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Analyzing Moir's Curve: A Quantitative Look at Attitudinal Changes in Induction-Year Agricultural Educators

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Abstract

With the challenge of creating a competent workforce to fill the shortage of agricultural educators nationwide, researchers have suggested a detailed examination of induction-year teachers to increase retention is critical. Multiple studies have depicted the importance of examining attitudes of induction-year and early career agricultural educators to develop quality induction-level support for this group. Moir (1990) conducted a qualitative study that resulted in the suggestion of six attitudinal phases all induction-year teachers experience, and described a predictive curvilinear relationship between attitude and time over the course of their first year teaching. As part of a larger study, the purpose of this study was to investigate the relationship among demographic variables and induction-year teachers' attitudes toward teaching. Using a repeated measures design, induction-year teachers' (n=197) attitudes were measured at six points during the 2011-12 school year in relation to the Moir's (1990) model. Findings showed that although minor changes in attitude among respondents occurred, respondents were generally positive in attitude toward their career and did not experience the high levels of fluctuation as suggested by Moir (1990). Additionally, upon completion of a forced entry linear regression, demographic characteristics were not found to be significant predictors of induction-year teachers' attitudes toward teaching.

Keywords: teacher-induction; agricultural education; attitude toward teaching

To meet the demands of today's learners, we must have a qualified workforce of teachers to serve them. The need for qualified teachers makes teacher shortages a critical issue in education; one that agricultural education has been plagued with for decades (Boone & Boone, 2007; Camp, Broyles & Skelton, 2002; Kantrovich, 2007; Wolf, 2011). According to the supply and demand study commissioned by the American Association of Agricultural Educators (AAAE), in 2009 there was a 26% gap between open agricultural education positions and qualified graduates to fill them (Kantrovich, 2010). This study also led researchers to suggest that teacher shortages could increase

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if there continues to be a decrease in the number of graduates in agricultural education (Kantrovich, 2010). Myers, Dyer, and Washburn (2005) identified the shortage of qualified teachers to fill secondary agricultural education vacancies as one of the most pressing issues facing the agricultural education profession.

There are many factors within the profession that could contribute to the lack of qualified teachers. Researchers suggest that retention practices, stress factors associated with agricultural education, and job satisfaction may be areas for improvement (Boone & Boone, 2007; Greiman, Walker, & Birkenholz, 2005; Joerger, 2002; Murray, Flowers, Croom, & Wilson, 2011; Moore & Swan, 2008; Nesbitt & Mundt, 1993; Peiter, Terry, & Cartmell, 2005; Walker, Garton, & Kitchel, 2004). Researchers have stated that providing induction programs that adequately support new teachers in agricultural education is critical and challenging because these programs must also identify and address normal stressors such as classroom management and content development (Scott, 1988), and attempt to control for extraneous variables associated with the choice to remain in the profession or leave (Smith & Ingersoll, 2004).

Although it is not clear how many agricultural education teachers leave or never enter the profession before retirement age, evidence exists supporting the notion that the percentage is high (Franklin & Molina, 2012; Kantrovich, 2010; Kelsey, 2006). Peiter, Terry, and Cartmell (2005) suggested teacher shortages and attrition could be addressed through more successful induction programs that provide transition-level support to help new teachers succeed. Induction programs can address problems, contribute to teacher success, and encourage teachers to stay in the profession (Moir & Glass, 2001; Nesbitt & Mundt, 1993). Many educational institutions have implemented induction programs to help early career teachers become more successful in the teaching profession (McCandless & Sauer, 2010). In agricultural education, Franklin and Molina (2012) found more than 65% of American Association for Agricultural Education (AAAE)-affiliated, teacher-preparation institutions provided beginning teacher assistance at some level. The reported need for induction-level assistance increases the importance of evaluating the specific experiences of early career agricultural educators, in order to design programmatic instruction that will serve the needs of induction-year teachers.

Fuller (1969), Huberman (1989), and Moir (1990) studied teachers and the various stages they experience for many years; their research serves as a foundation for this study. Evaluation of first-year agricultural education teachers could expand the scope of induction-year teacher research. In relation to agricultural education, the literature supports the notion that variation exists in both the experiences and attitudes between cohort members for new teachers (Bennett, Iverson, Rohs, & Langone, 2002; Berns, 1990; Cano & Miller, 1992; Croom, 2003; Joerger, 2003; Moir, 1990; Walker, Garton, & Kitchel, 2004). Understanding attitudinal phases of teachers has been shown to be an important facet in understanding job satisfaction and teacher retention (Ostroff, 1992). Additionally, to develop programmatic induction-year training that is best suited to all induction year teachers, it is important to understand demographic variables which may lead to differing attitudes toward teaching (Moir & Glass, 2001).

Moir's (1990) theory of attitudinal phases experienced by induction-year teachers had not been subjected to a quantitative test, although it has been examined extensively through qualitative research. An adequate instrument to measure specific phases of induction-year agricultural science teachers experience based on Moir's (1990) theory was not obvious in the literature. The study reported herein is a component of a larger study to develop quantitative metrics for Moir's theory as it relates specifically to induction year agricultural education teachers.

Theoretical Framework

Moir (1990) worked with approximately 1,500 induction-year teachers in California, taking excerpts from their journals along with program evaluations to understand the experiences of new teachers during their first year. After years of subsequent research Moir (1990) placed these

excerpts into themes and proposed six distinct phases of teacher attitudes toward teaching and proposed that first year teachers move from *Anticipation, Survival, Disillusionment, Rejuvenation, Reflection,* and back to *Anticipation.* Moir (1990) concluded from her research that not every teacher goes through all of the phases in the same order; however, she posited that most will experience all stages at some point during their first year.

After analyzing teacher reflections, Moir (1990) placed the attitudinal phases of induction-year teachers experiences in a linear fashion that corresponded with the school year (Figure 1). After analyzing teachers' journal entries to substantiate the timeline, Moir (1990) published her findings, which laid the foundation for understanding the induction year of teachers.

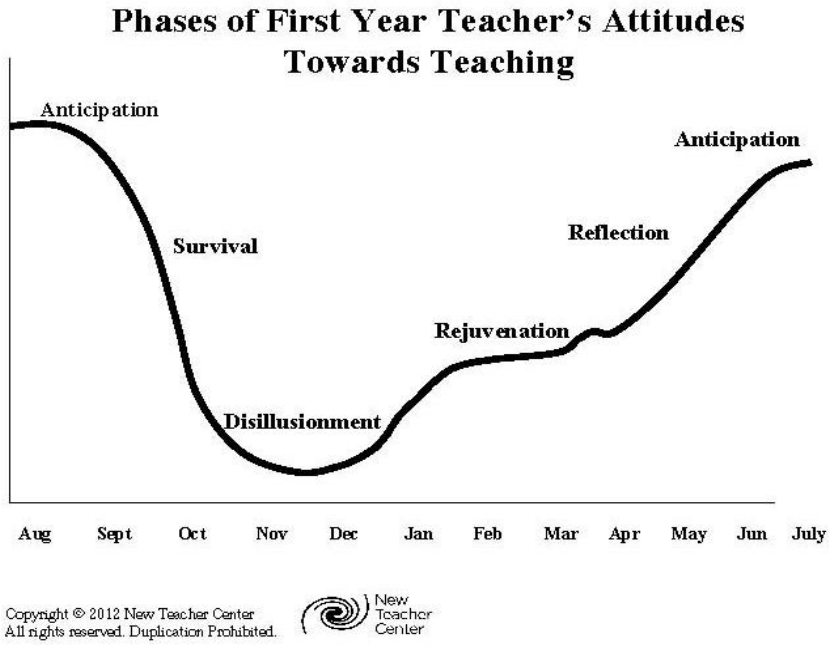

Figure 1. Phases of First Year Teacher's Attitudes Toward Teaching. Moir, 1999. Reprinted with permission.

Purpose and Objectives

The purpose of this component of the larger study was to investigate the relationship among demographic variables and induction-year teachers' attitudes toward teaching during the 2011–2012 school year. Research was guided by the following objectives:

1. Describe attitudinal changes of induction-year agricultural education teachers in New Mexico, Oklahoma, and Texas
2. 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.

Methods

This descriptive and predictive study was constructed using a repeated measures design. Induction-year agricultural education teachers in New Mexico, Oklahoma, and Texas (N = 125) during 2011-2012 school year were the accessible population for this study and were treated as a cohort. The overarching construct proposed for measurement during this study was attitude toward job. Indirect measures of new teachers' attitude toward teaching were obtained through questionnaires, and based on teacher perception.

Attitude toward teaching served as the outcome variable for this research, and was measured at six different points during the school year using a researcher-designed instrument to quantify the induction year based on Moir's (1990) study (Rayfield, McKim, Lawrence, & Stair, 2014). A panel of experts assessed the instrument for content and face validity. Post hoc analysis of reliability yielded an overall instrument reliability of a=0.88. Further analysis of reliability was completed through IBM ® SPSS ® v. 20 by analyzing overall reliability with each of the items removed. Removing items did not improve the alpha level of either individual constructs or the summated scale.

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) of data collection was followed for this study. Respondents self-administered the 76-item instrument that consisted of 66 Likert-type rating scale items, four multiple-choice response demographic items (single answer), three completion items, and three open-ended completion items.

To collect repeated measures data, all induction-year teachers were alphabetized and assigned a respondent identification number from 001 to125. The study had three rounds of data collection, with respondents randomly assigned to one of two groups per round as shown in Figure 2. Individuals in group "A" (i.e., R_1O, R_3O, and R_5O) received the instrument approximately eight weeks before group "B" (i.e., R_2O, R_4O, and R_6O). Each respondent received the instrument once per round, for a total of three times over the course of the study. Using IBM ® SPSS ® v. 20, 62 random numbers were generated. Numbers generated corresponding 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) as shown in Figure 2.

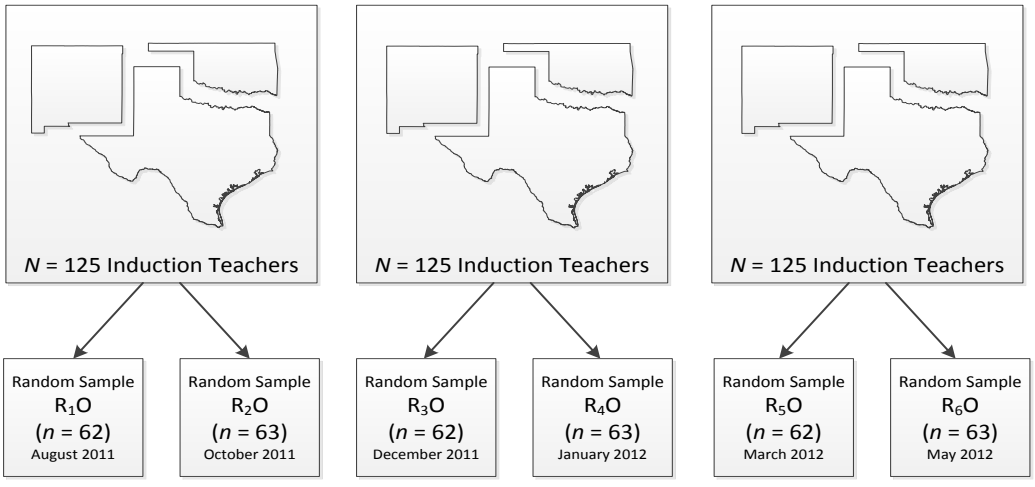

Figure 2. Group assignment by round

At the conclusion of the study, the overall response rate was 52.5% with *n* = 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 internet-based questionnaires in an effort to alleviate potential nonresponse error.

Table 1

Response Rate of Induction-Year Teachers (n=197)

Induction Round	*f (paper)*	*f (web)*	*%*
Round 1A (R_1O, August 2011)	11	20	50.00
Round 1B (R_2O, October 2011)	7	28	55.56
Round 2A (R_3O, December 2011)	10	16	41.93
Round 2B (R_4O, January 2012)	7	28	55.56
Round 3A (R_5O, March 2012)	6	32	61.29
Round 3B (R_6O, May 2012)	9	23	50.79
Overall	50	147	52.52

Factor analysis, specifically, principle component analysis with varimax rotation, was used to test the factors of Moir's (1990) theory. Quantitative data analysis techniques were used to analyze the data collected from respondents. Data were summarized and examined using frequencies, percentages, means, standard deviations, factor loading, correlations, and inter-item correlations as deemed appropriate.

Subject Characteristics

Demographic characteristics of the (*n* = 201) respondents are presented in Table 2. 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); 37% worked in a school with a two-teacher agricultural education department; 30% worked in a school with a single-teacher department; the remainder (*n* = 33) worked in three-, four-, or five-teacher departments; 41.7% were never married; 24.4% were married; 80% had no children; 78% had a bachelor's degree and 69% were not pursuing a master's; 26% wanted to teach 1–10 years; 11% intended on teaching 11-20 years; 23% wanted to teach 21–30 years; 13% intended on teaching 31-40 years; 3% intended on teaching 41 years or more; 9% of respondents were undecided on the length of time they intended to teach.

Table 2

Selected Demographic Characteristics of Respondents (n=201)

Characteristic	*f*	%
Gender		
Male	94	47
Female	107	53
Number of teachers in program		
1	60	30
2	74	37
3 or more	33	16
Not reported	34	17
Do You Have Children?		
Yes	36	18
No	142	71
Not reported	23	11
Family Status		
Never Married	84	42
Engaged	30	15
Married	49	24
Divorced	5	2
Divorced/Remarried	5	2
Other/Not Reported	28	14
Currently Pursuing An Additional Degree		
Yes	39	19
No	139	69
Not Reported	28	14
Intended Years to Teach		
1-10 years	53	26
11-20 years	23	11
21-30 years	47	23
31-40 years	27	13
41 or more years	7	3
Undecided	19	9
Not reported	25	12

Note. Due to rounding, not all percentages equal 100%.

Findings

Two research objectives guided this study and guided the tests of Moir's (1990) theory. The purpose of the first research objective was to describe attitudinal changes of induction-year agricultural education teachers in New Mexico, Oklahoma, and Texas. The conceptual model of phases of attitudes of first year teachers, as proposed by Moir (1990) is shown in Figure 1. Based on Moir's (1990) proposed model, induction-year teachers should experience attitudinal phases as the school year progresses. Moir (1990) posited induction-year teachers will experience *Anticipation, Survival, Disillusionment, Rejuvenation, Reflection,* and *Anticipation* over the course of their first year teaching.

In contrast to Moir's (1990) proposed stages, respondents had relatively little variation in their attitudes toward teaching as the school year progressed, and it is important to note that the attitudes toward teaching were generally positive at all points throughout the year. Mean scores per round did not statistically differ from one round to another. The overall grand mean score for all

responses (R_1O – R_6O; n = 197) was 3.46. The greatest mean score (M = 3.55; SD = 0.43) associated with an individual round was associated with the first round (R_1O) of data collection; whereas, the least mean score was associated with was associated with rounds four (R_4O; M = 3.39; SD = 0.42 and six (R_6O; M = 3.39; SD = .035) of data collection. The lack of noticeable fluctuation in this study could be due to the quantified y-axis scale being present on this model and absent on Moir's (1990) model. Figure 3 illustrates the attitudes induction-year agriculture teachers in New Mexico, Oklahoma, and Texas experienced during the school year.

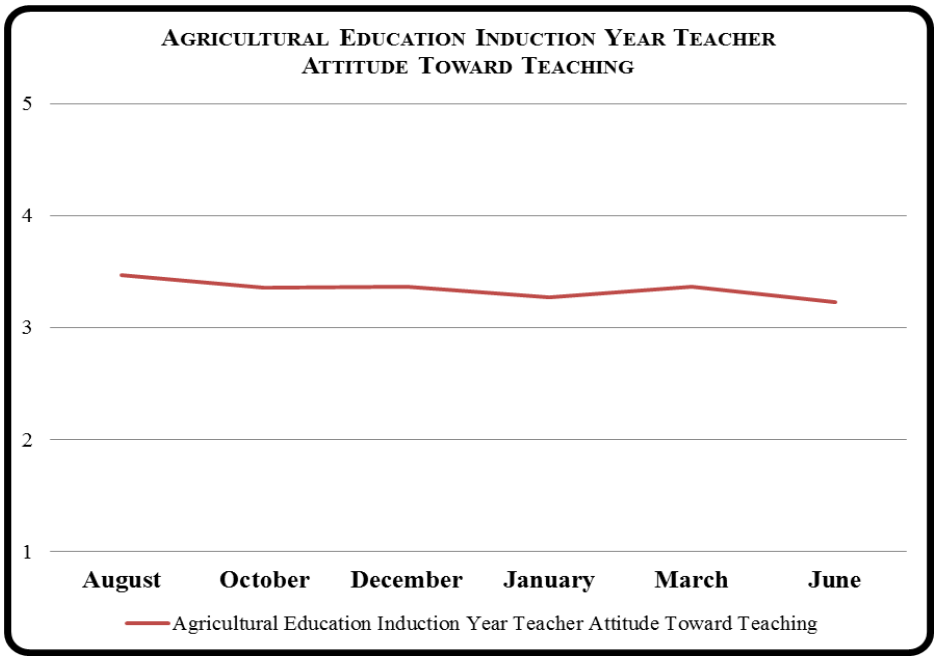

Figure 3. Agricultural Education Induction Year Teacher Attitude Toward Teaching

For illustrative purposes related to the fluctuation in attitude over the course of the year, all attitudinal scores between 3.0 and 3.5 were graphed on a scale adjusted view (Figure 4) to demonstrate the phenomena of attitude change over the course of the year. This depiction of scaled scores gives a more easily viewable reference of the change in attitude throughout the year. Although not statistically significant and minimal in overall impact related to the attitude level of induction-year agricultural educators, the scaled scores show that changes in attitude, although slight in comparison to the overall scale, do exist. Moir (1990) purported most teachers began the school year at an attitudinal high, and their attitude diminished as the school year continued.

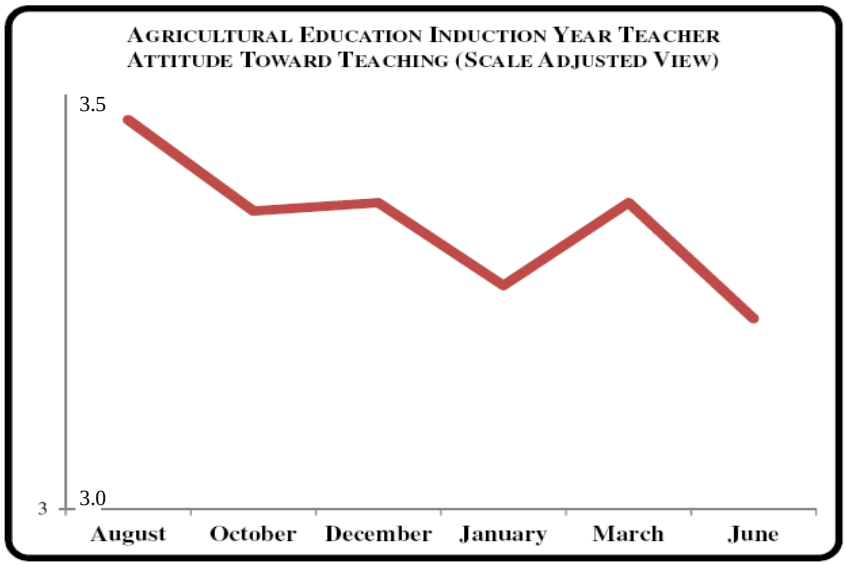

Figure 4. Scale adjusted model for attitudinal changes in induction-year agriculture teachers.

Although Moir (1990) posited that induction year teachers use the winter break as a period of rejuvenation, the scaled scores for agricultural educator respondents in this study showed a lag in the increase in attitude until the end of January. Another difference illustrated by the scaled view of scores is the noticeable lack of increase in attitude for respondents near the end of the school year, which is in contrast to Moir's (1990) findings.

To additionally describe the attitudinal changes of induction-year agricultural educators in New Mexico, Oklahoma, and Texas, data were analyzed in relation to specific constructs related to the phases of attitude described by Moir (1990). Constructs based on Moir's (1990) phases were developed as a method for quantifying the attitude of induction-year agricultural educators ([Authors, Year]). As part of a larger study ([Authors, Year]), instrument development resulted in the creation of nine constructs generated from factor analysis of the original 66 dimensions described in Moir's (1990) study. Although some variation existed between constructs, a significant change in attitude within a construct over time is not found for any of the nine categories. A summary of data by construct per round is shown in Table 3.

Table 3

Descriptive Statistics for Each Point of Data Collection by Construct

	R_1O		R_2O		R_3O		R_4O		R_5O		R_6O	
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Professional Efficacy	3.02	1.00	2.59	0.90	2.70	0.82	2.64	0.99	2.97	0.73	2.39	0.91
Balanced Reflection	3.70	0.59	3.55	0.60	3.62	0.52	3.62	0.81	3.56	0.68	3.77	0.53
Professional Commitment	3.85	0.66	3.77	0.61	3.82	0.64	3.64	0.61	3.78	0.55	3.38	0.47
Professional Confidence	2.96	0.94	3.15	0.87	3.12	0.88	2.77	0.85	3.11	0.82	3.01	0.97
Anticipated Change	3.92	0.74	4.00	0.65	4.08	0.54	4.34	0.66	4.14	0.59	4.32	0.56
Work-Life Balance	2.65	0.74	2.35	0.71	2.49	0.75	2.48	0.77	2.49	0.67	2.16	0.69
Strategic Renewal	3.77	0.65	3.61	0.66	3.67	0.64	3.24	0.82	3.43	0.67	3.49	0.72
Problem Solving	3.97	0.58	3.93	0.67	3.87	0.54	3.91	0.57	4.03	0.56	3.95	0.52
Professional Resolve	4.08	0.60	4.08	0.54	4.10	0.49	3.89	0.59	4.17	0.44	4.03	0.46
Grand Mean	3.55	0.43	3.45	0.38	3.50	0.32	3.39	0.42	3.52	0.35	3.39	0.35

Note. Initial invitations were sent on or about the 15th day of each month; R = Randomly assigned group: R_1O = August 2011, n = 31; R_2O = October 2011, n = 35; R_3O = December 2011, n = 26; R_4O = January 2012, n = 35; R_5O = March 2012, n = 38; R_6O = May 2012, n = 32

The purpose of the second research objective was to determine if demographic characteristics (*i.e., 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 over stepwise regression 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.

The regression yielded no significant predictors of attitude toward teaching, based on selected demographic variables. Table 4 illustrates the results of the forced entry linear regression for the variables.

Table 4

Regression Analysis for Demographic Factors Predicting Attitude Toward Teaching (n=197)

Variable	*B*	*SE B*	*β*	*T*	*Sig*
Gender	-0.008	0.066	-0.010	-0.12	0.906
Age	0.006	0.008	0.093	0.77	0.441
Number of Ag Teachers	-0.039	0.036	-0.092	-1.08	0.283
Family Status	-0.041	0.025	-0.154	-1.68	0.096
Presence of Children	-0.114	0.114	-0.120	-1.00	0.317
Highest Degree	-0.053	0.071	-0.064	-0.74	0.462
Pursuing Degree	0.003	0.079	0.003	0.04	0.970
Intended Years To Teach Group	0.016	0.020	0.065	0.80	0.425

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

Conclusions and Implications

Moir (1990) conducted a qualitative study, with 1,500 new teachers in California, whereas, this study was conducted with 125 induction-year agricultural education teachers. Based on the findings of this study, the researchers cannot claim that agricultural education teachers experience phases of attitudes during their first year of teaching as proposed by Moir (1990). Fluctuation in induction-year agricultural education teachers' attitudes toward teaching was minor.

Overall, the induction-year teachers' attitudes in this study remained positive throughout the year, in contrast to the suggestion of Moir (1990). Further inquiry into individual cases could reveal reasons this cohort of teachers remained generally positive. A possible explanation is that the typical schedule of an agricultural education teacher, which differs from other teaching content areas, incorporates many teaching assignments outside of the regular education classroom (Croom, 2003), and breaks the monotony of "day-in/day-out" rigors of the classroom.

In looking at scaled fluctuation to detect even small fluctuations in attitude, agriculture teachers seem different in their attitudinal changes with regard to winter break, as their attitude continued a slight decline until the end of January. Another difference occurred in the lack of a noticeable increase in attitude toward the end of the school year, which could be indicative of an agricultural education teacher's year-round work schedule. The decline in attitude toward the end of the school year could also be an indicator that induction-year teachers have expended much of their energy during the school year trying to meet the rigors of becoming a model teacher, as suggested by Roberts and Dyer (2004). It could also be a symptom of burnout as first-year teachers work to manage the multiple duties required of an agriculture teacher as outlined by Murray, Flowers, Croom, and Wilson (2011).

A generally positive attitude about teaching was evident in the findings of this study, which leads to questions about other considerations for teacher retention. Many agricultural educators make the choice to leave the classroom in their early years of teaching (Camp & Heath-Camp, 1990; Ingersoll, 2003). If attitudes remain positive throughout the induction-year, the evidence from this study supports the claim that factors other than attitude are influencing educators' choice to leave the profession.

Upon completion of a forced entry linear regression, it was determined that none of the collected variables were significant predictors of induction-year teachers' attitude toward teaching. These data suggest that for this cohort group, demographic characteristics did not influence attitude

toward teaching. Development of quality induction-year programming is important to not only teacher retention, but increasing the effectiveness of teachers who remain in the profession (Franklin & Molina, 2012; Joerger, 2003; Smith & Ingersoll, 2004). Understanding that demographic characteristics are not predictive of attitudinal changes allows for the development of quality induction-programs to serve the universal needs of all first-year teachers, without the need to develop multiple programs tailored to specific demographics.

With regard to subject characteristics, cohort members ranged in age from 22 to 51, of which nearly 10% of first year teachers were over the age of 30. Although there is no clear explanation for this phenomenon, one could hypothesize that the current economic situation in the United States has increased the number of people greater than 30 years of age who have entered the teaching profession or return to teaching after careers in other fields.

Another finding emerged related to intention to teach for a specified period of time and overall attitude toward teaching; although not directly related to the stated objectives of this study, this finding warrants examination. Respondents who intended to teach for a longer period of time had slightly overall 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 likely to view the career positively. It is important to note that this finding does not mean that the teachers will actually succeed in teaching as long as they intend to, rather they have a positive outlook on their chosen career, and they have had enough favorable interactions to intend to stay with it. Teachers who, during their first year, would already indicate continuing teaching beyond normal retirement age could be viewed as optimistic. In future research, intention to teach should not be overlooked as an important variable in predicting a teacher's attitude toward teaching, despite the lack of statistical significance in this study.

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 significant differences did not exist between groups, only 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 greatest 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 more likely in a three-teacher department, that there would be a mentor teacher with whom the new teacher could work closely. The effect of number of teachers in a department on the attitude toward teaching cohorts of induction-year teachers warrants further inquiry.

Recommendations

Based on the results of this study, several findings emerged which lead to recommendations for further research. Research recommendations include, using this study as a precursor to experimental research with induction-year teachers and their induction-year programming, which

could yield data related to the best practices for guiding induction-year teachers to increase retention.

This study could also be replicated 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. A simple replication of this study with induction-year agricultural education teachers could determine if these results were a chance phenomenon or if the attitudes of agricultural education teachers remain relatively positive their first year of teaching. Conducting this study on a larger scale could yield a large enough respondent group to analyze data related to differences in attitude between type of teacher preparation and region.

To further examine the interaction between demographic characteristics and attitudinal changes, research into the relationship between marital status and attitude toward teaching for induction-year agricultural education teachers should be pursued to investigate the usefulness of induction-year programs specifically tailored to the needs of early career agricultural educators as they marry and/or start a family. A final research recommendation would be to replicate this study with pre-service teachers to determine if similar attitudinal changes occur throughout the student teaching process.

This study also provides information which could be applicable in the profession as induction-year teachers experience their first year in the classroom. Based on the results of this study, recommendations for practice include developing individually tailored induction programs from data collected using the instrument in this study. The findings of this research highlight the need to establish organized induction programs for new agricultural education teachers with the cooperation and participation of AAAE member institutions and the NAAE.

As career commitment varied between the respondents in this study, it is recommended that teacher educators and state staff work with new agricultural education teachers to increase their career commitment, along with developing activities in undergraduate agricultural education programs that are designed to increase career dedication to the profession. Finally, upon its next iteration, teacher educators may benefit from clarification in the National Research Agenda of AAAE to emphasize induction-year agricultural education teachers, which may encourage more institutions to participate in formal induction-year programs.

Understanding the experiences of induction-year agricultural education teachers is paramount to developing new teacher induction programs, which will address their needs and increase their chances for retention in the profession (Joerger, 2003). It is encouraging for agricultural education that new teachers are generally positive about their job throughout the school year. By continuing to address new teachers' experiences, the profession can help beginning teachers remain in the profession and tighten the gap between the number of agricultural educators needed, and the number of qualified individuals to fill them.

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