

# An Analysis of Post–Secondary Agricultural Education Students’ Choice to Teach

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*The purpose of this study was to identify and describe factors that influence senior agricultural education students’ choice to become a secondary agricultural education teacher. The study focused on the extent to which students’ beliefs and attitude about teaching influenced their intent to select teaching secondary agricultural education as a career. An adaptation of the FIT–Choice® Scale instrument was distributed to senior students enrolled at post–secondary institutions within a nine state area that prepare secondary agriculture teachers. One–hundred forty–five students completed the instrument. Overall, negligible to low relationships were found between students’ beliefs about teaching and gender, perceived agriculture experience compared to peers, years enrolled in school–based agricultural education courses, years of FFA membership, participation in SAE, and years of 4–H membership. Negligible to low relationships were found between students’ attitude toward teaching gender, perceived agriculture experience compared to peers, years enrolled in school–based agricultural education courses, years of FFA membership, participation in SAE, and years of 4–H membership. A moderate relationship was found between students’ participation in high school agricultural education courses and their intent to teach agricultural education. Additionally, negligible to low relationships were found with the remaining student characteristics and intent to teach.*

Keywords: preservice teachers, agricultural education, recruitment, career choice

## Introduction

Nationwide, approximately 2.2 million teachers will be needed to fill positions in the next ten years because of teacher attrition, retirement, and increased student enrollment and more than 700,000 teachers will be needed in high–poverty urban and rural districts (NSEA, 2011). With respect to agricultural education, these data are alarming and problematic. When a large number of openings exist in a given state, often administrators and school districts are forced to hire uncertified or alternatively certified agriculture teachers, leave positions unfilled, or close programs entirely (Roberts & Dyer, 2004). The strength of the agricultural education profession hinges on several factors including state and federal legislation, funding, public perception, and local administration (Kantrovich, 2007). However, the recruitment of graduates into the profession also has the

potential to greatly impact the profession (Kantrovich, 2007). In the most recent national study of the supply and demand for agricultural education, it was reported that almost half of new agricultural education graduates who were certified to teach agricultural education chose careers other than teaching (Kantrovich, 2007).

A number of studies have been conducted to determine factors that influence undergraduates’ choice to major in agricultural education. Park and Rudd (2005) stated that secondary agriculture teachers influence many decisions about a student’s career and further education through their actions, comments, and instruction. These interactions, if positive, may lead students to a career teaching agricultural education. When agriculture teachers employ encouraging attitudes and behaviors, they may recruit new teachers into the profession (Park & Rudd, 2005). Stiegelbauer (1992) identified the importance of being a role model for

adolescents, continual learning and growth, sharing personal knowledge and expertise, and creating a positive learning environment as motivation to choose a career in teaching. In two studies conducted much earlier, Cole (1984) and Miller, Williams, and Sprouse (1984) concluded that students who were actively involved in SAE and FFA activities were more likely to choose agricultural education as a college major. An additional reason for majoring in agricultural education, as identified by Hillison, Camp and Burke (1986), was the flexibility of the program. Moreover, Esters and Bowen (2005) suggested that parents and friends were most influential on student career choices.

In regards to recruitment, Dyer and Breja (2003) stated that university teacher education programs in agriculture experience a ripple effect of the recruitment problems experienced in high school agriculture programs. Therefore recruitment efforts should begin at the secondary level.

Since recruiting students to the profession is essential to maintaining and growing secondary agricultural education programs across the country, it is vital to investigate the factors that play a role in choosing agricultural education as a career. Insight into the factors that influence students' choice to teach will provide assistance and guidance when developing national recruitment materials and help focus existing recruitment efforts at post-secondary institutions.

Lent, Brown, Talleyrand, McPartland, Davis, Chopra, Alexander, Suthakaran, and Chai (2002) identified factors that influenced college students' career choice as an interest in the subject matter and previous contextual work experiences or experiential learning. In contrast, Lent et al. identified disinterest, perceived low ability or performance problems, negative work conditions and lack of rewards as barriers to career choice. Identifying why students choose secondary education as a career choice is important as well. Kyriacou and Coulthard (2000) found that undergraduates view teaching as an enjoyable career as the most important factor influencing their choice. Additionally, the feeling of responsibility, contributions to society, and job mobility impacted teaching as a career choice. Furthermore, students who enter the teaching profession expect to make a difference in the lives of students (Hayes, 1990;

Stiegelabauer, 1992). Brunetti (2001) found the most important motivation for experienced teachers' choice to teach was the opportunity to work with young people and watching their students learn and grow. Harms and Knobloch (2005) identified several factors to explain career choice for those in agricultural education and career and technical education, in general. The factors included serving others, touching people's lives/making an impact, the "calling" to the career, salary and benefits, balance between career and personal time, and opportunities for advancement.

### Theoretical Framework

Fishbein and Ajzen (1975) provided the structure for which to better understand the antecedents to behaviors. According to Fishbein and Ajzen, in general, an individual will hold a positive attitude toward a given behavior if he/she believes that the performance of the behavior will lead to positive outcomes. Yet, Fishbein and Ajzen suggested that many researchers fail to distinguish among beliefs, attitudes and intentions and stated that behavior is a result of intentions. Intentions are a function of one's attitude, which is a result of one's beliefs or expectations that the behavior will lead to a particular outcome.

Furthermore, the expectancy-value theory is a social cognitive theory of motivation detailing the relationship between expectancies for success and the value placed in a goal (Wigfield & Eccles, 2000). The expectancy-value theory is directly linked to Fishbein and Ajzen's theory with the core belief that behavior is a function of the expectancies an individual has and the value of the goal toward which the individual is working (Watt & Richardson, 2007). The expectancy-value theory is the overarching theory in which this study is based. Understanding students' motivations for choosing a teaching as a career has implications for teacher education, curriculum design, and recruitment.

In addition to the expectancy-value theory, the framework of the FIT-Choice® model developed by Richardson and Watt (2006) provides a comprehensive guide for systematic investigation into the question of why people choose teaching (Richardson & Watt, 2006). The FIT-Choice® model organizes the themes

from the teacher education literature and locates them within the Expectancy–value theory to explain student choices to teach. The FIT–Choice® model (see Figure 1) contains antecedent socialization influences, followed by more proximal influences of task perceptions, self perceptions, values, and fallback career. The task constructs include *expert career*, *highly demanding*, *social status*, *teacher morale* and *salary*. Similarly, *values* constructs contain first order component constructs. The values constructs in the model are *intrinsic career value*, *job security*, *time for family*, *job*

*transferability*, *shape future of children/adolescents*, *enhance social equity*, *make social contribution*, *bludging*, and *work with children/adolescents*. These constructs ultimately lead to the choice to become a secondary agriculture teacher. The term *bludging* is an Australian expression meaning the laziest approach possible and was used only as a sub–construct identifier, not in the instrument. The FIT–Choice® model determines the strength of influence for a range of attitude, motivation and intent from individuals choosing teaching as a career.

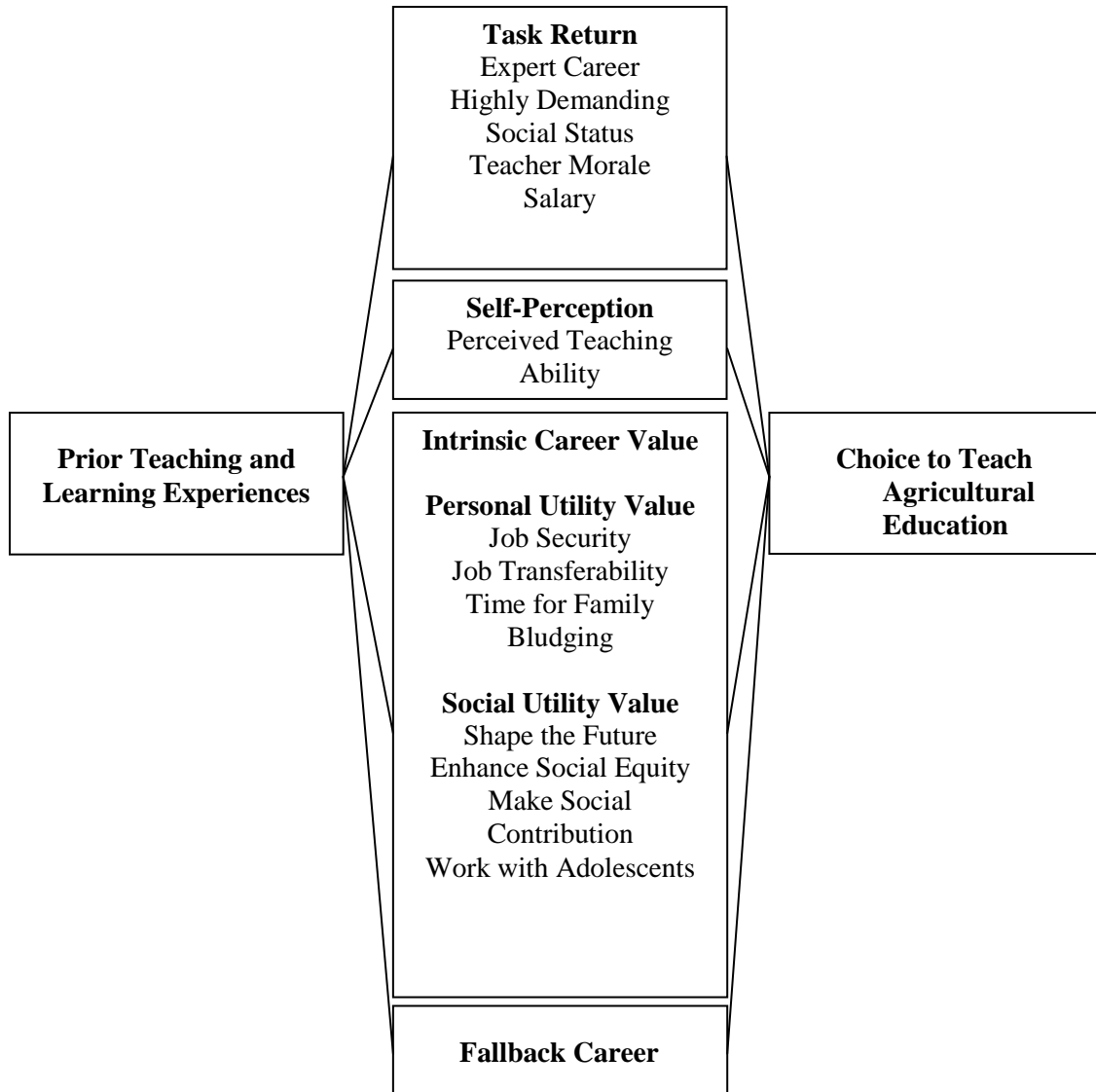


Figure 1. Ag Ed FIT–Choice® Model, adapted from Richardson and Watt (2006).

**Purpose and Research Objectives**

Undeniably, quality agriculture education teachers are needed to fill positions at a time where teacher shortages are clear. Thus, the purpose of this study was to determine the factors that influence agricultural education students’ choice to become secondary agriculture teachers. The following research objectives were developed to guide the study:

1. Describe selected characteristics of students majoring in agricultural education (gender, perceived agriculture experience compared to their peers, years enrolled in school-based agricultural education courses, years of FFA membership, participation in SAE, and years of 4–H membership).
2. Describe students’ beliefs about teaching secondary agricultural education (expert career, highly demanding, social status, teacher morale, and salary).

3. Describe students' attitude toward teaching secondary agricultural education (ability, intrinsic career value, fallback career, job security, bludging, time for family, job transferability, shape the future of adolescents, enhance social equity, make social contribution, work with adolescents, prior teaching and learning experiences, social influences).
4. Describe students' intent to teach secondary agricultural education (social dissuasion, satisfaction with choice).
5. Determine the relationship between students' beliefs about and attitude about teaching secondary agricultural education, their intent to teach secondary agricultural education and their gender, perceived agriculture experience compared to their peers, years enrolled in school-based agricultural education courses, years of FFA membership, participation in SAE, and years of 4-H membership.

### Methods

#### *Population and Sample*

This study utilized a nonexperimental descriptive–correlational research design method to meet the purpose and research objectives. This type of research often uses questionnaires to gather information from groups of subjects (Ary, Jacobs, & Razavieh, 2002). The target population was senior agricultural education students enrolled in a teacher preparation program. Institutions with teacher preparation programs in Agricultural Education were selected from states contiguous to Missouri by reason of proximity, ease of contact, cost, and familiarity with the teacher education programs within each state. Twenty–six teacher education programs within Arkansas, Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, Oklahoma, and Tennessee were initially identified from the American Association for Agricultural Education Directory (2007). Of the 26 teacher education programs within the nine–state area, 19 programs were included in the study. The 19 teacher education programs were selected based upon a single criterion established *a priori*. The selection criterion was access to senior agricultural education majors who were to participate in student teaching during the fall or spring semester. Because

students in these programs tend to be defined cohort groups, arguably, cohorts for subsequent years are likely to represent similar dispositions. Oliver and Hinkle (1982) argued that defined student cohorts could be considered representative of future similarly defined cohorts. Consequently, this study is viewed as a time and place sample.

#### *Instrumentation*

The data collection instrument was adapted from the FIT–Choice® Scale (Watt & Richardson, 2007). The FIT–Choice® Scale was developed to measure beliefs, attitude and intention of teacher candidates (Richardson & Watt, 2006). Dr. Helen Watt provided written permission allowing the FIT–Choice® to be utilized and adapted for this study. Section one of the instrument included 40 statements designed to collect data related to students attitude toward becoming a secondary agricultural education teacher. These questions began with the stem *I want to become a high school agriculture teacher because...*, and included questions such as *I like teaching about agriculture, it will allow me to shape children's values, and I have had good teachers as role models*. The questions are grouped into 13 sub–constructs to measure attitude: make a social contribution, prior teaching and learning, ability, work with adolescents, intrinsic career value, job security, enhance social equity, shape the future, social influence, job transferability, time for family, fallback career, and bludging. Section two of the instrument was designed to collect data related to students' beliefs about teaching. These 15 items began with the stem, *Compared with other professionals...*, and included questions such as *teaching agriculture is a highly skilled occupation and agriculture teachers are perceived as professionals*. The questions are grouped into five sub–constructs that measured beliefs: expert career, social status, teacher morale, salary, and highly demanding. Section three included six statements related to students' intent to teach and are measured by two sub–constructs, satisfaction with choice and social dissuasion. For each item, students were asked to identify their level of agreement. The response scale was a five–point Likert scale with the following choices: 1 = definitely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = definitely agree.

A panel of experts was utilized to review the data collection instrument and address face, construct and content validity. The panel consisted of seven university faculty members representing higher education institutions from across the United States and Australia. A pilot study with freshman agricultural education students ( $n = 29$ ) at University of Missouri was completed. This group of students was selected because of their similarity in teaching interests to that of the target population. As a result of the pilot test, slight modifications were made to the final instrument including clarification of questions and minor formatting changes. Cronbach's alpha was used as an estimate for reliability of the sub-constructs of the Ag Ed FIT-Choice questionnaire using data collected during the pilot test ( $n = 29$ ). Each of the 20 sub-constructs consisted of two or three questions each. The following reliability estimates were noted: shape the future of adolescents ( $\alpha = .90$ ), job security, work with adolescents and social influence ( $\alpha = .86$ ), salary ( $\alpha = .84$ ), ability and enhance social equity ( $\alpha = .78$ ), prior teaching and learning ( $\alpha = .77$ ), intrinsic career value ( $\alpha = .76$ ), time for family and expert career ( $\alpha = .75$ ), make social contribution and satisfaction with choice ( $\alpha = .67$ ), highly demanding ( $\alpha = .65$ ), social status and social dissuasion ( $\alpha = .63$ ), fallback career ( $\alpha = .60$ ) and job transferability ( $\alpha = .52$ ). Generally, .70 and above is an acceptable alpha; however a lower alpha is not necessarily a detriment. Nunnally (1978) concluded that in the early stages of construct validation research it may be acceptable to have only modest reliability. The study utilized pre-identified groups of senior agricultural education students prior to the student teaching experience. Consequently, the sample was not representative of the entire population and is non-probabilistic in nature. Therefore, caution should be exercised when interpreting the results and interpretations should not extend beyond the sample.

#### *Data Collection*

Data were collected from a convenience sample of students enrolled as seniors in agricultural education teacher preparation programs at 19 institutions throughout the Midwest. Dillman's (2007) Tailored Design Method suggested five points of contact to guide

the data collection process when using mailed questionnaires. Because of the unique characteristics of the sample, a modified version of the Tailored Design Method was used. Agricultural education faculty members at 19 institutions were contacted via email and asked to assist in the data collection process. The faculty members were asked to identify one primary faculty contact and the number of senior agricultural education students who would be able to participate. After consent was obtained from the faculty members and students were identified, a pre-notice email was sent to the faculty members at each institution that explained the purpose and instructions for the study. Also included were instructions the process for completing the instrument, the responsibility of the faculty member, specified timeline and IRB information. The second contact with the faculty members included a mailed packet of questionnaires, instructions and a stamped return envelope. The responsibility of the faculty contact was to distribute, collect, and return completed questionnaires to the researcher. For those faculty contacts who had not returned the completed questionnaires by the suggested date, an email was sent two weeks later that contained information similar to the second contact and served as either a thank you or reminder. The third contact was made with faculty for which data were missing via email to determine whether or not they needed additional time or new copies of questionnaires. A final packet was mailed to the faculty contact that had either not yet begun the instrument or those who had requested additional copies of the instrument. The final contact was made via email to thank those who participated. Due to the nature of convenience sampling, non-response error was not a concern in this study. However, to encourage participation of the cohort group of students, multiple contacts were utilized and all letters were personalized to the university faculty who agreed to assist with the study. Results include a response rate of 93%; 18 of the 19 institutions that initially agreed to participate returned questionnaires for a total of 145 data points ( $n = 145$ ).

#### *Data Analysis*

Data were analyzed using the Statistical Package for Social Sciences (SPSS® v. 15.0) for windows. Correlational analysis, using Davis'

(1971) conventions, was performed to interpret the magnitude of the correlation coefficients and to address the relationship between student beliefs, attitudes, intent to teach and the selected characteristics.

### Results/Findings

Research objective one sought to analyze the student selected characteristics (gender, perceived agriculture experience compared to their peers, years enrolled in school-based agricultural education courses, years of FFA membership, participation in SAE, and years of 4-H membership) (see Table 1). The majority of respondents were female ( $n = 77$ , 53.47%). Students were also asked to identify their perceived agriculture related experience as compared to their peers; ( $n = 67$ , 46.53%) respondents identified themselves as having

more agriculture experience, ( $n = 57$ , 39.58%) respondents identified themselves as having the same amount of agriculture experience, and ( $n = 20$ , 13.89%) respondents identified themselves as having less agriculture experience than their peers. The majority of respondents ( $n = 125$ ; 86.21%) took one or more school-based agriculture courses and reported a mean of 4.05 ( $SD = .88$ ) years of enrollment in secondary agricultural education. The majority of respondents ( $n = 127$ ; 87.59%) reported having been a member of the National FFA Organization the mean number of years of membership in the FFA was 5.52 ( $SD = 1.91$ ) years. Nearly four-fifths of respondents (78.32%) reported having a Supervised Agricultural Experience (SAE) project. The majority of the respondents ( $n = 103$ ; 71.53%) were also members of 4-H and reported a mean of 7.27 ( $SD = 3.71$ ) years of membership.

Table 1  
*Characteristics of Senior Agricultural Education Students (n = 145)*

Characteristic	<i>f</i>	%	<i>M</i>	<i>SD</i>
Gender				
Female	77	53.47		
Male	67	46.53		
Agriculture Experience <sup>a</sup>				
More than Others	67	46.53		
Same as Others	57	39.58		
Less than Others	20	13.89		
Enrolled in School-Based Agricultural Education				
Yes	125	86.21		
No	19	13.10		
Years of Enrollment			4.05	.88
FFA Membership				
Yes	127	87.59		
No	17	11.72		
Years of FFA Membership			5.52	1.91
Supervised Agricultural Experience Project				
Yes	112	78.32		
No	31	21.68		
4-H Membership				
Yes	103	71.53		
No	41	28.47		
Years of 4-H Membership			7.27	3.71

<sup>a</sup>Perceived agriculture experience compared to their peers

Research objective two sought to analyze the beliefs of senior agricultural education students about teaching. Students were asked to indicate their level of agreement regarding

statements of beliefs about teaching secondary agricultural education (see Table 2). Five sub-constructs were identified from the beliefs about teaching construct. The following sub-

constructs represented the agree category and included expert career, ( $M = 3.98$ ;  $SD = .69$ ), followed by social status ( $M = 3.79$ ;  $SD = .65$ ), and teacher morale ( $M = 3.67$ ;  $SD = .67$ ). The sub-construct salary ( $M = 2.94$ ;  $SD = .97$ )

represented the not sure (2.60 – 3.50) category and highly demanding ( $M = 2.54$ ;  $SD = .56$ ) represented the disagree category (1.60 – 2.50).

Table 2  
*Sub-constructs of Beliefs about Teaching (n = 145)*

Construct Item	<i>M</i>	<i>SD</i>
Expert Career	3.98	.69
Social Status	3.79	.65
Teacher Morale	3.67	.67
Salary	2.94	.97
Highly Demanding	2.54	.56

*Note.* 0.00–1.55 = definitely disagree, 1.56–2.55 = disagree, 2.56–3.55 = neutral, 3.56–4.55 = agree, 4.56–5.00 = definitely agree

Research objective three sought to determine the attitude about teaching agricultural education held by senior agricultural education students. Students were asked to indicate their level of agreement to each statement regarding attitude (see Table 3). Ten sub-constructs represented the agree category and included making a social contribution ( $M = 4.38$ ;  $SD = .46$ ); prior teaching and learning ( $M = 4.27$ ;  $SD = .63$ ); ability ( $M = 4.20$ ;  $SD = .48$ ); work with adolescents ( $M = 4.13$ ;  $SD = .61$ );

intrinsic career value ( $M = 4.12$ ;  $SD = .57$ ); job security ( $M = 3.94$ ;  $SD = .58$ ); enhance social equity ( $M = 3.83$ ;  $SD = .58$ ); shape the future ( $M = 3.80$ ;  $SD = .46$ ); and social influence ( $M = 3.78$ ;  $SD = .72$ ). The sub-constructs job transferability ( $M = 3.26$ ;  $SD = .70$ ) and time for family ( $M = 3.07$ ;  $SD = .71$ ) represented the not sure category and fallback career ( $M = 2.25$ ;  $SD = .81$ ) represented the disagree category. Finally, the sub-construct bludging ( $M = 2.02$ ;  $SD = .75$ ) represented the disagree category.

Table 3  
*Sub-constructs of Attitude about Teaching (n = 145)*

Construct Item	<i>M</i>	<i>SD</i>
Make a Social Contribution	4.38	.46
Prior Teaching and Learning	4.27	.63
Ability	4.20	.48
Work with Adolescents	4.13	.61
Intrinsic Career Value	4.12	.57
Job Security	3.94	.58
Enhance Social Equity	3.83	.58
Shape the Future	3.80	.46
Social Influence	3.78	.72
Job Transferability	3.26	.70
Time for Family	3.07	.71
Fallback Career	2.25	.81
Bludging	2.02	.75

*Note.* 0.00–1.55 = definitely disagree, 1.56–2.55 = disagree, 2.56–3.55 = neutral, 3.56–4.55 = agree, 4.56–5.00 = definitely agree

Objective four sought to identify students' intentions to teach secondary agricultural education upon graduation (see Table 4). Two

sub-constructs for intent to teach were identified. The sub-construct satisfaction with choice ( $M = 4.29$ ;  $SD = .72$ ) indicated the



students' agreement in their choice to teach. The sub-construct social dissuasion ( $M = 3.48$ ;  $SD = .70$ ) indicated the extent to which others

advised against pursuing a career in teaching agriculture.

Table 4  
*Intent to Teach Sub-constructs (n = 145)*

Construct Item	<i>M</i>	<i>SD</i>
Satisfaction with Choice	4.29	.72
Social Dissuasion	3.48	.70

*Note.* 0.00–1.55 = definitely disagree, 1.56–2.55 = disagree, 2.56–3.55 = neutral, 3.56–4.55 = agree, 4.56–5.00 = definitely agree

Objective five sought to determine the relationship between students' beliefs about attitude about teaching secondary agricultural education, intent to teach secondary agricultural education and their gender, perceived agriculture experience compared to peers, years enrolled in school-based agricultural education courses, years of FFA membership, participation in SAE, and years of 4-H membership (see Table 5). Pearson's product moment and point-biserial correlations were used to calculate the correlation coefficient. The findings indicate a positive, low relationship between beliefs about teaching and the number of years students were members of the FFA ( $r = .20$ ) and years enrolled in high school agricultural education ( $r = .18$ ). There was a negative, low correlation between students intent to teach and gender ( $r_{pb} = -.13$ ) and students participation in FFA and beliefs ( $r_{pb} = -.10$ ). Students' participation in 4-H had a positive, negligible relationship with beliefs ( $r_{pb} = .09$ ), while students' agriculture experience compared to their peers had a negative, negligible relationship with beliefs ( $r = -.09$ ). Students' participation in high school agricultural education ( $r_{pb} = -.08$ ), SAE participation ( $r_{pb} = -.04$ ), and years of membership in 4-H ( $r = -.03$ ) had a negative, negligible relationship with beliefs.

The findings indicate a positive, low relationship between attitude about teaching and the number of years students were FFA

members ( $r = .25$ ) and the number of years enrolled in high school agricultural education ( $r = .18$ ). Students' participation in SAE ( $r_{pb} = -.13$ ) and the number of years of membership in 4-H ( $r = -.10$ ) had a negative, low relationship with attitude. Students' agriculture experience compared to their peers ( $r = .07$ ) and students' participation in 4-H ( $r_{pb} = .03$ ) had positive, negligible relationship with attitude. While gender ( $r_{pb} = -.07$ ), students' participation in high school agricultural education ( $r_{pb} = -.02$ ) and students' participation in the FFA ( $r_{pb} = -.02$ ) had negative, negligible relationships with attitude.

A positive, moderate relationship between students' participation in high school agricultural education and students' intent to teach ( $r_{pb} = .38$ ) was reported. Students' years of enrollment in high school agricultural education had a positive, low relationship with intent to teach ( $r = .15$ ). Gender ( $r_{pb} = -.12$ ) and SAE experience ( $r_{pb} = -.12$ ) had a negative, low relationship with intent to teach. Students' participation in FFA ( $r_{pb} = -.09$ ), students' agriculture experience compared to their peers ( $r = -.07$ ) and years of 4-H membership ( $r = -.05$ ) revealed a negative, negligible relationship with intent to teach. The number of years students were members of the FFA ( $r = .03$ ) and students participation in 4-H ( $r_{pb} = .01$ ) showed a positive, negligible relationship with intent to teach.

Table 5  
*Bivariate Correlations between Selected Student Characteristics and Beliefs, Attitudes, and Intentions (n = 145)*

Characteristic	Beliefs <sup>c</sup>	Attitude <sup>c</sup>	Intent <sup>c</sup>
Years of FFA Membership	.20	.25	.03
Years Enrolled in High School Agricultural Education	.18	.18	.15
Gender <sup>a</sup>	-.13	-.07	-.12
Participated in FFA <sup>b</sup>	-.10	-.02	-.09
Participated in 4-H <sup>b</sup>	.09	.03	.01
Agriculture Experience	-.09	.07	-.07
Participated in High School Agricultural Education <sup>b</sup>	-.08	-.02	.38
Participated in SAE <sup>b</sup>	-.04	-.13	-.12
Years of 4-H Membership	-.03	-.10	-.05

Note. <sup>a</sup>Female=1; Male=2, <sup>b</sup>Yes=1; No=2; <sup>ab</sup> point biserial coefficients reported; <sup>c</sup> 1 = definitely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = definitely agree;  $p < .05$

### Conclusions

Based upon the findings of the study, students possess positive beliefs and attitudes about teaching agricultural education and are satisfied with their choice to teach. It is important to note that others did not easily discourage these students from entering the career. Previous research indicates peers, parents, and agriculture teachers play an important role in influencing a student's decision to teach agricultural education (Hillison et al., 1986). Perhaps students are being encouraged, as opposed to being discouraged, to enter the profession by these important people in their lives.

Students identified teaching as a career that requires expert knowledge, which is supported by Stiegelbauer (1992). Furthermore, students believed that teaching agricultural education gave them an opportunity to gain respect or social status, which is supported in a study by Hayes (1990) who suggested that students believe teaching is a highly respected career.

Students were unsure about salary and the highly demanding nature of the job. This suggests that students are uncertain of the financial rewards of becoming an agriculture teacher, and are unaware of the demands placed on agriculture teachers. Because, this study obtained data from students prior to student teaching, students may not be aware of the actual pressures placed on agriculture teachers or the intrinsic benefits of the job. Perhaps the unsure belief regarding teacher salary is a reflection of Herzberg's (1968) two-factor

theory, which identifies factors in the workplace that cause job satisfaction. These students have not had the chance to be motivated by recognition, responsibility, and the intrinsic passion for the job which may outweigh the salary concerns.

Overall, students tended to display a positive attitude toward teaching. Students believe that they will be making a social contribution, have had positive teaching and learning experiences, feel they have the ability, want to work with adolescents, and intrinsically value the career. Perhaps prior participation in agricultural education, FFA and 4-H, and community service activities has influenced the students' attitude about their ability to give back to students and the community. Furthermore, both prior teaching and learning experiences and being able to work with adolescents were significant in determining students' positive attitude toward teaching agricultural education. It stands to reason that these students have had great teachers, learning opportunities, and enjoy the prospect of sharing their experiences with others.

Students' intrinsic value placed on the career was rated high as well. With regard to teaching, the data suggest that these students simply enjoy teaching and teaching about agriculture. The intrinsic value of teaching as a career is supported by Hayes (1990) who identified that students majoring in education were strongly drawn to teaching for reasons other than monetary rewards.

Students indicated that they have carefully thought about the decision to teach, are satisfied

and happy with the choice to teach, and indicated that others influenced their decision to become an agriculture teacher. Important to note is that students disagreed that teaching agriculture education was considered a fallback career. While it is extremely positive that these students have a solid hold on their future career choice, discouragement from others was not a strong factor in students' choice of teaching as a career. This contradicts findings by Richardson and Watt (2006) who reported strong experiences with social dissuasion from teaching. In addition, there are minor concerns about having time for family. This could be due to the stage the students are in their college career; at this point in their undergraduate program students are finalizing their decisions about their future and their career, which may be unclear.

These findings suggest that students' past experience and preparation in agriculture, agricultural education classes, FFA, SAE, and 4-H do contribute to the students' attitude about their ability to teach agriculture. However, these findings indicate an inconsequential relationship between students' characteristics and their beliefs, attitude, and intent to teach agricultural education. While it is well documented that agriculture teachers and FFA programs are our best suppliers of future teachers, the idea of recruiting future teachers from outside of agricultural education may be an initiative to consider.

Continuing to make teacher recruitment a priority in agricultural education is vital to its growth. Many factors such as the skilled nature of the job, making social contributions, prior teaching and learning opportunities, perceived ability, and the opportunity to work with adolescents should be considered.

Students' motivations, attitude, and intent to teach have been a focus of research attention in a climate of rising teacher shortages. By and large, teaching was not considered a fallback career for these students. Nor was encouragement from others a strong factor in the students' choice to teach agricultural education. The students' ability beliefs, personal and social values, positive prior experiences in teaching and learning, and the expert nature of the job were all motivations for choosing agricultural education as a career. The students' values included the intrinsic career value of teaching,

the opportunity to make social contributions and work with adolescents, job security, and job transferability. These students perceived teaching agricultural education as a career that needed expertise but was not highly demanding, and one that provides for a low return in terms of salary and time for family.

### Recommendations

It is vital for agricultural education stakeholders including secondary agriculture teachers, state agriculture teacher organizations, teacher preparation programs, the National Teach Ag Campaign, and National FFA to continue to promote the positive benefits of choosing a career in agricultural education.

Teacher preparation programs must continue to provide students with the opportunity to gain the technical expertise they will need to become quality agriculture educators and offer a variety of technical coursework to students. Teacher preparation programs must provide the necessary pre-service coursework to develop well-prepared and knowledgeable agriculture teachers who can safely and effectively educate students (McKim & Saucier, 2011). This further supports the belief that agriculture education is a highly expert career where a significant amount of technical knowledge is needed. While the majority of these students have extensive experience in agriculture through FFA activities, SAEs, and 4-H membership, do these (and related) experiences alone contribute to the technical knowledge that is needed to teach? Because students believe that teaching agricultural education is a highly skilled career; technical content coursework should be encouraged and modified based on student needs. Teacher educators should work carefully to advise students on the appropriate technical content courses needed to enhance and strengthen their knowledge base. Additionally, undergraduate students should find employment or volunteer opportunities to learn supplementary skills that would enhance their technical knowledge. In addition, agricultural education teachers and teacher education programs should tap into the talents and interests of students who have an interest in the technical subjects and guide them towards the teaching profession.

Continuing to promote teaching as a professional career choice where one can make a difference is imperative. National and state FFA organizations, the National Association of Agricultural Educators, and the American Association for Agricultural Education should continue to reward quality agriculture teachers and continue to promote the occupation as a professional career choice. Teacher educators must provide opportunities for students to observe agriculture teachers in and out of the classroom prior to student teaching, give them the chance to reflect on what they have seen, and be willing to discuss salary issues while encouraging students to explore the intrinsic opportunities associated with teaching.

Secondary agricultural education teachers should continue to acknowledge the recommendations made by Park and Rudd (2005) and be professional, respect students, mentor, and exhibit positive teacher attitudes in order to produce future teachers. Students choose a career in teaching to make a positive difference in the lives of adolescents, have a desire to be a role model for students, and enjoy working with adolescents (Hayes, 1990; Stiegelbauer, 1992).

Capitalizing on the opportunity to work with adolescents is an additional factor that should be utilized in developing marketing and recruitment aids. The National FFA Organization should continue to develop strategies that target high school students and focus on agriculture teacher recruitment. An increased utilization of programs such as Partners in Active Learning Support (PALS) will also provide students the opportunity to work with children. Once more, an increasing emphasis on early, positive field experiences should be planned by teacher educators. In regards to recruitment of teachers into agricultural education promoting the enjoyment and passion about teaching, the interest in agriculture, and the opportunity to work with young people should be considered when focusing marketing efforts. Harms and Knobloch (2005) support the idea of intrinsic value of the career by identifying individuals teach in order to satisfy their needs. Students' intent to teach may be due to the enjoyment they get from teaching about agriculture.

Local agricultural education programs are commonly known for large contributions to the community, community service projects and

service to others. Agricultural education teacher preparation coursework should include components involving service learning and leadership. Current undergraduate students should capitalize on participation in campus organizations like Collegiate FFA, Ag Ed Club, or Alpha Tau Alpha, where they can obtain real world experience in service to others.

Because students were unsure about work and family, discussions about time management and balancing work and family life could be included in the teacher preparation programs. These discussions may alleviate any fears students have about the future. In addition to understanding work and family life balance, a continued joint effort from high school teachers and teacher educators to support students' decision to teach agricultural education is important.

Agricultural Education teacher preparation programs across the country typically attract the same type of student; they had high school agriculture education, and they were members of FFA and 4-H and had a SAE. This does not mean efforts should be refocused to another demographic, but there is an untapped resource of students out there. Interestingly, there were a slight few that did not share the typical background of the majority of the agricultural education students. This minority population may provide the additional teachers agricultural education needs to fill vacancies across the country. Students in urban, sub-urban and rural communities that do not have access to an agricultural education program may be potential recruits. The lack of prior experience in agricultural education should not deter recruitment efforts. National and state staff and teacher educators should develop strategies to reach out to the non-traditional audiences while continuing to recruit from the long-established source of students in high school agriculture education programs. This effort would bring about diversity in agriculture education as well as have the potential to reach out to communities wanting to incorporate agriculture programs into their existing curriculum and place teachers in diverse or urban areas; recruitment efforts should focus on students from diverse and urban backgrounds.

National and state leaders should make it a priority to recognize students who excel in agricultural education by continuing to provide

sponsorships in the agricultural education proficiency award area. Recruitment materials or workshops designed to teach students about a career in agricultural education are also called for. The factors identified in this study should be incorporated into materials promoting agricultural education as a career that taps into students' interests and experience, provides a steady career path, contributes to society, and is a career where they have the opportunity to work with kids and make a difference in their lives.

The struggle to recruit young people into agricultural education is well documented and according to Kantrovich (2007) agricultural education has not seen a single year since 1965 in which all teaching positions have been filled. Undeniably, continued evaluation of the factors that influence students' intent to teach is essential. Dyson (2005) voices a concern over the amount of reviews that have been conducted in teacher education over the last thirty years, because we continue to struggle with understanding why people are attracted to teaching in the first place. Richardson and Watt

(2006) suggest that a different approach to teacher recruitment, induction and retention is needed. Perhaps, future research should evaluate additional factors that influence students' intent to teach. Studies focused on agricultural education majors that do not come from the typical agricultural education route (i.e. no secondary agricultural education, FFA, urban, etc.) that assess the factors that influence their choice to teach agricultural education would assist in determining the factors that are significant in the development of initiatives and materials to attract a diverse population into agricultural education. Several factors including ethnic diversity, community size and urban vs. suburban factors were not considered in this study.

Finally, identifying the factors that influence students' choice to teach gives us the first step towards creating a plentiful supply of well trained and highly qualified agriculture teachers. The next step should focus on recruitment and retention strategies to maintain quality teachers in the profession.

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