utilizing psychometrics can be an efficient means to developing an assessment tool. Furthermore, "when proposing a new measure, it is important to clearly qualify and quantify the properties of the concept, thereby providing the rules of the measure and the mechanism to establish validity and reliability" (McKim, Lawver, Enns, Smith, & Aschenbrener, 2012, p. 4). Ferketich (1991) admonished researchers to use as few items as possible and still be able to produce a

psychometrically sound instrument. For the purposes of this study and the development of the proposed instrument, Moir's Theory guided the construct development process.

Moir's theory (1999) provided the basis for establishing reliable constructs for the instrument. Factor analysis was used to assess Moir's theory because "factor analysis is useful in developing and assessing theories" (Tabachnick & Fidell, 2013, p. 26).

Although several constructs constitute stages of an induction year, each of these constructs were evaluated individually and combined to form an overall appraisal of the situation the constructs constitute (Nunnally, 1967). Moir's theory revolves around the attitude of first year teachers toward their job.

Katz (1960) defined attitude as "the predisposition of the individual to evaluate some symbol or object or aspect of his world in a favorable or unfavorable manner" (p. 168). Schipor and Bujor (2011) evaluated student's attitudes toward becoming a teacher and believed that attitude toward teaching was actually a "complex of attitudes" (Schipor & Bujor, p. 281, 2011) instead of one construct. Attitude toward teaching should be a combination of multiple attitudes according to research conclusions.

### Summary

Teacher induction is important. Relevant literature pertaining to the induction year of teaching and the differences of that year for agricultural education teachers was discussed. Contributing factors to teacher attrition and the common causes specific to agricultural education teachers were discussed. The theory of acculturation was used to establish a theoretical framework for the study. Conceptually, the study was framed by the work of Fuller (1969), Fuller, Parsons, and Watkins (1974), Huberman (1989), Steffy



and Wolfe (1997), and Moir (1999). Furthermore, psychometric theory (Nunally, 1967) was used to establish the validity of creating an instrument to test Moir's (1999) theory based on the perceptions of induction-year agricultural education teachers.

Although agricultural education literature yielded some studies that used theorists to examine induction-year teachers (Burris, McLaughlin, McCulloch, Brashears, & Frazee, 2010; Joerger, 2002b), no studies were found that sought to develop an instrument to measure induction-year teachers' attitude toward teaching. Given the absence of literature on instruments used to measure new teachers' attitude toward teaching, the researcher worked to develop an instrument to test the theory of Moir (1999) in relation to induction-year agriculture teachers.

## CHAPTER III

### METHODS

Several studies (Burriss, McLaughlin, McCulloch, Brashears, & Frazee, 2010; Fuller, 1969; Joerger, 2002; Moir, 1999; Ritz, Burriss, Brashears, & Frazee, 2010) of induction-year teachers have been conducted. However, working to develop an instrument, and analyzing the first year of teachers, in a multistate cohort of agricultural education teachers was beyond the scope of those studies. To accomplish the purpose of this study, the researcher followed research methodologies recommended by Frankel and Wallen (2009), Tabachnick and Fidell (2013), and Dillman, Smyth, and Christian (2009). Once data collection concluded, factor analysis was employed to confirm the constructs proposed by Moir (1999). The original instrument was composed of 66 items intended to measure induction-year teachers' attitude toward teaching. Due to the large numbers of variables, factor analysis was chosen as the proper technique to employ. "Factor analysis is a technique that allows a researcher to determine if many variables can be described by a few factors (Frankel & Wallen, 2009, p. 334). The design of the study, population and sample, consent documents, instrumentation, data collection, and data analysis and interpretation procedures are discussed in this section.

#### Purpose and Objectives

The purpose of this study was to describe and analyze the induction-year of agricultural education teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year. The following objectives guided this study:

1. Assess the factor-analytic and psychometric properties of attitude toward teaching based on the perceptions of induction-year secondary agricultural education teachers.
2. Using the outcome of research objective one, determine if differences existed between longitudinal measures of attitude toward teaching.
3. Determine if demographic characteristics (*age, gender, time, marital status, level of educational attainment, presence of children, number of teachers in the department, and intended years to teach*) of induction-year agricultural education teachers are significant predictors of attitude toward teaching.
4. Determine if induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico experience stages as proposed by Moir (1999).

### Research Design

This descriptive study was a longitudinal, between-groups design. Cohort members were all induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico during 2011—2012 school year. All induction-year agricultural education teachers employed in three states ( $N = 125$ ) were the accessible population of the study. The overarching construct proposed for measurement during this study was attitude toward job. Attitude toward job is considered intangible and not directly observable (Ary, Jacobs, Razavieh, & Sorenson, 2006). Indirect measures of new teachers' attitude toward teaching were obtained through questionnaires based on teacher perception.

Attitude toward teaching was the dependent variable, and was measured at six different points in time using a researcher-designed instrument based on Moir (1999). Independent variables collected were *age, gender, time, marital status, level of educational attainment, presence of children, number of teachers in the department, and intended years to teach*. The Tailored Design Method (Dillman, Smyth, & Christian, 2009) was used to administer the researcher-designed instrument to the cohort members. Respondents self-administered the 76-item instrument, which consisted of 66 Likert rating scale items, four multiple-choice response demographic items (single answer), three completion items, and three open-ended completion items.

Factor analysis was employed to test the factors of Moir's theory. Quantitative data analysis techniques were used to analyze the data collected from respondents. Quantitative data were summarized and examined using frequencies, percentages, means, standard deviations, factor loading, correlations, and interitem correlations as deemed appropriate.

### Population and Sample

The population of interest was all induction-year agricultural education teachers in Texas, New Mexico, and Oklahoma during the 2011–2012 school year. According to Fraenkel, Wallen, and Hyun (2012), investigators can use personal judgment for sampling, based on previous knowledge of a population, and the specific purpose of the research. A census was attempted on the accessible population with random assignment of half of the participants to each round. The first year teacher population was accessed with the assistance of the state teacher education program(s), State Career and Technical

Education Supervisors, and the agricultural education teacher associations. One hundred twenty-one teachers taught in high school agriculture programs and four teachers taught at middle school agricultural education programs. One hundred twenty-five teachers ( $N = 125$ ) were randomly assigned to groups using SPSS V.19 three times. It was not clear how many people became employed after the study began, and it is possible that there were some late hires. Therefore, sampling frame error may exist.

### Sampling

All induction-year teachers were alphabetized and assigned a respondent identification number from 1 to 125. Using SPSS 19, 62 random numbers were generated. Numbers generated that corresponded to the individual respondent identification numbers were assigned to group "A." Induction-year teachers not randomly assigned to group "A," were automatically assigned to group "B." This yielded  $n = 62$  for group "A" and an  $n = 63$  for group "B." This process was repeated three times, resulting in three rounds with two groups per round ( $N = 375$ ).

At the conclusion of the study, the overall response rate was 52.5% with 197 responses to the instrument. Round 1A had a response rate of 50.0%. Round 1B had a response rate of 55.6%. Round 2A had a response rate of 41.9%. Round 2B had a response rate of 55.6%. Round 3A had a response rate of 61.3%. Round 3B had a response rate of 50.8%. Table 1 illustrates the response rate for each round using mixed modes of instrument delivery (Dillman, Smyth, Christian, 2009). Method of delivery included mail and Web questionnaires in an effort to alleviate potential nonresponse error. Response rates for the two modes of contact are represented in Table 1.

Table 1

*Response Rate of Induction-Year Teachers (N=197)*

Induction Round	<i>f (paper)</i>	<i>f (web)</i>	%
Round 1A	11	20	50.00
Round 1B	7	28	55.56
Round 2A	10	16	41.93
Round 2B	7	28	55.56
Round 3A	6	32	61.29
Round 3B	9	23	50.79
<b>Overall</b>	<b>50</b>	<b>147</b>	<b>52.52</b>

Consent

A description of the proposed research and a copy of the instrument in its final form were submitted, to the Human Subjects' Protection Program at Texas A&M University on May 25, 2011. The data collection process began following final approval of the Institutional Review Board on August 15, 2011. (Protocol Number: 2011–0525), and the researcher followed the requirements and specifications within the IRB agreement application.

Included with the mailed and e-mailed instruments were personalized cover letters (Dillman, Smyth, & Christian, 2009) informing (Appendices C&D) participants of their rights based on the Human Subjects' Protection Program. Participants were urged to complete the instrument, but were informed of their rights should they choose

not to participate in the study. All participants received instructions on how to withdraw from the study at any time. Participants were reassured they would not lose any rights and privileges with Texas A&M University, Oklahoma State University, Texas Tech University, or New Mexico State University by answering all questions objectively.

### *Instrumentation*

The researcher contacted 20 experts in the fields of agricultural education teacher preparation, instrumentation, methodology, and assessment to assist in developing an instrument for this study to test Moir's theory. According to Moir (1999), induction-year teachers experience the emotions of *anticipation*, *survival*, *disillusionment*, and *rejuvenation* during the course of their first year. These constituted the constructs for the instrument development. Identifiers from each phase described by Moir (1999) were used to develop potential items to measure the attitude of participants based on their perceptions of the statements. During the developmental phase, numerous items were separated to eliminate multiple component questions, reducing sources of measurement error.

Items developed were based on the review of literature, Moir (1999), and the experts' experiences. Four rounds of instrument revision were completed using e-mail, phone, and face-to-face contact. The resulting instrument was a 76-item questionnaire (Appendix A).

The design and format of the instrument was modified based on recommendations by Dillman, Smyth, and Christian (2009). The questionnaire was originally designed for paper format and then converted to a Web-based survey. Section

one utilized 66 items in a Likert-type, summated scale, ranging in value from one to five, to assess the five constructs posited by Moir (1999). The associated Likert-type scales comprised five anchors: 1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree nor Disagree; 4 = Agree; 5 = Strongly Agree.

The demographic section comprised seven items; *In what year were you born? What is the highest degree you possess? Are you currently pursuing an additional degree? Which of the following best describes your family situation? Do you have children? How many agriculture teachers are there in your department (including you)? Including this year, how many years do you intend to teach?*

Sixty-six items were developed to assess attitude toward teaching. Experts in the field of agricultural education provided feedback for revisions of the constructs. The following items were developed to assess each phase proposed by Moir (1999). Construct one (anticipation) was assessed by six items. Eleven items assessed construct two (survival). Twenty-one items assessed construct three (disillusionment). Fifteen items measured construct four (rejuvenation). Thirteen items measured construct five (reflection).

#### Measurement Error

Measurement error can, at best, be minimized. This instrument was designed to be a self-reporting instrument. Ary, Jacobs, Razavieh, & Sorenson state that an instrument “can be reliable without being valid; but it cannot be valid unless it is first reliable” (2006, p. 256). The researcher developed the questionnaire based on Moir’s (1999) theory. The data from Moir were qualitative in nature, and collected from the



journals of nearly 1,500 new teachers (nonagricultural education teachers). Therefore, validity and reliability must be addressed.

### Validity and Reliability

The panel of agricultural education experts, including agricultural education teachers, assessed the instrument for content and face validity. The final instrument consisted of 76 items. Cronbach's alpha coefficient was used to assess the reliability of the instrument and the constructs post hoc. Cronbach's alpha was calculated using SPSS V.20. According to Fraenkel, Wallen, and Hyun (2012), Cronbach's alpha coefficient is appropriate for calculating the reliability of items, and was used to determine if the instrument was a reliable and internally consistent tool for measuring "attitude toward teaching" for first year agricultural education teachers. The researcher selected the option in SPSS v.20 to determine the alpha level if each item was removed. Removing items did not improve the alpha level of each construct, or the summated scale. Each alpha level is reported in Table 2. The overall instrument reliability was  $\alpha = 0.88$ .

Table 2

<i>Alpha Level of Summated Attitude Scale Items</i>		
Construct	# of items	$\alpha$ level
1	6	.88
2	6	.82
3	6	.80
4	5	.80
5	4	.84
6	7	.82
7	4	.77
8	3	.63
9	4	.65
<b>Instrument</b>	<b>45</b>	<b>.88</b>

Cronbach's alpha coefficients were calculated for all nine scales—constructs one through nine—yielding coefficient estimates of reliability within the acceptable range. According to Field (2009), alpha coefficients of 0.80 or higher are considered to be acceptable. However, constructs 7, 8, and 9 were below that threshold. According to Nunnally (1975), alpha levels of 0.7 are considered to be adequate for psychometric analysis. Constructs 8 and 9 remained a concern with alpha levels below 0.70 (Nunnally, 1975). Steers and Braunstein (1976) developed a five-item questionnaire to measure respondent's need for achievement. They reported an alpha level of 0.61 and was used in other studies consistently (Goulet & Singh, 2002). Mirels and Garrett's (1971) instrument, Protestant Work Ethic (PWE), had an alpha level of 0.76. Hackman and Oldman's (1974) reported an alpha level of 0.76 for their Job Diagnostic Survey. These

were reported for total instrument reliability. Only two constructs fell below 0.70. The overall reliability coefficient for the instrument was 0.88.

### Validity

The stages proposed by Moir (1999) served as the constructs for the instrument to be tested. Questionnaire items were developed by a panel of land grant university, agricultural education faculty. Once the initial items were formulated, a panel of 20 experts reviewed the items to determine content and face validity. The instrument was deemed to be appropriate for agricultural education teachers by all experts after four rounds of revisions. Upon conclusion of the review, the items were loaded into Qualtrics® and into a paper Scantron® form.

Mortality was expected to occur in this study (Fraenkel, Wallen, & Hyun, 2012). One teacher resigned during the course of the study. The researcher did not follow up with respondents who dropped out of the study. The researcher assumed a common cause of mortality was deciding not to return to the classroom.

### Induction-Year Agricultural Education Attitude Phases Instrumentation

Section 1 questions pertained to the factors affecting attitudes toward teaching as proposed by Moir: anticipation, survival, reflection, disillusionment, and rejuvenation. Constructs one through five assessed first year teachers' attitude toward teaching by asking their level of agreement with 66 factors related to attitude toward teaching. Five anchors were associated with the scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree nor Disagree; 4 = Agree; 5 = Strongly Agree. Some items were reverse coded.

Section 2 collected selected demographic information from the respondents. The data gathered comprised year born, highest level of education, pursuing an additional degree, family situation, presence of children, number of teachers in the department, and intended number of years to teach.

Section 3 contained open-ended questions about successes, challenges, and general comments about each round. Respondents could write or type their responses. Not all respondents chose to answer the open-ended response questions.

#### Data Collection Procedures

Data collection occurred via a mixed mode design following Dillman, Smyth, and Christian's Tailored Design Method (2009) to reduce error due to coverage and non-response. A minimum of five compatible points of contact were used for each round: prenotice postcard; cover letter, questionnaire, and a postage paid, self-addressed return envelope; an e-mail invitation with a cover letter and link to the survey; one reminder; one follow-up "Thank You." The Tailored Design Method was important because of the flexibility it provided to accommodate the "particular population being surveyed" (Dillman, Smyth, & Christian, 2009, p. 37) and the events occurring during the predetermined contact dates. No incentives were used. However, personalized postcards, letters, e-mails, and thank you notes were issued as suggested in Dillman, Smyth, and Christian (2009). All paper mailings were sent via the United States Postal Service and electronic contacts were delivered through Qualtrics.

Initial contact with each group was via a prenotice postcard with individual survey links on each card. Group 1A was initially contacted on August 23, 2011 in an

effort to ensure that the majority of the participants were in school. Group 1B was contacted October 7, 2011. Group 2A was contacted November 26, 2011. Administering an instrument during this time posed a threat to internal validity due to the events that occur leading up to and during Winter Break. It was important to measure the teachers during this time because Moir (1999) specifically mentioned the importance of Winter Break for teachers. Group 2B was contacted January 11, 2012. Group 3A participants was contacted February 29, 2012. Group 3B was contacted May 2, 2012. Data were collected from each round for 30 days.

The addresses of teachers were checked for accuracy prior to mailing of any contact. When feasible, school e-mail addresses were used for contacting the teachers with the electronic cover letter and survey to reduce coverage error as described by Dillman, Smyth, and Christian (2009).

Teachers were assigned to a spreadsheet that corresponded to their group (A or B) and round (one, two, or three) to facilitate participant response. An “E” or a “M” beside each respondent signified if the response was by electronic or postal mail survey, respectively. Dates of responses were recorded to facilitate addressing nonresponse error.

Nonresponse error was addressed following Method 2 as described by Lindner, Murphy, and Briers (2001). Due to the limited sample size of each round, the researcher determined to use days to respond as a regression variable. Lindner, Murphy, and Briers (2001) noted, “if the regression model does not yield statistically significant results, it is assumed the nonrespondents do not differ from respondents” (p.52). For this study, days

to respond was not a significant predictor of score ( $p = .566$ ). It is assumed that there were no differences between respondents and non-respondents. However, such assumptions should be approached with caution given the relatively low response rate.

### Data Analysis

The data analysis occurred in two phases. All quantitative analyses were conducted using SPSS® version 20 for Windows platform computers. Phase one consisted of describing the population of first year agricultural education teachers in terms of selected demographic variables through frequencies and percentages and in means and standard deviations as appropriate. Phase two involved validating the constructs of the induction-year questionnaire using exploratory factor analysis as described by Field (2009). Further description of the data analysis procedures employed will be included later in this chapter.

#### *Phase One*

Frequencies and percentages and means and standard deviations were used to describe the respondents of the study. Variables of interest were age (to be determined by birth year), highest degree earned, seeking an additional degree, family status (never married, engaged, married, separated, divorced, divorced/remarried, widowed, other), existence of children, number of agricultural teachers (including the respondent), and number of intended years of teaching.

#### *Phase Two*

Exploratory factor analysis as described by Field (2009) was used to determine if the participant's attitudes toward teaching varied during time of year and construct. It

was expected, based on Moir (1999), that a teacher should experience multiple stages of attitude toward teaching throughout their first year. Limited research has been done on the attitude toward teaching of first year teachers in relation to induction year stages. Fewer studies have been conducted with induction-year agricultural education teachers.

Responses to the Induction-Year Questionnaire (Appendixes A and B) variables were loaded into factors. Loadings were expected to be “above 0.4 when you ignore the plus or minus sign” (Field, 2009, p. 669). Those factors formed grouped to form constructs. If Moir (1999) applies to induction-year agriculture teachers in Texas, Oklahoma, and New Mexico, the mean scores for the respective factors/constructs should be statistically different, each round, as the year progresses. When the scores are graphically represented, the graph will be either similar or different than the one proposed by Moir (1999).

Furthermore, the factor analysis was used to “construct a questionnaire to measure an underlying variable” (Field, 2009, p. 628). According to Thompson (2004), factor analytic methods can be used to help confirm score validity when a measure has been developed. Furthermore, factor analysis can be used to “develop theory regarding the nature of constructs” (Thompson, 2004, p. 3).

The 66 scale items from the questionnaire were included in the principal component analysis (PCA) with varimax rotation; coefficients with an absolute value less than 0.45 were suppressed. The Kaiser–Meyer–Olkin (KMO) of sampling adequacy was 0.787 and Bartlett’s test of sphericity was significant ( $p < 0.001$ ). Field (2009) suggested a KMO should be above 0.5 to be considered acceptable for factor analytic

procedures. Furthermore, Bartlett's test needs to be significant because it means there is a correlation matrix and not an identity matrix (Field, 2009).

Number of items, Eigenvalues, percentages, and cumulative variance levels are reported in Table 3. Factor loadings from the PCA and varimax rotation are reported in Table 4.

Table 3

*Number of items, Eigenvalues, Percentages of Variance, and Cumulative Percentages, and Number of Responses Per Construct.*

	Items	Eigenvalue	% of variance	Cumulative %	<i>n</i>
Construct 1	6	4.678	7.088	7.088	188
Construct 2	6	3.964	6.007	13.095	187
Construct 3	6	3.914	5.931	19.025	183
Construct 4	5	3.718	5.633	24.659	182
Construct 5	4	3.584	5.430	30.089	182
Construct 6	7	3.572	5.412	35.501	179
Construct 7	4	2.868	4.345	39.846	187
Construct 8	3	2.843	4.308	44.154	180
Construct 9	4	2.782	4.216	48.370	176



Table 4

*Construct Loadings from Principal Component Analysis with Varimax Rotation*

Item	Loading
<b>Construct 1: Professional Efficacy</b>	
I am bombarded with a variety of situations I didn't anticipate. <sup>R</sup>	.811
I am bombarded with a variety of problems I didn't anticipate. <sup>R</sup>	.809
My work is always stressful. <sup>R</sup>	.699
I am overwhelmed by my teaching job. <sup>R</sup>	.653
Things are not going as smoothly as I would like. <sup>R</sup>	.590
I can barely keep my "head above water." <sup>R</sup>	.559
<b>Construct 2: Balanced Reflection</b>	
I often think about those events that were not successful because of my teaching strategy.	.764
I often think about those events that were not successful because of my management.	.748
I often think about those events that were not successful because of my curriculum.	.724
I often think about those events that were successful because of my teaching strategy.	.664
I often think about those events that were successful because of my curriculum.	.579
I often think about those events that were successful because of my management.	.560
<b>Construct 3: Professional Commitment</b>	
I sometimes question if I want to be a teacher. <sup>R</sup>	.824
I am excited about being a teacher.	.728
I am very committed to being a teacher.	.620
My morale is sometimes low. <sup>R</sup>	.575
The end of the semester/school year is a beacon of hope for me. <sup>R</sup>	.574
I often have a sense of accomplishment.	.491
<b>Construct 4: Professional Confidence</b>	
Communication with parents is sometimes awkward. <sup>R</sup>	.856
Communication with parents is sometimes difficult. <sup>R</sup>	.768
Parents sometimes intimidate me. <sup>R</sup>	.731
School events, such as "back-to-school night" and parent conferences stress me out. <sup>R</sup>	.500
I spend a lot of time teaching unfamiliar content. <sup>R</sup>	.498
<b>Construct 5: Anticipated Change</b>	
I often think about how I want to change my curriculum for the next school year.	.831
I often think about how I want to change my teaching strategy for the next school year.	.764
I often think about how I want to change my management strategy for the next school year.	.755
I often think of how next school year will be different.	.717

Table 4, Continued

Item	Loading
<b>Construct 6: Work-Life Balance</b>	
My family members and/or friends sometimes complain about the requirements of my job. <sup>R</sup>	.676
I have very little time to get things done. <sup>R</sup>	.641
I am often overworked. <sup>R</sup>	.622
My work requires an extensive commitment of my time. <sup>R</sup>	.601
My work is nonstop. <sup>R</sup>	.585
I have an opportunity to lead a normal life.	.539
I have little time to reflect on my experiences. <sup>R</sup>	.530
<b>Construct 7: Strategic Renewal</b>	
I take a break to organize teaching materials.	.763
I take a break to prepare curricular materials.	.704
I take time to gain perspective on my teaching.	.571
I take time to reflect on my teaching.	.559
<b>Construct 8: Problem Solving</b>	
I am confident I that I can prevent problems.	.793
I am confident that I can manage problems.	.747
I understand the process by which I am evaluated.	.511
<b>Construct 9: Professional Resolve</b>	
I will make a difference.	.695
I am committed to making a difference.	.663
I sometimes question why classroom management takes so much time. <sup>R</sup>	.570
I will accomplish my goals.	.537

*Note.*<sup>R</sup> items were reversed coded.

After the PCA was completed, a list of proposed scale items and the associated construct categories were e-mailed to the panel of 20 experts that helped develop the instrument. Each expert was specifically asked to review the proposed items and constructs and suggest a name for each construct. As a result of the expert feedback, the construct scales will be referred to throughout the rest of the study as: Construct 1—“Professional Efficacy,” Construct 2—“Balanced Reflection,” Construct 3—“Professional Commitment,” Construct 4—“Professional Confidence,” Construct 5—

“Anticipated Change,” Construct 6—“Work-Life Balance,” Construct 7—“Strategic Renewal,” Construct 8—“Problem Solving,” and Construct 9—“Professional Resolve.”

Table 5 lists the correlations between constructs. It is acknowledged by the researcher that some constructs were outside of the desirable range suggested by Field (2009). According to Field (2009), any intercorrelations below “about 0.3” (p. 648) and greater than 0.8 (p.648) should be disregarded when determining variables related to the constructs.

Table 5

*Bivariate Correlations Between Constructs*

<i>Construct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
<i>1</i>	–								
<i>2</i>	.011	–							
<i>3</i>	.532	.115	–						
<i>4</i>	.431	.031	.226	–					
<i>5</i>	-.334	.285	-.133	-.261	–				
<i>6</i>	.636	.110	.356	.349	-.174	–			
<i>7</i>	.341	.456	.304	.241	-.029	.371	–		
<i>8</i>	.249	.124	.323	.208	.007	.173	.238	–	
<i>9</i>	.203	.175	.413	.330	-.034	.089	.270	.282	–

### Summary of Methods

This section described the procedure and methods used to conduct research on induction-year teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year. The population and sample were described along with the census technique used to assess the attitudes of the teachers. Overall response rate was reported as 52.52%. Nonresponse was addressed following Lindner, Murphy, and Briers (2001). Days to respond was not a significant predictor of the dependent variables of interest.

Institutional approval and methods used to insure consent from participants were described. Procedures used to contact participants for each round were listed.

Factor analysis yielded a nine factor solution using varimax rotation. Forty-five items composed the Agricultural Education Induction-Year Teacher Attitudinal Scale. Descriptive names for the constructs were the product of 20 experts in the field of agricultural education. The following construct names were proposed: “Professional Efficacy,” “Balanced Reflection,” “Professional Commitment,” “Professional Confidence,” “Anticipated Change,” “Work-Life Balance,” “Strategic Renewal,” “Problem Solving,” and “Professional Resolve.” Following the methods described here resulted in findings from the Agricultural Education Induction-year Teacher Attitudinal Scale. These findings will be discussed in the following chapter.

## CHAPTER IV

### FINDINGS

#### Summary

Findings of this study will be discussed in this chapter. Findings will be presented for objective of this study. The Agricultural Education Induction-Year Attitude Survey constructs will be discussed. Differences in attitude scores between measures will be discussed. Demographic characteristics as predictors of attitude toward teaching will be presented. Finally, a discussion of Moir (1999) and how agricultural education induction-year teachers experience their first year will be included. A summary will conclude the chapter.

#### Research Objective 1

The purpose of Research Objective 1 was to assess the factor-analytic and psychometric properties of attitude toward teaching based on the perceptions of induction-year secondary agricultural education teachers. Tables 6–12 illustrate the benchmark scores for the instrument. The overall score is reported in Table 6. All other rounds are represented in Tables 7–12. The proposed new instrument for future studies is included in the appendices.

Table 6 illustrates the overall benchmark scores for the constructs. These data represent mean scores and standard deviations for the respondents' scores on each construct. The two constructs with the highest scores were *Anticipated Change* ( $M = 4.13, SD = .64$ ) and *Professional Resolve* ( $M = 4.07, SD = .52$ ). The two constructs with the lowest scores overall were *Professional Efficacy* ( $M = 2.73, SD = .91$ ) and *Work-Life*

*Balance* ( $M = 2.44$ ,  $SD = .72$ ). It is important to note that both constructs contained reverse coded items. Low scores on these constructs indicate the teachers did not have a positive score for efficacy nor did they have a positive work-life balance score.

Table 6

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Overall)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>1</sup>	2.73	.91
2. Balanced Reflection	3.63	.63
3. Professional Commitment <sup>1</sup>	3.54	.75
4. Professional Confidence <sup>1</sup>	3.02	.89
5. Anticipated Change	4.13	.64
6. Work-Life Balance <sup>1</sup>	2.44	.72
7. Strategic Renewal	3.53	.71
8. Problem Solving	3.95	.57
9. Professional Resolve <sup>1</sup>	4.07	.52

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>1</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)

Table 7 illustrates the benchmark scores for Round 1. These data represent mean scores and standard deviations for the constructs. The two constructs with the highest scores were construct 9 ( $M = 4.08$ ,  $SD = .60$ ) and construct 8 ( $M = 3.97$ ,  $SD = .58$ ). The two constructs with the lowest scores in Round 1 were construct 6 ( $M = 2.65$ ,  $SD = .74$ ) and construct 4 ( $M = 2.96$ ,  $SD = .94$ ). Round 1 began on August 23, 2011. This round had many of the highest overall mean scores compared to other rounds.

Table 7

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Round 1)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>R</sup>	3.02	1.00
2. Balanced Reflection	3.70	.60
3. Professional Commitment <sup>R</sup>	3.82	.80
4. Professional Confidence <sup>R</sup>	2.96	.94
5. Anticipated Change	3.92	.74
6. Work-Life Balance <sup>R</sup>	2.65	.74
7. Strategic Renewal	3.77	.65
8. Problem Solving	3.97	.58
9. Professional Resolve <sup>R</sup>	4.08	.60

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>R</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)

Table 8 illustrates the benchmark scores for Round 2. These data represent mean scores and standard deviations for the constructs. The two constructs with the highest scores were construct 9 ( $M = 4.08$ ,  $SD = .54$ ) and construct 5 ( $M = 4.00$ ,  $SD = .65$ ). The two constructs with the lowest scores in Round 2 were construct 6 ( $M = 2.36$ ,  $SD = .71$ ) and construct 1 ( $M = 2.59$ ,  $SD = .90$ ). Round 2 began October 7, 2011.

Table 8

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Round 2)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>R</sup>	2.59	.90
2. Balanced Reflection	3.55	.60
3. Professional Commitment <sup>R</sup>	3.67	.78
4. Professional Confidence <sup>R</sup>	3.15	.87
5. Anticipated Change	4.00	.65
6. Work-Life Balance <sup>R</sup>	2.36	.71
7. Strategic Renewal	3.61	.66
8. Problem Solving	3.93	.67
9. Professional Resolve <sup>R</sup>	4.08	.54

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>R</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)



Table 9 shows the benchmark scores for Round 3. These data represent mean scores and standard deviations for the constructs. The two constructs with the highest scores were construct 9 ( $M = 4.10$ ,  $SD = .49$ ) and construct 5 ( $M = 4.08$ ,  $SD = .54$ ). The two constructs with the lowest scores in Round 3 were construct 1 ( $M = 2.70$ ,  $SD = .82$ ) and construct 6 ( $M = 2.49$ ,  $SD = .75$ ). Round 3 began November 26, 2011.

Table 9

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Round 3)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>R</sup>	2.70	.82
2. Balanced Reflection	3.62	.52
3. Professional Commitment <sup>R</sup>	3.73	.74
4. Professional Confidence <sup>R</sup>	3.12	.88
5. Anticipated Change	4.08	.54
6. Work-Life Balance <sup>R</sup>	2.49	.75
7. Strategic Renewal	3.67	.64
8. Problem Solving	3.87	.54
9. Professional Resolve <sup>R</sup>	4.10	.49

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>R</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)

Table 10 displays benchmark scores for Round 4. These data represent mean scores and standard deviations for the constructs. The two constructs with the highest scores were construct 5 ( $M = 4.34$ ,  $SD = .66$ ) and construct 9 ( $M = 3.89$ ,  $SD = .59$ ). The two constructs with the lowest scores in Round 4 were construct 6 ( $M = 2.48$ ,  $SD = .77$ ) and construct 1 ( $M = 2.64$ ,  $SD = .99$ ). Round 4 began January 11, 2012.

Table 10

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Round 4)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>R</sup>	2.64	.99
2. Balanced Reflection	3.61	.81
3. Professional Commitment <sup>R</sup>	3.36	.74
4. Professional Confidence <sup>R</sup>	2.77	.85
5. Anticipated Change	4.34	.66
6. Work-Life Balance <sup>R</sup>	2.48	.77
7. Strategic Renewal	3.24	.82
8. Problem Solving	3.91	.57
9. Professional Resolve <sup>R</sup>	3.89	.59

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>R</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)

Table 11 illustrates the benchmark scores for Round 5. These data represent mean scores and standard deviations for the constructs. The two constructs with the highest scores were construct 9 ( $M = 4.17$ ,  $SD = .44$ ) and construct 5 ( $M = 4.14$ ,  $SD = .59$ ). The two constructs with the lowest scores in Round 5 were construct 6 ( $M = 2.49$ ,  $SD = .67$ ) and construct 1 ( $M = 2.97$ ,  $SD = .73$ ). Round 5 began February 29, 2012.

Table 11

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Round 5)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>R</sup>	2.97	.73
2. Balanced Reflection	3.56	.68
3. Professional Commitment <sup>R</sup>	3.59	.68
4. Professional Confidence <sup>R</sup>	3.11	.82
5. Anticipated Change	4.14	.59
6. Work-Life Balance <sup>R</sup>	2.49	.67
7. Strategic Renewal	3.43	.67
8. Problem Solving	4.03	.56
9. Professional Resolve <sup>R</sup>	4.17	.44

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>R</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)

Table 12 illustrates the benchmark scores for Round 6. These data represent mean scores and standard deviations for the constructs. The two constructs with the highest scores were construct 5 ( $M = 4.32$ ,  $SD = .56$ ) and construct 9 ( $M = 4.03$ ,  $SD = .46$ ). The two constructs with the lowest scores in Round 6 were construct 1 ( $M = 2.39$ ,  $SD = .91$ ) and construct 6 ( $M = 2.16$ ,  $SD = .69$ ). Round 6 concluded the study and began May 2, 2012.

Table 12

*Benchmark Scores for Agriculture Teachers' Job Stage/Satisfaction Levels (Round 6)*

<i>Construct</i>	<i>M</i>	<i>SD</i>
1. Professional Efficacy <sup>R</sup>	2.39	.91
2. Balanced Reflection	3.77	.53
3. Professional Commitment <sup>R</sup>	3.08	.56
4. Professional Confidence <sup>R</sup>	3.01	.97
5. Anticipated Change	4.32	.56
6. Work-Life Balance <sup>R</sup>	2.16	.69
7. Strategic Renewal	3.49	.72
8. Problem Solving	3.95	.52
9. Professional Resolve <sup>R</sup>	4.03	.46

*Note.* 1 = Strongly Disagree, 5 = Strongly Agree

<sup>R</sup> Contains Reverse Coded Items (1 = Strongly Agree, 5 = Strongly Disagree)

The *Work-Life Balance* construct had the highest frequency of mean scores below 3.0 throughout the study and the lowest overall mean score. Mean scores for

*Professional Resolve*, above 4.0, occurred the most frequently throughout the study. However, *Anticipated Change* had the highest overall mean score for the study. It is important to note some of these constructs contain reverse coded items. The implications of these findings will be discussed at length in the next chapter.

### Research Objective 2

Research Objective 2 used the outcome of Research Objective 1 to determine if differences existed between longitudinal measures of attitude toward teaching. An analysis of variance (ANOVA) was conducted using the grand mean as the dependent variable and “Round of Data Collection” as the fixed factor. Table 13 illustrates the result of the ANOVA. No statistically significant differences were found for the mean scores of respondents between rounds. Therefore, there are no differences between attitude toward teaching across longitudinal measures for the respondents of this study. Time of year did not significantly affect the induction-year teachers overall attitude toward teaching.

Table 13

*Analyses of Round of Collection by Attitude Scale (n = 196)*

Scale	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2$	$1 - \beta$
Grand Mean							
Between	5	1.12	.22	1.43	.22	.036	.50
Within	190	29.77	.16				

Demographic characteristics of the ( $n = 201$ ) respondents are presented in Table 14. Respondents ranged in age from 22 ( $n = 4$ ) to 51 ( $n = 1$ ); the modal age was 25; the mean age was 26.9 (27); 53.2% were female ( $n = 107$ ); 44% worked in a school with a two-teacher agricultural education department; 36% worked in a school with a single-teacher department; the remainder ( $n = 33$ ) worked in three-, four-, and five-teacher departments; 47.5% were never married; 27.7% were married; 80% had no children; 78% had a bachelor's degree and 69% were not pursuing a master's; 30% wanted to teach 1–10 years; and 26.7% wanted to teach 21–30 years. A complete summary of demographic characteristics is reported in Table 14.

Table 14

<i>Demographic Characteristics of Respondents (N=201)</i>		
Characteristic	<i>f</i>	%
<b>Gender</b>		
Female	107	53
Male	94	47
<b>Number of Agriculture Teachers</b>		
(1)	60	36
(2)	74	44
(3)	19	11
(4)	12	7
(5)	2	1
<b>Family Status</b>		
1 = Never Married	84	48
2 = Engaged	30	17
3 = Married	49	28
4 = Divorced	5	3
5 = Divorced/Remarried	5	3
6 = Other	4	2

Table 14, Continued

Characteristic	<i>f</i>	%
<b>Do You Have Children</b>		
Yes	36	20
No	142	80
<b>Pursuing Additional Degree</b>		
Yes	39	19
No	139	69
<b>Intended Years to Teach</b>		
1–10 Years	53	30
11–20 Years	23	13
21–30 Years	47	27
31–40 Years	27	15
41 years and above	7	4
? & n/a	19	10
<b>Respondents Age</b>		
22	4	2
23	32	19
24	34	20
25	45	26
26	15	9
27	11	6
28	5	3
29	2	1
31	2	1
34	2	1
37	1	1
38	3	2
39	3	2
40	1	1
41	4	2
43	3	2
46	2	1
48	3	2
51	1	1

*Note.* Not all percentages total 100% and not all frequencies total 201 due to missing data and rounding.

Table 15 provides means, standard deviations, and standard error scores for the demographic variables. Results presented below are for the respondents across all rounds of data collection. Males had a slightly more positive attitude toward teaching than did females. Respondents who worked in a three-teacher department had a more positive attitude toward teaching than their other cohort members. Respondents who were divorced and remarried ( $n = 5$ ) had a higher attitude score than other respondents. Respondents who reported never being married ( $n = 84$ ) had a slightly more positive attitude than those married. Respondents who either had children, had a master's degree and/or were pursuing an advanced degree had a somewhat higher attitude score than did their cohort members. Respondents who said they intended on teaching 31–40 years had a more positive attitude toward teaching than did their colleagues. Respondents who were 31 years old ( $n = 2$ ) had the highest mean scores ( $M = 3.91$ ) for attitude toward teaching. However, the largest group of respondents ( $n = 15$ ) who had the highest mean scores for attitude toward teaching ( $M = 3.50$ ) were the 26-year-olds.

Table 15

*Means, Standard Deviations, and Standard Error Attitude Scores for Demographic Variables Across All Rounds. (N = 196)*

Characteristic	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>
Gender				
Female	103	3.33	.41	.04
Male	93	3.36	.39	.04
Number of Agriculture Teachers in Department				
(1)	60	3.34	.42	.05
(2)	74	3.38	.37	.04
(3)	19	3.53	.27	.06
(4)	12	3.02	.28	.08
(5)	2	3.24	.11	.08



Table 15, Continued

Characteristic	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>
<b>Family Status</b>				
Never Married	84	3.41	.35	.04
Engaged	30	3.28	.45	.08
Married	49	3.35	.36	.05
Divorced	5	3.27	.75	.33
Divorced/Remarried	5	3.46	.29	.13
Other	4	3.12	.44	.22
<b>Do You Have Children</b>				
Yes	36	3.45	.35	.06
No	142	3.34	.38	.03
<b>Highest Degree</b>				
Bachelor's	137	3.36	.40	.03
Master's	38	3.38	.29	.05
<b>Pursuing Additional Degree</b>				
Yes	39	3.38	.40	.06
No	139	3.36	.38	.03
<b>Intended Years to Teach</b>				
1–10 Years	53	3.25	.38	.05
11–20 Years	23	3.46	.28	.06
21–30 Years	47	3.42	.41	.06
31–40 Years	27	3.52	.36	.07
41 years and above	7	3.28	.41	.15
? & n/a	19	3.25	.36	.08
<b>Respondents Age</b>				
22	4	3.58	.28	.14
23	32	3.41	.39	.07
24	34	3.22	.41	.07
25	45	3.34	.37	.06
26	15	3.50	.26	.07
27	11	3.10	.42	.13
28	5	3.41	.20	.09
29	2	3.70	.06	.05
31	2	3.91	.26	.18
34	2	3.33	.14	.10
37	1	2.68	-	-
38	3	3.68	.22	.13
39	3	3.17	.60	.35
40	1	3.16	-	-

Table 15, Continued

Characteristic	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>
41	4	3.39	.37	.19
43	3	3.55	.33	.19
46	2	3.49	.08	.06
48	3	3.75	.22	.13
51	1	3.43	-	-

*Note.* All *n* values may not add to *N* = 196 due to missing data.

### Research Objective 3

The purpose of Research Objective 3 was to determine if demographic characteristics (age, gender, time, marital status, level of educational attainment, presence of children, number of teachers in the department, and intended years to teach) of induction-year agricultural education teachers are significant predictors of attitude toward teaching. A forced entry regression was chosen to determine if any demographic characteristics significantly predicted an induction-year teacher's attitude toward teaching. Forced entry regression was chosen as the preferred method because according to Field (2009), "stepwise techniques ... seldom give replicable results if the model is retested" (p. 212). Furthermore, Field (2009) noted that some researchers believe the forced entry method is the only appropriate method of regression to use when testing theory.

No significant predictors of attitude toward teaching based on selected demographic variables were generated as a result of the regression. Table 16 illustrates the results of the forced entry linear regression for the variables.

Table 16

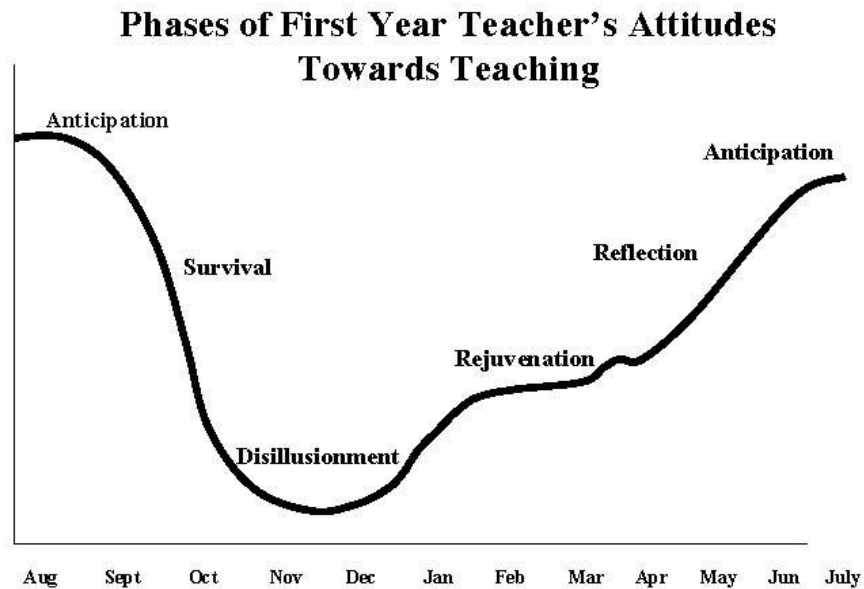
*Regression Analysis for Demographic Factors Predicting Attitude Toward Teaching*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>Sig</i>
Gender	-.008	.066	-.010	-.12	.906
Age	.006	.008	.093	.77	.441
Number of Ag Teachers	-.039	.036	-.092	-1.08	.283
Family Status	-.041	.025	-.154	-1.68	.096
Presence of Children	-.114	.114	-.120	-1.00	.317
Highest Degree	-.053	.071	-.064	-.74	.462
Pursuing Degree	.003	.079	.003	.04	.970
Intended Years To Teach Group	.016	.020	.065	.80	.425

*Note:*  $R^2 = .069$ . Adjusted  $R^2 = .013$   $F = 1.23$

## Research Objective 4

The purpose of Research Objective 4 was to determine if induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico experience stages as proposed by Moir (1999). In Figure 4, Phases of First Year Teacher's Attitudes Towards Teaching, illustrates the conceptual model of phases of attitudes of first year teachers, as proposed by Moir (1999).



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Figure 4. Phases of First Year Teacher's Attitudes Towards Teaching. Moir, 1999. Reprinted with permission.

Based on Moir's findings, induction-year teachers experience attitudinal phases as the school year progresses. Though Moir noted that not all teachers will experience each stage, however most do. Figure 5 illustrates the attitudes of induction-year agriculture teachers in Texas, Oklahoma, and New Mexico experienced during the school year.

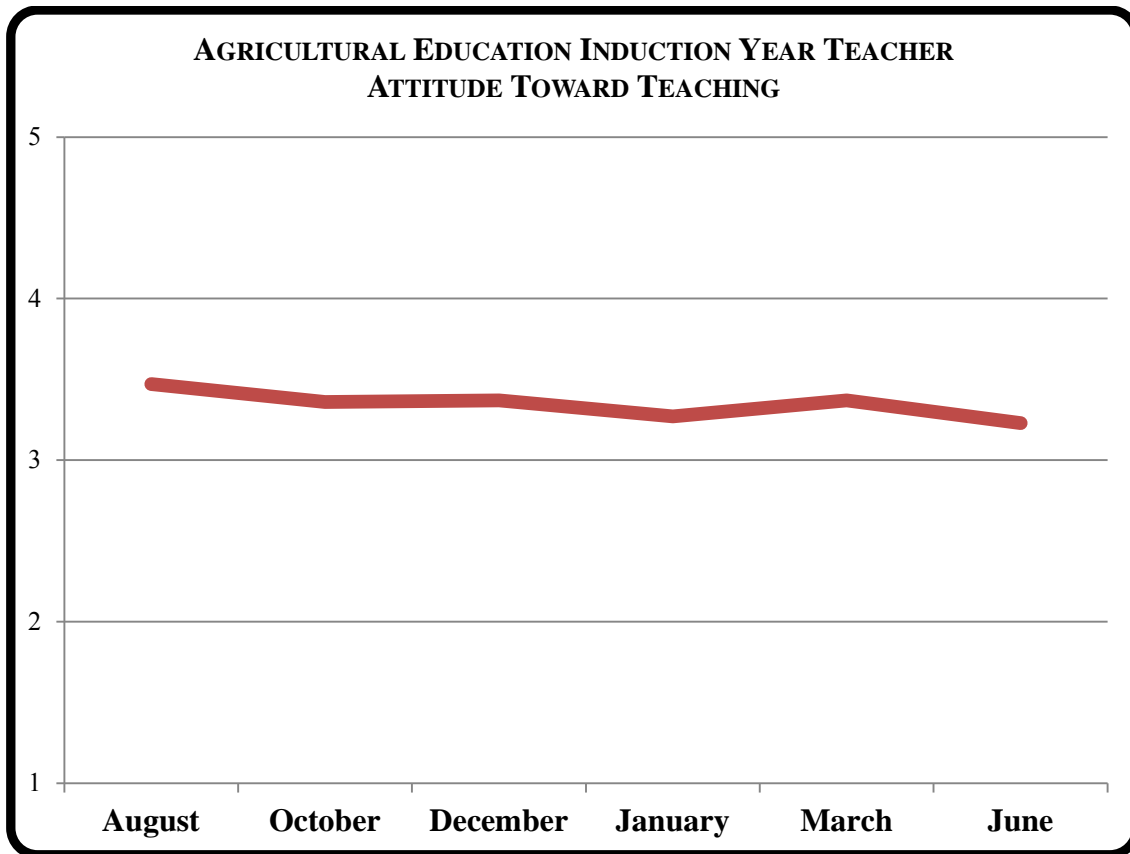


Figure 5. Model for agricultural education induction-year teacher attitude toward teaching.

Although teachers had relatively little variation in their attitudes toward teaching as the school year progressed, it is important to note that the attitudes toward teaching were generally positive. Grand mean scores per round did not statistically differ from one round to another. The lack of noticeable fluctuation in this study could be due to the y-axis scale being present on this model and absent on Moir’s model (1999). For illustrative purposes, Figure 6 represents the changes in attitude toward teaching throughout the school year for respondents by graphing all of scores between 3.0 and 3.5. Figure 6 should be considered a scale-adjusted graph of the phenomena that occurred.

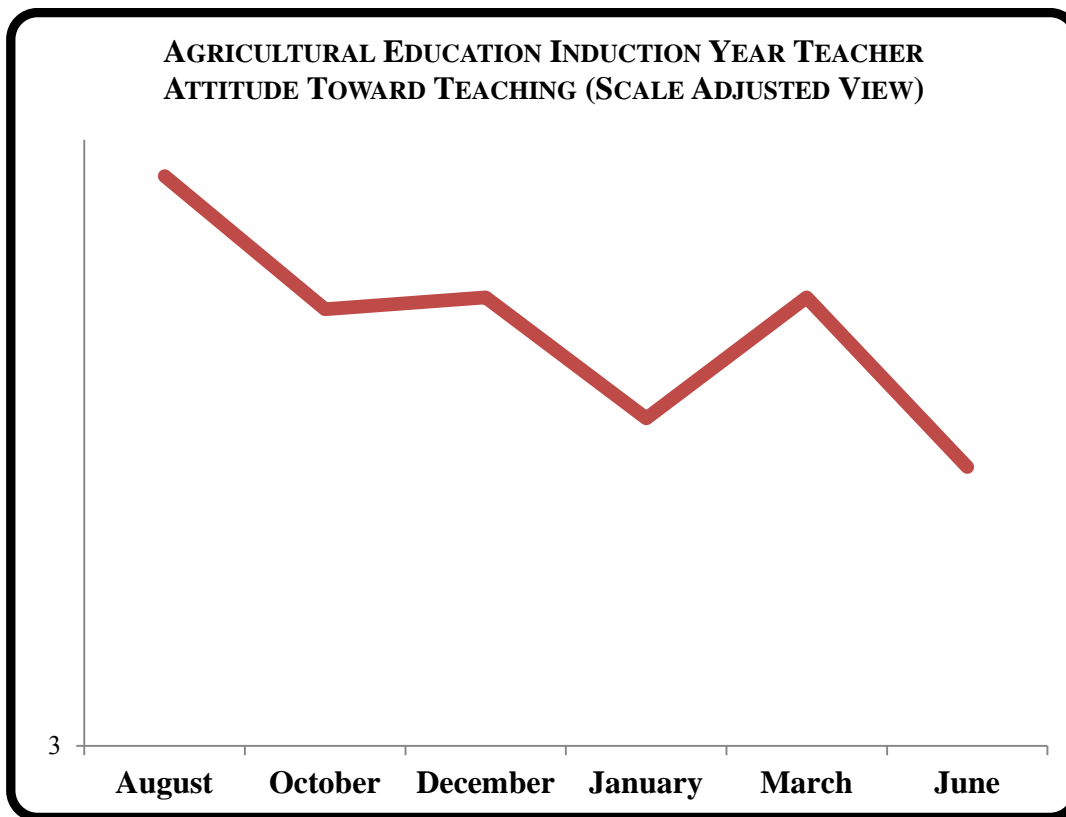


Figure 6. Scale adjusted model for attitudinal changes in induction-year agricultural education teachers.

Despite the absence of statistically different means for each round, one could argue that induction-year agricultural education teachers do go through drastic ups and downs. Moir (1999) posited that teachers start off on a high at the beginning of the school year. However, the novelty wears off after a few weeks. Though this seems to be the case with the model in Figure 6, it must be noted that the measure of attitudinal change was only a few tenths of a point and remained positive throughout the year.

Figure 6 illustrates that some teacher's attitudes may fall as the first month of school progresses.

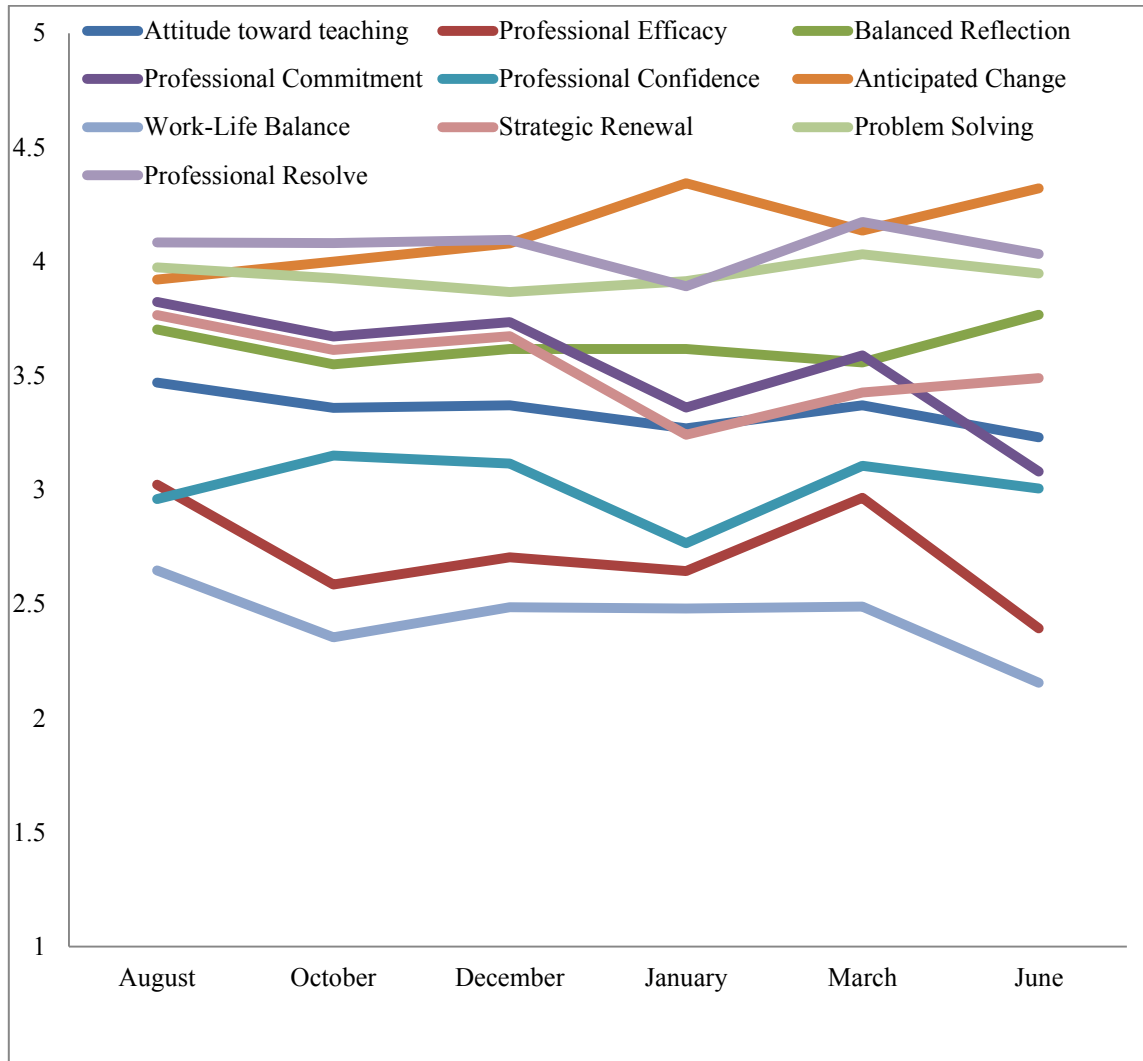


Figure 7. Attitude Toward Teaching Constructs Over Time

Figure 7 illustrates all of the mean scores for each of the constructs per round. The dark blue line represents the grand mean over time. Respondent scores had only a few points of interaction across the rounds. The line for Construct 4, *Professional*

*Confidence*, displays an interesting phenomenon. The respondents reported gaining confidence as the year began. However, confidence lowered as the year progressed. From January to March, the confidence level increased for respondents. Construct 5, *Anticipated Change*, maintained a stable level and spiked near the winter break.

### Summary of Findings

In this chapter, a new measure of teacher attitude was proposed. Demographic characteristics for the respondents were presented as aggregate data. All of the mean attitude scores and standard deviations associated with each of the demographic variables were presented. Results for the regression analysis performed on the data were not significant. Therefore, no significant predictors were generated by the forced entry regression. A model of induction-year agricultural education teacher's attitudes was proposed along with a scale adjusted model of agricultural education teacher attitude toward teaching. A model of all attitude constructs was presented to illustrate the effect of time on the attitude of the induction-year agricultural education teachers. Insight into what occurs during the induction year of agricultural education teachers in Texas, Oklahoma, and New Mexico can be gleaned from these findings.



## CHAPTER V

### CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### Summary

This investigation into the critical concern area (Wolf, 2011; Boone & Boone, 2007) of induction-year teaching for the profession of agricultural education revealed much about the cohort of induction-year teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year. Though studies pertaining to induction-year teachers are available in Agricultural Education, studies that have been conducted with the purpose of exploring Moir (1999) or developing an instrument to assess induction-year teacher's attitude toward teaching were not located by the researcher.

The teachers in this study were beginning their careers as agricultural education teachers. All were in the survival and discovery phases, as described by Huberman (1989), of teacher development. This conclusion is supported by the finding that the teachers had declining scores for the *Professional Commitment* scales of the Agricultural Education Induction-Year Attitude Scale (AEIYAS) that was developed as part of this study. Burris et al. (2010) argued that teachers in the beginning stages of their career were in the most critical phases related to retention because, as Huberman suggested, those who had a positive experience during the discovery and survival phases will move into stabilization or commitment. Based on the findings of this study, it does not appear that induction-year teachers reached the stabilization stage. In fact, the teachers exhibited declining levels of career commitment.

Limited literature exists on formal induction programs in agricultural education. Franklin and Molina (2012) reported 65% of the agricultural education teacher preparation programs provided assistance for beginning teachers. With 35% of the agricultural education teacher programs not providing assistance to new teachers, there is room for improvement in terms of helping induction-year teachers become acculturated to being agricultural education teachers. Additionally, researchers reported that being a new agricultural education teacher is not without its challenges (Croom, 2003; Franklin & Molina, 2012; Greiman, Walker, & Birkenholz, 2005). The literature suggests that teacher attrition remains a concern, therefore more research should be done to find solutions to the negative impacts of teacher attrition. Additional investigation, with the goal of deepening the understanding of the phenomena of induction-year teachers, will be needed until a viable solution is discovered and adopted by the agricultural education profession.

In an effort to quantify the induction-year agricultural education teachers experience, an output of this study was the Agricultural Education Induction-Year Attitude Scale (AEIYAS). AEIYAS scores were used to assess the attitudes of induction-year agricultural education teachers. The instrument is acceptably reliable and valid, and should be used by researchers to gain insight into the induction year. Data provided by these additional studies can be used to continually refine the instrument. Aside from producing an instrument to assess induction year agricultural education teachers, this study found that most new agricultural education teachers are successful and have a positive attitude toward their job. These findings hold true regardless of their

age, marital status, personal children, professional education level, gender, or the number of teachers in their department. This information can be used recruiting new teachers into the agricultural education profession to help alleviate the critical shortage (National Teach Ag, 2012).

This study examined the attitudinal phases of new teachers proposed by Moir (1999). Using her research to guide the inquiry into the induction year of agricultural education teachers, the researcher found that agricultural education teachers in Texas, Oklahoma, and New Mexico do not experience all of the stages proposed by Moir (1999). Rather, data suggest that agricultural education teachers have an overall positive attitude toward teaching. Additionally, the data suggest that the respondents experienced slight increases and decreases in overall attitude toward teaching, although the amount of these differences were not statistically significant. There were no significant differences, longitudinally, between attitude scores across study rounds. A more in-depth discussion is included later in this chapter, as well as recommendations for practice and additional research.

#### Research Objective 1

Research Objective 1 was accomplished through psychometric theory (Nunally, 1967; Nunally, 1975) and survey methodology. This exploratory quantitative study was designed to explore the theory proposed by Moir (1999). Six rounds of data collection from a cohort of induction-year agricultural education teachers resulted in an instrument to measure the attitude of teachers being reduced from 66 to 45 items using principal components analysis with varimax rotation. The instrument produced from this study

measured *Professional Efficacy*, *Balanced Reflection*, *Professional Commitment*, *Professional Confidence*, *Anticipated Change*, *Work-Life Balance*, *Strategic Renewal*, *Problem Solving*, and *Professional Resolve*. The instrument had an overall Cronbach's alpha level of 0.88. It is important to note the limitations of the instrument. Two individual constructs, *Problem Solving* and *Professional Resolve*, each had lower Cronbach's alpha levels. Though the alpha level was between 0.7 and 0.6 and considered acceptable by some researchers (Nunally, 1975; Schmitt, 1996) these constructs should be evaluated and perhaps refined to improve reliability in future research. Overall alpha level achieved during this exploratory study, 0.88, indicates that the instrument is reliable. Joerger (2003) called for a way to assess the inservice needs of beginning teachers. The instrument may be suitable for research into the needs of inservice and preservice agricultural education teachers.

In building conclusions for this study, it is important to remember that cohorts of new teachers are made up of individual teachers. This instrument will provide future researchers insight into what is happening within a cohort of teachers. Another powerful aspect that should not be overlooked is its potential use as an instrument for induction program coordinators. The Agricultural Education Induction-Year Attitude Scale (AEIYAS) can assist in helping induction-year teachers overcome some of the challenges they are experiencing on an individual level through individual attitude reports. Though mean aggregate data is important in determining what the overall trend is in a sample and population, it often does little in helping meet the needs of individual teachers.

In addition to determining the needs of first year teachers, the instrument may be useful to further investigate agricultural education induction-year teacher's attitudes toward their jobs. Being an agricultural education teacher is demanding and challenging due to the physical, emotional, and intellectual resources needed to be an effective teacher (Croom, 2003; Cano, 1990). An instrument sensitive to multiple components of an induction-year teacher's attitude toward teaching may help induction programs and processes be more precise. The presence of these new factors could indicate that teaching in general has become more complex than when Moir (1999) posited her theory of induction-year teacher's phases of attitudinal change.

There is no shortage of literature within the profession of agricultural education recommending improvement in the areas of retention practices, stress factors, and job satisfaction (Walker, Garton, & Kitchel, 2004; Boone & Boone, 2007; Nesbit & Mundt, 1993; Peiter, Terry, & Cartmell, 2005; Mundt, 1991; Moore & Swan, 2008; Greiman, Walker, & Birkenholz, 2005; Murray, et al., 2011; Bennett, et al., 2002). However, most studies are descriptive in nature. This instrument allows researchers to become more prescriptive in their approach to working with induction-year agricultural education teachers.

#### Research Objective 2

Research Objective 2 utilized the outcome of Research Objective 1 to determine if differences existed between longitudinal measures of attitude toward teaching. The ANOVA revealed no statistically significant differences in attitudes between measures

for this group of induction-year agricultural education teachers, supporting Joerger's (2002a) position that beginning agricultural education teachers' experiences are similar.

### Research Objective 3

Research Objective 3 was used to determine if selected demographic variables could predict an induction-year teacher's attitude toward teaching score. According to a forced entry linear regression, the variables collected were not significant predictors. It was concluded that the demographic variables collected were not significant predictors of induction-year teachers' attitude toward teaching.

Cohort members ranged in age from 22 to 51. The researcher found it interesting that nearly 10% of first year teachers were over the age of 30. Although it is not clear why this happened, one could hypothesize that the current economic situation in the United States has increased the number of people above 30 who have entered the teaching profession.

Overall, the induction-year teachers' attitudes remained positive throughout the year. Moir (1999) posited that teachers looked forward to the Winter Break because it allowed teachers to recuperate, and their attitude to improve similarly to the beginning of the school year. Perhaps the typical schedule of an agricultural education teacher incorporating FFA contests, local fairs, and shows, breaks the monotony of "day-in/day-out" rigors of the classroom. Further inquiry into individual cases could reveal reasons this cohort of teachers remained positive. Though neither statistically nor practically significant, the decline in overall attitude before Winter Break as well as the increase in attitude after January, (Figure 6) is supported by Moir (1999). She posited that teachers

often feel rejuvenated after the Winter Break. It appears to hold true for agricultural education teachers in Texas, Oklahoma, and New Mexico. The decline in attitude after March could signify that some teachers are tired due to the rigors of trying to be a model teacher as proposed by Roberts and Dyer (2004), or working to manage the duties mentioned by Murray et al. (2011).

Analyses indicated that there were no statistically significant differences between groups of respondents based on the demographic variables measured in the study. It is interesting that respondents with children had a more positive attitude toward teaching than did respondents without. A possible explanation of this could be that the presence of dependents causes the respondents to view work through a different lens, increasing the value of job security, for example. More research is needed on this subject to fully understand the implications for the profession.

Another finding that is not a predictor of attitude toward teaching, but warrants examination, is that respondents who intended to teach for more years had higher attitude scores. Operationally, this is logical in that teachers who believe they will teach beyond the required number of years for retirement would be more positive. It does not mean that the teachers will actually succeed in teaching as long as they indicated they would, but rather that they merely have a positive outlook on their chosen career, and they like it enough to stay with it.

Respondents who indicated that they intended teaching 31 to 40 years had an overall more positive attitude toward teaching than did their other cohort members. Teachers who, during their first year, would already indicate continuing teaching beyond

normal retirement age could be viewed as optimistic. Intention to teach should not be overlooked as an important variable in predicting a teacher's attitude toward teaching, even though it was not statistically significant in this study.

Another interesting finding was that male agriculture teachers had a slightly more positive attitude toward teaching than did females. One could claim that that was to be expected in a male-dominated profession. Based on the findings of this study and data from the National FFA Organization (2012), there appears to be a trend of more female active participation in agricultural education. It is possible that female teachers had negative experiences because they would interact with parents of students or program stakeholders who may still perceive that agricultural education teachers should be male or who were in school when females were not allowed in FFA. The findings are inconclusive and warrant additional research.

Respondents who indicated they had never been married had a slightly more positive attitude than respondents who indicated they were married. This could be explained by the lack of other commitments of time and energy outside of their job. It should be noted that there were not significant differences in the two groups, just differences in scores. Additionally, further analysis of the data revealed that the divorced respondents who remarried ( $n = 5$ ) had a higher attitude score than other respondents. Their scores were closest to respondents who indicated they had never been married. A larger sample of induction-year teachers, such as a sample from a national study, could provide further insight into these differences in scores and further describe the effect of marital status on teacher's attitudes toward their jobs.



Based on the data, teachers who reported working in a three-teacher department ( $n = 19$ ) had the highest overall attitude toward teaching scores ( $M = 3.53$ ,  $SD = .37$ ) when compared to the teachers who taught in any other type of department. Departments with three teachers would be more likely to have better distribution of teaching duties as described by Roberts and Dyer (2004) than a one- or two-teacher department. It is also likely, in a three-teacher department, that there would be a mentor teacher with whom the new teacher could work closely.

Teachers in four-teacher departments ( $n = 12$ ) had the lowest attitude scores ( $M = 3.02$ ,  $SD = .28$ ) of any of the respondents. Though caution must be used in interpreting data generated by such few respondents, it was interesting. A possible explanation would be that opportunities for personalities to conflict increases with the number of people. It is important to point out that the respondents, in general, still had a positive attitude toward teaching. However, the effect of number of teachers in a department on the attitude toward teaching cohorts of induction-year teachers warrants further inquiry.

Despite the failure of this study to produce a prediction equation for induction teachers attitude toward teaching, there were some interesting results from the demographic characteristics reported by the teachers. Furthermore, outcomes of objective three provide areas of focus for future researchers.

#### Research Objective 4

Research Objective 4 was used to determine if induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico experience the stages as proposed by Moir (1999). Moir conducted a qualitative study, with 1,500 new teachers

in California, whereas this study was conducted with 125 induction-year agricultural education teachers. However, one reason this study was conducted was to investigate if agricultural education teachers experience attitudinal phases, and to determine if they are similar to all teachers' induction-year experiences. Based on the findings of this study, the researcher cannot claim that agricultural education teachers experience phases of attitudes during their first year of teaching as proposed by Moir (1999). Fluctuation in induction-year agricultural education teachers attitudes toward teaching was minor. Respondents in this study maintained a relatively positive attitude toward teaching throughout the 2011–2012 school year.

As illustrated by Figure 6, respondents in this cohort did not maintain a perfectly maintained attitude (flat line) across the duration of the study. Data suggest that there may be some “ups” and “downs” for induction-year agricultural education teachers. This finding is further illustrated by adjusting the scale of the graph (Figure 7). However, there were no statistically significant differences between the respondents' overall attitude score and the time of measurement. Nonetheless, the data did fluctuate, indicating that there could be underlying factors that bring attitude scores down.

Figure 7 illustrates that the various construct scores were almost completely separate. It is important to note that there was some interaction of scores at the beginning of the study as well as toward the middle of the study. It is important to keep in mind that some of the constructs contained reverse-scored items.

Agricultural education teachers experienced a decline in professional commitment, strategic renewal, and professional resolve as the Winter Break was

approaching. Moir (1999) found this to be a common occurrence due to the fact that new teachers were experiencing accumulated stress from the rigors of the first half of the year teaching. In essence, the teachers of this cohort held to Moir's theory in that their attitude toward teaching declined in certain areas. Though these scores were going down, the respondents were anticipating change. For someone to anticipate change, evidence would suggest that the respondents hoped that things would improve and that they had not given up on the profession. One could gather that, if teachers were anticipating change, things were not going as well as they had hoped.

Upon further investigation into Figure 7, as depicted in Figure 8, one can see that after Winter Break, the construct scores that increase are *Professional Resolve*, *Professional Commitment*, and *Strategic Renewal*. These findings support that teachers are rejuvenated after their Winter Break. *Anticipated Change* was lower at the beginning of the New Year. Perhaps teachers were more satisfied with how their jobs were going. *Balanced Reflection* scores were lower after January as well. These two constructs decreased in overall mean scores from January to March. This suggests that the break did have a positive impact on the teachers and that they had time for rejuvenation.

The scores for construct 1—*Professional Efficacy* and construct 4—*Professional Confidence* are particularly interesting. At the beginning of the year, the professional efficacy of the teachers decreased and the professional confidence increased. This is a stark contrast to the same two lines in January. It is important to clarify that the items that composed the constructs are reverse coded. Professional confidence was measured by items that included references to parents, communication, conferences, and teaching

unfamiliar content. Early in the school year would afford teachers more opportunities to interact with parents compared to later. These opportunities could exist due to open houses and other meetings that occur during the beginning of school. If you follow the construct line to December, when fewer functions happen and the end of the semester, confidence increases. This could be due to the lack of parental contact during the ending of the semester. Furthermore, new teachers may take additional time to become comfortable with new subject matter. Professional efficacy, represented by the red line, decreased at the beginning of the year. However, with a half of a school year completed, the professional efficacy scores increased sharply after January.

Nearly all construct scores declined as the year ended, except for *Anticipated Change*, and *Anticipated Change*. Moir (1999) proposed that induction-year teachers end the school year with very positive attitudes toward the next year. A study of Moir's model (Figure 2), may lead to interpreting it as ending the year on a high note. In this study, both interpretations would apply when interpreting the scores in Figure 8. Teachers did have an overall positive attitude toward teaching. Induction-year teachers also scored higher on *Anticipated Change* than any other construct. Teachers, overall, were positive about teaching and anticipatory about change, however, there were some scale scores that indicated potential for concern. *Professional Commitment* and *Professional Resolve* declined at the end of the year. It is interesting to point out that as *Anticipated Change* scores were increasing again, *Professional Commitment* was decreasing, although the teachers, on average indicated they were committed to the profession of teaching.

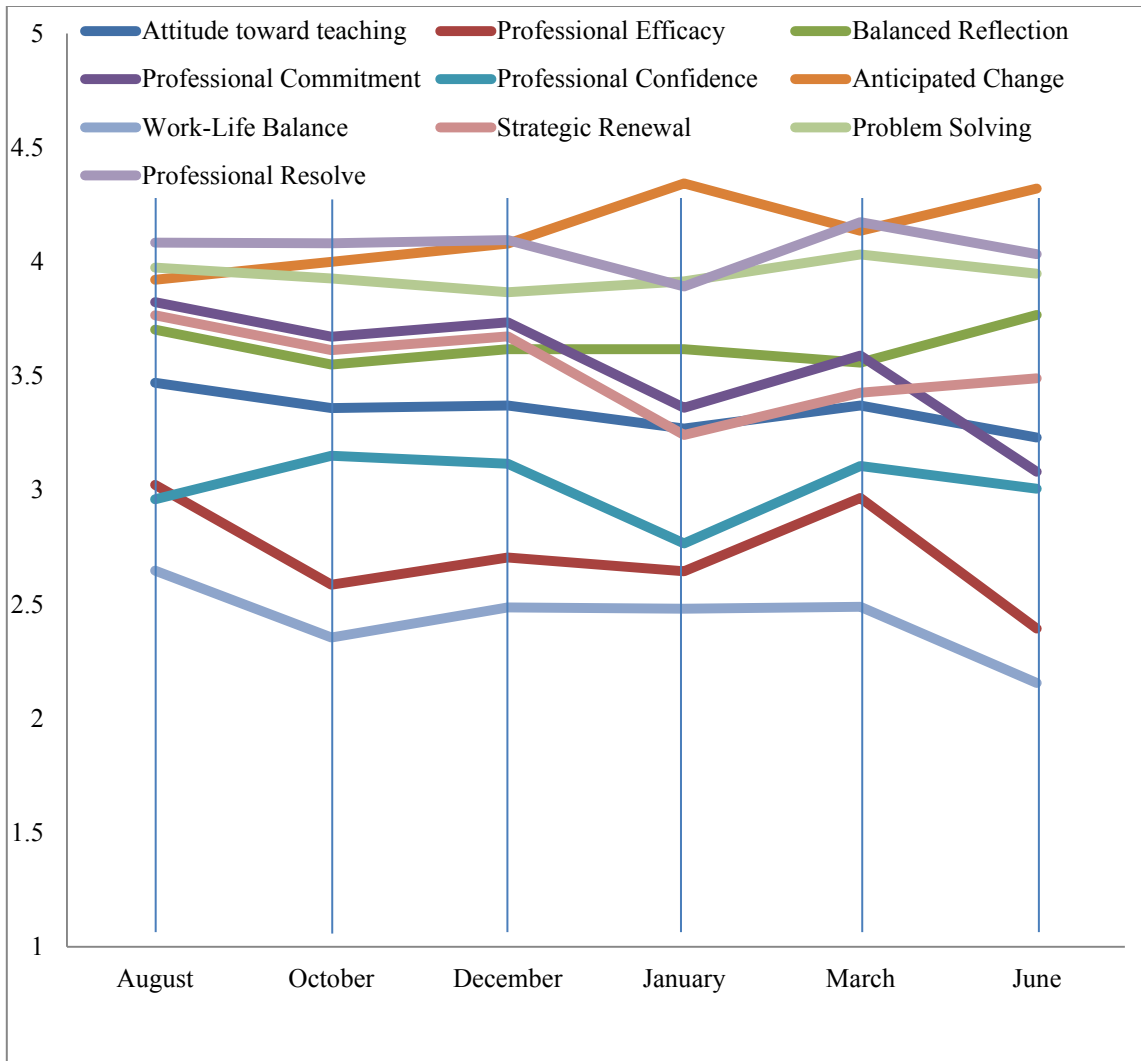


Figure 8. Attitude Constructs Across Rounds With Lines

One important final conclusion to be drawn from this study is that teachers did not have scores for *Work-Life Balance* that should be considered positive. This indicates that teachers perceived they were not able to maintain a positive *Work-Life Balance* throughout the school year. Teachers reported a perceived decline in *Work-Life Balance* in September and again during April and May, which could indicate that the teachers were very busy during this time of year. Unfortunately, this group of teachers had a

lower sense of *Work-Life Balance* at the end of the study. According to the NCES (2007), 65% of the teachers who left the profession in 2004–2005 felt that their workload in their new occupation was more manageable and they were better able to balance their personal and work lives. The teachers in this study indicated that they were not able to balance their personal lives with their work priorities well. Not being able to balance work and life puts new teachers at great risk of burnout. However, Croom (2003) found that burnout was not a serious problem for agriculture teachers, and it appears that this study supports that for new teachers given the overall positive attitude toward teaching. The finding of low *Work-Life Balance* scores and the implications to the profession need further investigation. Nonetheless, though *Work-Life Balance* scores were low and is a negative finding for the profession, the respondents reported an overall positive attitude toward teaching.

### Implications

In efforts to combat attrition, many schools have mentoring programs for beginning teachers (Ingersoll & Strong, 2011). Mentors could find the AEIYAS useful. Researchers and practitioners could assess induction-year agricultural education teachers quickly and efficiently with the AEIYAS. Individual attitude toward teaching graphs should be generated for induction year teachers at multiple points during the year if needed. These attitude graphs, similar to Figure 8, would allow the teacher to visualize the attitudinal trends taking place in their careers.

Meister and Melnick (2003) believed that attempting to fully understand the concerns of beginning teachers should lead to better preparation of preservice teachers,

better mentoring, and improved professional development for beginning teachers. Induction-year agricultural education teachers and their mentors should discuss the attitude graphs generated from the instrument. If mentors are not available or assigned, agricultural education university faculty, school district personnel, and/or other organized induction program members should discuss the results with the new teacher. This would alleviate the “sink or swim” (Howe, 2006) approach to induction-year programming that made the metaphor famous and build upon Meister and Melnick (2003).

A personalized graph, discussed with new teachers, could help socialize them into the profession, help them deal with support group issues, and help them not be so isolated, which are problems within the profession of agricultural education (Greiman, Walker, & Birkenholz, 2005; Talbert, et al., 1994; Myers, Dyer, & Washburn, 2005). It would be timely to use the AEIYAS to provide feedback to new teachers because research indicates helping novice teachers gain feedback and support increases their confidence (Knobloch & Whittington, 2002).

The body of literature suggests that teacher attrition and the induction-year of teaching are well studied yet still remain an area of concern. The AEIYAS can help move the research in the area of induction-year agricultural education teachers into a more confirmatory, prescriptive mode as time progresses rather than the current exploratory, descriptive mode.

Lowering attrition rates and filling the needs of school systems is not accomplished by general treatment practices but rather through meeting the needs of the

individuals who make up the cohorts of new teachers. This instrument may help new teachers learn more about themselves, as part of an induction program as described by Wong (2004), Waters (1988), Nesbitt & Mundt (1993).

Scott (1988) called for induction programs that adequately support new agricultural education teachers; however, mean scores will not explain what the individuals measured are experiencing individually. Studies have revealed first year teachers struggling with classroom management, working with mainstreamed discipline, identifying appropriate expectations for students, dealing with stress, and handling angry parents (Brock & Grady, 1998).

Other studies identified problem areas associated with a complete agricultural education program, including managing the overall activities of the local FFA Chapter, balancing professional and personal responsibilities, maintaining personal motivation, time management, and building the support of school faculty and administration (Mundt & Connors, 1999). Furthermore, agriculture teachers usually have a greater workload and work longer hours than other secondary education teachers (Torres, Ulmer, & Aschenbrenner, 2007). Understanding how new agriculture teachers develop stress and learning how to overcome these problems can allow preservice and first year teachers to handle possible problems and increase overall job satisfaction (Boone & Boone, 2007).

Quantitative evidence suggests the phases of attitudes posited by Moir (1999) may not hold true for agricultural education teachers. What is it about induction-year agriculture teachers that make their attitude toward teaching relatively positive and stable during their first year? In light of this finding, the positive attitude maintained by



most of the teachers in this study should be used as a recruitment tool for recruiting agricultural education teachers into the profession.

Though the findings from this study cannot be generalized beyond this cohort of teachers, the lack of differences in mean attitude scores across rounds opens up a new line of inquiry. It is often said that agricultural education teachers are different because of the duties and responsibilities that are integral to the job. Perhaps this is the beginning of empirical evidence to support or refute that claim. In doing so, the conclusion that there is no difference in attitudes across measures could be either verified or refuted. Additionally, the AEIYAS should be utilized across core subject, career and technical education (CTE), and agricultural education teacher induction programs. Such a study may reveal if there were differences between core subject, CTE, and agricultural education induction-year teachers. If there are differences, the AEIYAS could be useful in describing those differences.

### Recommendations

Based on the conclusions of this study, the researcher recommends the following recommendations be applied to both practice and research.

#### *Recommendations for Practice*

1. Utilize the Agricultural Education Induction-Year Attitudinal Scale (AEIYAS) developed in this study with cohorts of new agricultural education teachers nationally to refine the instrument, while pinpointing areas of concern for individual teachers.

2. Organize a national study among AAAE member institutions that have agricultural education teacher preparation programs in efforts to build upon this study and compare responses by region.
3. Administer the AEIYAS to induction year teachers in the future.
4. Develop individual tailored induction programs from data collected using the instrument in this study.
5. Establish organized induction programs for new agricultural education teachers with the help of AAAE member institutions and the NAAE.
6. Use AEIYAS for helping to evaluate student teachers as they complete their student teaching experience.
7. Work with new agricultural education teachers increase their career commitment.
8. Establish an area in the National Research Agenda of AAAE dedicated to induction-year agricultural education teachers to encourage more institutions to participate in formal induction year programs.

*Recommendations for Research*

1. Study induction-year teachers in the core subjects, career and technical education (CTE), and fine arts to be able to compare with agricultural education teachers.
2. Use this study as a precursor to experimental research with induction-year teachers and their induction-year programming.
3. Replicate this study with induction-year agricultural education teachers and induction year nonagricultural education teachers using the instrument developed to determine if differences exist between groups and across measures.

4. Replicate this study with induction-year agricultural education teachers to determine if this was a chance phenomenon or if the attitudes of agricultural education teachers remain relatively positive their first year of teaching.
5. Conduct a methods study to compare the frequency of measurement with respondents' scores as well as the response rate.
6. Collect longitudinal data in a study from July 1 to June 30 of each school year with cohorts of new agricultural education teachers.
7. Carry out a two-year cohort study to investigate if differences exist between years of the study.
8. Conduct a study to determine the needs of older teachers vs. younger teachers to determine if age and experience play into attitude toward teaching.
9. Conduct a longitudinal study with the help of AAAE, NAAE, and FFA that tracks teachers throughout their career of teaching.
10. Replicate this study to determine if differences exist in other areas of the country and to refine the proposed model of a first year teacher's attitude toward teaching.
11. Collaborate with Moir on a research project to replicate her study with agricultural education teachers on a national study.
12. Test the proposed model of induction-year agricultural education teachers' attitude toward teaching.
13. Intended years to teach should be investigated in a longitudinal study to determine if the intended numbers remain high throughout the years of service.

14. As the research matures, a mixed methods study should be conducted.

### Summary

Based on the findings on this study, the induction-year agricultural education teachers in Texas, Oklahoma, and New Mexico during the 2011–2012 school year did not experience phases of attitude toward teaching as proposed by Moir (1999). Respondents did experience varying scores on nine attitudinal scales across six rounds of data collection. It was evident, based on the data of this study, that induction-year teachers needed help maintaining professional commitment, professional efficacy, and work-life balance when being acculturated into the profession. Though the mean scores of the respondents were mostly in the positive at the conclusion of the year, a decline was evident. More should be done to keep track of agricultural education teachers to help them stay in the profession and determine what factors measured by the AEIYAS predict if a teacher will leave the profession. There is something that causes 50% of all teachers to leave by the end of their fifth year teaching (NCES, 2007). It was beyond the scope of this study to pinpoint the cause of such a critical number of teachers leaving the profession. However, research must continue. Agricultural education teachers, as well as other teachers, work daily with the future of this country.

It is reassuring to know that the teachers in the profession have a positive attitude toward teaching, and a positive level of professional commitment, despite the sharp decline at the end of the year. This line of research should continue in order to further validate the career choice of many young teachers. Research in this area should strive to give teacher preparation programs and induction program coordinators needed tools and

information. Teaching will continue to change as population dynamics shift. It is the responsibility of those more experienced in education to help those less experienced. The profession of education depends upon it. The competitive, successful, and sustainable progression of the nation requires it.

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APPENDIX A  
INITIAL QUESTIONNAIRE

**MARKING INSTRUCTIONS**

CORRECT: ● INCORRECT: ✘ ☒ ☹

## First-Year Teaching Questionnaire

### INSTRUCTIONS

In this questionnaire, you will be provided with statements that some first-year teachers have made. Please consider each statement, then respond by filling in the bubble directly to the right of the statement that most accurately describes your response. There are no "right" or "wrong" responses to any of the statements. First reactions are usually the best.

SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree,  
A = Agree, SA = Strongly Agree

	SD	D	NA/D	A	SA
I am excited about being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am overwhelmed by my teaching job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is nonstop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My attitude toward teaching is slowly improving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have little time to reflect on my experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am anxious about being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am bombarded with a variety of problems I didn't anticipate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is always stressful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have an opportunity to lead a normal life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take time to gain perspective on my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am committed to making a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am bombarded with a variety of situations I didn't anticipate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work requires an extensive commitment of my time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a break to organize teaching materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often wonder how my students will perform on tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little time to get things done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Things are not going as smoothly as I would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a break to prepare curricular materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please continue on the next page.



SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

**MARKING INSTRUCTIONS**

CORRECT: ● INCORRECT: ✖ ✘ ☹

	SD	D	NA/D	A	SA
I will make a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little time to learn new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My morale is sometimes low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take time to reflect on my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my teaching strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will accomplish my goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have so much to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question if I want to be a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have hope that I will be a good teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can barely keep my "head above water"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question if I am a competent teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the school system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time teaching unfamiliar content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often wonder whether I can accomplish everything by the end of the school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the realities of teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my teaching strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time developing course material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School events, such as "back-to-school night" and parent conferences stress me out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often have a sense of accomplishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my management strategy for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to maintain a tremendous amount of energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am stressed by formal evaluations by my administrator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The end of the semester/school year is a beacon of hope for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my curriculum for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very committed to being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know what to do at most school events, such as "back-to-school night", "open-house night", or parent conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please continue on the next page.



SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

**MARKING INSTRUCTIONS**

CORRECT: ● INCORRECT: ✖ ✗ ✘ ✙

	SD	D	NA/D	A	SA
I am confident that I can prevent problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my teaching strategy for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents sometimes discount my ability because I am a new teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can manage problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think of how next school year will be different	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents sometimes intimidate me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am focused on curriculum development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often wonder whether I am an effective teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with parents is sometimes awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am focused on long-term planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with parents is sometimes difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am focused on teaching strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe parents are partners in the learning process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am usually prepared for parents' concerns/criticisms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the process by which I am evaluated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question why classroom management takes so much time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am often over worked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family members and/or friends sometimes complain about the requirements of my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please list some of the successes, related to your job, that you have experienced in the past six weeks.

Please list some of the challenges, related to your job, that you have experienced in the past six weeks.

Please continue on the next page.

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**MARKING INSTRUCTIONS**

CORRECT: ● INCORRECT: ✖ ✖ ✖ ✖

In what year were you born?

What is the highest degree you possess?

- Bachelor's
- Master's
- Specialist
- Other (please specify):

Are you currently pursuing an additional degree?

- Yes
- No

Which of the following best describes your family situation?

- Never married
- Engaged
- Married
- Separated
- Divorced
- Divorced/Remarried
- Widowed
- Other (please specify):

Do you have children?

- Yes
- No

How many agriculture (Agricultural Science) teachers are there in your department (including you)?

Including this year, how many years do you intend to teach?

Please use this space to share any additional comments that you might have.

*Thank you for your participation!*



APPENDIX B  
INITIAL WEB QUESTIONNAIRE



### Instructions

In this questionnaire, you will be provided with statements that some first-year teachers have made. Please consider each statement, then respond by filling in the bubble directly to the right of the statement that most accurately describes your response. There are no "right" or "wrong" responses to any of the statements. First reactions are usually the best.

SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

	SD	D	NA/D	A	SA
I am excited about being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am overwhelmed by my teaching job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is nonstop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My attitude toward teaching is slowly improving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have little time to reflect on my experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am anxious about being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am bombarded with a variety of problems I didn't anticipate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is always stressful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have an opportunity to lead a normal life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take time to gain perspective on my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am committed to making a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am bombarded with a variety of situations I didn't anticipate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work requires an extensive commitment of my time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a break to organize teaching materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often wonder how my students will perform on tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little time to get things done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Things are not going as smoothly as I would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a break to prepare curricular materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>







SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

	SD	D	NA/A	A	SA
I will make a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little time to learn new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My morale is sometimes low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take time to reflect on my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my teaching strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will accomplish my goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have so much to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question if I want to be a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have hope that I will be a good teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can barely keep my "head above water"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question if I am a competent teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the school system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time teaching unfamiliar content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often wonder whether I can accomplish everything by the end of the school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the realities of teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my teaching strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time developing course material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School events, such as "back-to-school night" and parent conferences stress me out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often have a sense of accomplishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

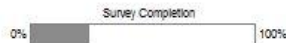
<< >>



SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

	SD	D	NA/A	A	SA
I often think about how I want to change my management strategy for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to maintain a tremendous amount of energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am stressed by formal evaluations by my administrator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The end of the semester/school year is a beacon of hope for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my curriculum for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very committed to being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know what to do at most school events, such as "back-to-school night", "open-house night", or parent conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can prevent problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my teaching strategy for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents sometimes discount my ability because I am a new teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can manage problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think of how next school year will be different	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents sometimes intimidate me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am focused on curriculum development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often wonder whether I am an effective teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with parents is sometimes awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am focused on long-term planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with parents is sometimes difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am focused on teaching strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<< >>





SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

	SD	D	NA/D	A	SA
I believe parents are partners in the learning process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am usually prepared for parents' concerns/criticisms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the process by which I am evaluated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question why classroom management takes so much time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am often over worked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family members and/or friends sometimes complain about the requirements of my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please list some of the successes, related to your job, that you have experienced in the past six weeks.

Please list some of the challenges, related to your job, that you have experienced in the past six weeks.

<< >>





In what year were you born?

What is the highest degree you possess?

Bachelor's

Specialist

Master's

Other (please specify):

Are you currently pursuing an additional degree?

Yes

No

Which of the following best describes your family situation?

Never Married

Divorced

Engaged

Divorced/Remarried

Married

Widowed

Separated

Other (please specify):

Do you have children?

Yes

No

How many agriculture (Agricultural Science) teachers are there in your department (including you)?

How many years do you intend to teach (including this year)?

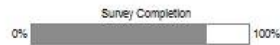




TEXAS TECH UNIVERSITY  
College of Agricultural Sciences  
& Natural Resources



Please use this space to share any additional comments that you might have.



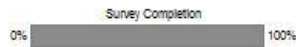
Survey Powered By [Qualtrics](#)



TEXAS TECH UNIVERSITY  
College of Agricultural Sciences  
& Natural Resources



We thank you for your time spent taking this survey.  
Your response has been recorded.



APPENDIX C

PRE-NOTICE



Dear «First Name»,

In the next few days you will receive a request to fill out a brief questionnaire (either via e-mail or paper survey) for a research project being conducted in New Mexico, Oklahoma and Texas. The focus is on the first year of teaching agricultural education and the stages beginning Ag Teachers go through. Most likely, this is your third time being asked to participate.

This postcard serves as a pre-notice because we have found that many people like to know that they will be contacted in advance. Your input will be used to determine what new pre-service practices could enhance/improve the first year teaching experience of Ag Teachers in New Mexico, Oklahoma, Texas, and potentially the nation.

For your convenience, we will provide an electronic version of the questionnaire as an alternative to the paper version you may receive in the mail. If you would prefer to complete the questionnaire online immediately, simply type the following link into the address bar on any computer connected to the internet or wait for our next e-mail or letter.

«Shortened Link»

Thank you for your time and consideration. Your participation is essential to the success of this project and will impact agricultural education in a positive way!



Dear «First Name»,

In the next few days you will receive a request to fill out a brief questionnaire (either via e-mail or paper survey) for a research project being conducted in New Mexico, Oklahoma and Texas. The focus is on the first year of teaching agricultural education and the stages beginning Ag Teachers go through. Most likely, this is your third time being asked to participate.

This postcard serves as a pre-notice because we have found that many people like to know that they will be contacted in advance. Your input will be used to determine what new pre-service practices could enhance/improve the first year teaching experience of Ag Teachers in New Mexico, Oklahoma, Texas, and potentially the nation.

For your convenience, we will provide an electronic version of the questionnaire as an alternative to the paper version you may receive in the mail. If you would prefer to complete the questionnaire online immediately, simply type the following link into the address bar on any computer connected to the internet or wait for our next e-mail or letter.

«Shortened Link»

Thank you for your time and consideration. Your participation is essential to the success of this project and will impact agricultural education in a positive way!



Dear «First Name»,

In the next few days you will receive a request to fill out a brief questionnaire (either via e-mail or paper survey) for a research project being conducted in New Mexico, Oklahoma and Texas. The focus is on the first year of teaching agricultural education and the stages beginning Ag Teachers go through. Most likely, this is your third time being asked to participate.

This postcard serves as a pre-notice because we have found that many people like to know that they will be contacted in advance. Your input will be used to determine what new pre-service practices could enhance/improve the first year teaching experience of Ag Teachers in New Mexico, Oklahoma, Texas, and potentially the nation.

For your convenience, we will provide an electronic version of the questionnaire as an alternative to the paper version you may receive in the mail. If you would prefer to complete the questionnaire online immediately, simply type the following link into the address bar on any computer connected to the internet or wait for our next e-mail or letter.

«Shortened Link»

Thank you for your time and consideration. Your participation is essential to the success of this project and will impact agricultural education in a positive way!



Dear «First Name»,

In the next few days you will receive a request to fill out a brief questionnaire (either via e-mail or paper survey) for a research project being conducted in New Mexico, Oklahoma and Texas. The focus is on the first year of teaching agricultural education and the stages beginning Ag Teachers go through. Most likely, this is your third time being asked to participate.

This postcard serves as a pre-notice because we have found that many people like to know that they will be contacted in advance. Your input will be used to determine what new pre-service practices could enhance/improve the first year teaching experience of Ag Teachers in New Mexico, Oklahoma, Texas, and potentially the nation.

For your convenience, we will provide an electronic version of the questionnaire as an alternative to the paper version you may receive in the mail. If you would prefer to complete the questionnaire online immediately, simply type the following link into the address bar on any computer connected to the internet or wait for our next e-mail or letter.

«Shortened Link»

Thank you for your time and consideration. Your participation is essential to the success of this project and will impact agricultural education in a positive way!



APPENDIX D  
COVER LETTER





<<DATE>>

<<NAME>>

<<Street Address>>

<<Town, Zip Code>>

Dear <<NAME>>:

As you are well aware, the first year of teaching agricultural science comes with many challenges other first year teachers usually do not experience. I am requesting your help to answer two critical questions:

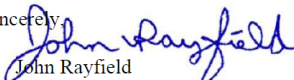
1. What should agricultural science teacher education programs be doing to better prepare pre-service teachers for their first year?
2. What are the job stages for first year agricultural science teachers in relation to those of other teachers?

Answers to these questions will give Texas A&M University, Oklahoma State University, and New Mexico State University the information to we need to better plan in-service programs for current Texas, Oklahoma and New Mexico agriculture teachers as well as better prepare future agriculture teachers in said states. I am certain that you will agree this is a goal worthy of your support.

Your response to this questionnaire is very important to the success of the study; therefore, I urge you to take 10-15 minutes to complete the enclosed questionnaire if you have not already completed the online version sent to you earlier this week. Your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified. Once you have completed the enclosed questionnaire and returned it in the postage paid, self-addressed envelope your name will be deleted from the mailing list and never connected to your answers in any way. By completing and returning the questionnaire, you are consenting to participation in the study.

Participation in this study is voluntary; in no way are you required to participate. However, you can help teacher education very much by taking a few minutes to answer a few questions about your first year of teaching. Should you choose not to participate in this study, please return the questionnaire in the postage paid, self-addressed envelope so that I do not send you a follow up questionnaire. Rest assured that your refusal to participate in this study will not affect your relationship with Texas A&M University, Texas Tech, Oklahoma State University or New Mexico State; it will not result in any penalty or loss of benefits to which you might otherwise be entitled.

Thank you in advance for your prompt response. Your input is essential for improving teacher education in Texas, Oklahoma, New Mexico, and potentially the nation. If you have any questions as you complete the questionnaire, please contact me at the phone number or e-mail listed below.

Sincerely,  
  
John Rayfield  
TAMU Agricultural Science

Phone (979) 862-3707

FAX (979) 845-6296

jrayfield@aged.tamu.edu

APPENDIX E  
WEB COVER LETTER



<<DATE>>

<<NAME>>

<<Street Address>>

<<Town, Zip Code>>

Dear <<NAME>>:

As you are well aware, the first year of teaching agricultural science comes with many challenges other first year teachers usually do not experience. That's why I'm requesting your help. I'm working with teacher educators at New Mexico State University, Oklahoma State University, Texas Tech University, and Texas A&M University to determine what we need to change to better prepare pre-service teachers for their first year of teaching. Only you, and people like you, can help us —that is why your input is critical.

During this academic year, we will send you three questionnaires. They are very similar, but they will help us to better plan in-service programs for current Texas, Oklahoma and New Mexico agriculture teachers, as well as better prepare future agriculture teachers. We realize you are very busy, so we've created a paper and online version of this questionnaire. Please take 10 minutes to complete one version of the questionnaire.

To complete the online version, please click on the link directly below.

<<WEB LINK>>

You will also receive a paper questionnaire in the mail. If you prefer to complete the paper version, please do so and returned it in the postage-paid, self-addressed envelope.

Participation in this study is voluntary and your answers will be kept confidential. By completing and returning the questionnaire, you are consenting to participation in the study. Should you choose not to participate in this study, please return the questionnaire in the postage paid, self-addressed envelope so that I do not send you a follow up questionnaire.

Thank you in advance for your prompt response. Your input is essential for improving teacher education in Texas, Oklahoma, and New Mexico. If you have any questions as you complete the questionnaire, please contact me at the phone number or e-mail listed below.

Sincerely,

Dr. John Rayfield – Assistant Professor  
TAMU Agricultural Science

Phone (979) 862-3707

FAX (979) 845-6296

jrayfield@aged.tamu.edu

APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVAL

**TEXAS A&M UNIVERSITY**  
**DIVISION OF RESEARCH AND GRADUATE STUDIES - OFFICE OF RESEARCH COMPLIANCE**

1186 TAMU, General Services Complex  
College Station, TX 77843-1186  
750 Agronomy Road, #3500

979.458.1467  
FAX 979.862.3176  
<http://researchcompliance.tamu.edu>

---

Human Subjects Protection Program

Institutional Review Board

**APPROVAL DATE:**

09-Aug-2011

**MEMORANDUM**

**TO:** RAYFIELD, JOHN  
77843-2116

**FROM:** Office of Research Compliance  
Institutional Review Board

**SUBJECT:** Initial Review

**Protocol Number:** 2011-0525

**Title:** A quantitative analysis of induction-year job stages for agricultural science teachers in Texas, Oklahoma, and New Mexico

**Review Category:** Expedited

**Approval Period:** 09-Aug-2011 To 08-Aug-2012

**Approval determination was based on the following Code of Federal Regulations:**

45 CFR 46.110(b)(1) - Some or all of the research appearing on the list and found by the reviewer (s) to involve no more than minimal risk.

-----  
Criteria for Approval has been met (45 CFR 46.111) - The criteria for approval listed in 45 CFR 46.111 have been met (or if previously met, have not changed).

-----  
(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation or quality assurance methodologies.

(Note: Some research in this category may be exempt from the HHS regulations for the protection of human subjects, 45 CFR 46.101(b)(2) and (b) (3). This listing refers only to research that is not exempt.)

---

<b>Provisions:</b>	
<b>Comments:</b>	Waiver approved

---

This research project has been approved. As principal investigator, you assume the following responsibilities

1. **Continuing Review:** The protocol must be renewed each year in order to continue with the research project. A Continuing Review along with required documents must be submitted 30 days before the end of the approval period. Failure to do so may result in processing delays and/or non-renewal.
2. **Completion Report:** Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the IRB Office.
3. **Adverse Events:** Adverse events must be reported to the IRB Office immediately.
4. **Amendments:** Changes to the protocol must be requested by submitting an Amendment to the IRB Office for review. The Amendment must be approved by the IRB before being implemented.
5. **Informed Consent:** Information must be presented to enable persons to voluntarily decide whether or not to participate in the research project.

This electronic document provides notification of the review results by the Institutional Review Board.

APPENDIX G  
AEIYAS REVISED INSTRUMENT

# Agricultural Education

## Induction Year Attitude Survey

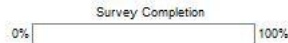
### Instructions

In this questionnaire, you will be provided with statements that some first-year teachers have made. Please consider each statement, then respond by filling in the bubble directly to the right of the statement that most accurately describes your response. There are no "right" or "wrong" responses to any of the statements. First reactions are usually the best.

**SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree**

	SD	D	NA/D	A	SA
I am excited about being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am overwhelmed by my teaching job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is nonstop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have little time to reflect on my experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am bombarded with a variety of problems I didn't anticipate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is always stressful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have an opportunity to lead a normal life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take time to gain perspective on my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am committed to making a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am bombarded with a variety of situations I didn't anticipate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work requires an extensive commitment of my time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a break to organize teaching materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little time to get things done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Things are not going as smoothly as I would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a break to prepare curricular materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Click here to move forward](#)



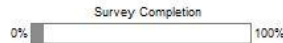


# Agricultural Education

## Induction Year Attitude Survey

SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

	SD	D	NA/A	A	SA
I will make a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My morale is sometimes low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take time to reflect on my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were successful because of my teaching strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will accomplish my goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question if I want to be a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can barely keep my "head above water"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time teaching unfamiliar content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about those events that were not successful because of my teaching strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School events, such as "back-to-school night" and parent conferences stress me out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often have a sense of accomplishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

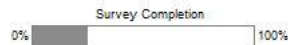


# Agricultural Education

## Induction Year Attitude Survey

**SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree**

	SD	D	NA/A	A	SA
I often think about how I want to change my management strategy for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The end of the semester/school year is a beacon of hope for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my curriculum for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very committed to being a teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can prevent problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I want to change my teaching strategy for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can manage problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think of how next school year will be different	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents sometimes intimidate me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with parents is sometimes awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with parents is sometimes difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# Agricultural Education

## Induction Year Attitude Survey

SD = Strongly Disagree, D = Disagree, NA/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree

	SD	D	NA/D	A	SA
I understand the process by which I am evaluated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes question why classroom management takes so much time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am often over worked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family members and/or friends sometimes complain about the requirements of my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please list some of the successes, related to your job, that you have experienced in the past six weeks.

Please list some of the challenges, related to your job, that you have experienced in the past six weeks.

[<<](#) [Click here to move forward](#)



# *Agricultural Education*

## *Induction Year Attitude Survey*

In what year were you born?

What is your gender?

Female

Male

What is your ethnicity?

American Indian

Asian/Pacific Islander

Black

Hispanic

White

Other Ethnic Background (Please Specify)

<< [Click here to move forward](#)



# *Agricultural Education*

## *Induction Year Attitude Survey*

What is the highest degree you possess?

---

Bachelor's

Specialist

Master's

Other (please specify):

Are you currently pursuing an additional degree?

---

Yes

No

How did you become certified to teach agricultural education?

---

Bachelor's Degree in Agricultural Education

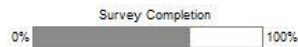
Master's Degree in Agricultural Education

Alternative Certification Route

Other (Please Specify)

<<

[Click here to move forward](#)



# *Agricultural Education*

## *Induction Year Attitude Survey*

Which of the following best describes your family situation?

- |                                     |  |
|-------------------------------------|--|
| <input type="radio"/> Never Married | <input type="radio"/> Divorced                                     |
| <input type="radio"/> Engaged       | <input type="radio"/> Divorced/Remarried                           |
| <input type="radio"/> Married       | <input type="radio"/> Widowed                                      |
| <input type="radio"/> Separated     | <input type="radio"/> Other (please specify): <input type="text"/> |

Do you have children?

- Yes  
 No

How many agriculture (Agricultural Science) teachers are there in your department (including you)?

How many years do you intend to teach (including this year)?

Please use this space to share any additional comments that you might have.

<< [Click here to move forward](#)

Survey Completion  
0%  100%

# *Agricultural Education*

## *Induction Year Attitude Survey*

We thank you for your time spent taking this survey.  
Your response has been recorded.

