

## PREDICTING AGRICULTURAL EDUCATION STUDENT TEACHERS' INTENTION TO ENTER TEACHING

*T. Grady Roberts, Associate Professor*  
University of Florida

*Julie F. Harlin, Associate Professor*  
*Gary E. Briers, Professor*  
Texas A&M University

### Abstract

*The purpose of this study was to explore how the student teaching experience and other variables influenced student teachers' intentions to teach. Data were collected from 80 student teachers at three universities—a land grant/research I institution, a non-land grant/doctoral degree granting institution, and a comprehensive regional institution. Data were collected longitudinally at four points during the student teaching semester. The typical student teacher in this study was a 22-year-old, white, male undergraduate who had been enrolled in agricultural education courses in high school and who had worked full time in agriculture. Intentions to teach did not change during the student teaching experience but did differ by university. The best predictor of a student teacher's intent to teach after student teaching was their intention to teach before student teaching. Differences in intentions to teach were observed at the three universities, and thus university was also predictive of final intent to teach.*

### Introduction and Theoretical Framework

“Student teaching is the most important experience a preservice teacher can have to determine future career decisions.” This message has likely been conveyed by teacher educators to preservice teachers numerous times. Many teacher educators would agree that student teaching is an important component of the teacher education program, but at what point do preservice teachers commit or disavow themselves to teaching as a career? Further, are there specific predictors that can help teacher educators determine early on which students are likely to teach? The agricultural education teacher shortage continues across the nation while national efforts emphasize adding programs and teachers. Currently, most teacher education programs in agriculture lose roughly 50% of their preservice teachers to other careers (Kantrovich, 2007). Predicting intention to teach could help teacher educators recruit and retain students who will enter the teaching field and increase the number of agricultural education teachers nationwide.

Armed with this knowledge, teacher educators might do a much better job recruiting the “right” students to preservice programs and provide interventions at appropriate times to help preservice teachers make good decisions regarding their future career.

This study examined the influence of the student teaching experience on student teachers' intentions to teach. Accordingly, a theoretical framework that emphasized the experiential, learner-centered nature of an internship was developed to guide this inquiry. A synthesis of four complementary theories accomplished this purpose: constructivism, social cognitive theory, situated learning, and experiential learning. First, it was assumed that learners (student teachers) actively construct meaning from their experiences (Doolittle & Camp, 1999; von Glasersfeld, 1995). Social constructivism further emphasizes the role of a social environment in the learning process (Doolittle & Camp). For the second part of the framework, social learning theory, it was assumed that learning (the student teaching experience) occurs in a

dynamic social environment (Bandura, 1997; Vygotsky, 1978). During the student teaching experience, these social interactions would include high school students, fellow student teachers, cooperating teachers, university supervisors, and others. Social cognitive theory purports an interaction between the environment, the person, and exhibited behaviors (Bandura). From a situated learning perspective, the third part of the framework, it was assumed that learning is situated and bound by the

context in which it occurs (Lave & Wenger, 1991). Learners are placed in a community of practice and develop through legitimate peripheral participation (Lave & Wenger). The fourth part of the framework, experiential learning, assumes that learning is a cyclical process by which learners reflect on experience (Roberts, 2006a). The above-mentioned theories were used to create a conceptual model (Figure 1) that guided this investigation.

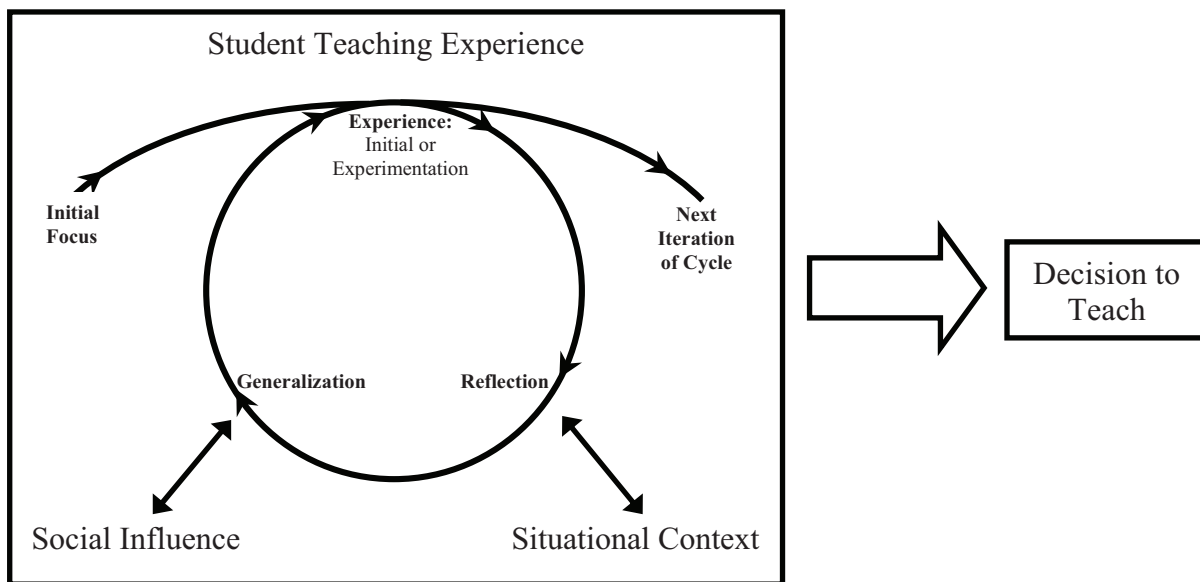


Figure 1. Conceptual model of factors that influence decision to teach.

Previous research that examined how the student teaching experience influenced intentions to teach could not be found, so a review of previous research centered on social and situational variables that occur during the student teaching experience was undertaken. A particular variable with tremendous impact on both the social and situational aspects of the experience is the cooperating teacher. Roberts (2006b) developed a four-dimensional model of cooperating teacher effectiveness. In this model, he outlined characteristics related to (a) the student teacher/cooperating teacher relationship, (b) teaching/instruction, (c) professionalism, and (d) personal characteristics. However, Kasperbauer and

Roberts (2007b) found that student teachers' perceptions of their relationship with cooperating teachers were not related to their decision to teach. Although perceptions of the student teacher/cooperating teacher relationship were not predictive of decision to teach, Kasperbauer and Roberts (2007a) reported that student teachers perceived the relationship with their cooperating teacher as *important* and that the perceptions of the *importance* did not change throughout the experience. Harlin, Edwards, and Briers (2002) and Young and Edwards (2006) reported similar findings. Edwards and Briers (2001) reported that cooperating teachers also perceived that the relationship with student teachers was important.

Although the importance of the relationship remained the same, Kasperbauer and Roberts (2007a) reported that as the experience progressed, student teachers perceived their cooperating teachers exhibited lower *levels* of those factors desired in the relationship, such as providing feedback and assistance.

Although perceptions of the student teacher/cooperating teacher relationship were not predictive of decision to teach, in a recent national study, Rocca (2005) found that agricultural education student teachers with higher teaching efficacy exhibited a greater intent to teach. He further reported that outcome expectations and support systems were positively related to teaching intention. These two factors (teaching efficacy and teaching expectation) accounted for 44% of the variance in a student teacher's intent to teach. Rocca reported teaching intention had a substantial positive correlation with teacher expectation, a moderate positive correlation with intended length of teaching tenure, and a moderate positive correlation with teaching efficacy.

Several researchers have studied teaching efficacy of agricultural education student teachers based primarily on the teaching self-efficacy work of Tschannen-Moran and Woolfolk Hoy (2001). Roberts, Harlin, and Ricketts (2006) found that teaching efficacy of student teachers changed during the student teaching experience. Student teachers began the semester with "quite a bit" of teaching efficacy, which increased after the 4-week on-campus block to its highest levels, then decreased to its lowest levels during the middle of the field experience, and then finally rebounded by the end of the field experience. Ultimately, teaching efficacy of student teachers increased from the beginning of the semester to the end. Knobloch (2006) reported similar changes in teaching efficacy with student teachers from The Ohio State University and the University of Illinois.

Other variables have been shown to be predictive of intent to teach. Kasperbauer and Roberts (2007b) found that a student teachers' experience in agricultural education as a high school student was

predictive of their decision to teach. In an earlier study, Hillison, Camp, and Burke (1987) also reported that a student teacher's decision to teach was influenced by his or her involvement in high school agricultural education. In an even earlier study, Cole (1984) found that agricultural education teachers who entered and remained in teaching were more likely to have been in high school agricultural education. Research in other educational fields has found that male and female preservice teachers are equally likely to enter teaching (Biraimah, 1988). Age of prospective teachers was not predictive of decision to teach (Zumwalt & Craig, 2005).

As noted earlier, previous research could not be found that examined how the student teaching experience influenced a student teacher's intent to teach. The current study will seek to fill that void in the research.

### Purpose

The purpose of this study was to explore how the student teaching experience and other variables influenced student teachers' intentions to teach. Three objectives guided this inquiry:

1. Determine if intent to teach prior to student teaching is different than after student teaching.
2. Determine if intentions to teach vary at different universities.
3. Determine which variables are predictive of student teachers' intent to teach after student teaching.

### Methods and Procedures

This study employed a causal-comparative design in which data were collected as it naturally occurred, without manipulation from the researchers (Gall, Gall, & Borg, 2003). This design allows for confirmation of relationships between variables but does not allow for a determination of cause and effect. The population of interest in this study was agricultural education student teachers at University 1 (a land grant/research I institution), University 2 (a non-land grant/doctoral degree granting institution),

and University 3 (a comprehensive regional institution). The accessible sample represented a slice in time sample of student teachers from the spring 2005 semester ( $n = 87$ ). Although not random, the researchers assumed the sample was representative and thus employed inferential statistics (Oliver & Hinkle, 1982).

Data were collected by a combination of mailed questionnaires and face-to-face sessions conducted by the researchers and collaborating teacher educators at other institutions. The three institutions structured the student teaching semester with a 4-week "block" of classes at the beginning of the semester, followed by 11 or 12 weeks of field experience. Data were collected at four points during the student teaching semester: (a) the first day of the "block" (Round 1), (b) the last day of the "block" (Round 2), (c) midway through the field experience (Round 3), and (d) at the conclusion of the field experience (Round 4). University 1 and University 3 had face-to-face sessions in the middle of the field experience (data collection point 3), but University 2 did not. Consequently, mailed questionnaires were used to collect data for those from University 2, which contributed to some nonresponse. Because of the longitudinal nature of this study, it was reasoned that employing follow-up procedures to capture data from nonrespondents would provide data at a different time during the experience and thus be incomparable to existing data.

Data on five sets of variables were collected: (a) student teacher perceptions of the *importance* of cooperating teacher characteristics (four dimensions: relationship, teaching/instruction, professionalism, and personal); (b) student teacher perceptions of the *level* to which their cooperating teacher exhibited the characteristics; (c) teaching efficacy; (d) intention to teach; and (e) demographics. Demographic information was collected only at data collection point one. All remaining data were collected at all four data collection points.

Data related to cooperating teacher importance variables, cooperating teacher level variables, decision to teach variables, and demographics were collected using a researcher developed instrument based on

the work of Roberts (2006b). The instrument consisted of four sets of items (cooperating teacher relationship – 14 items, cooperating teacher teaching/instruction – 9 items, cooperating teacher professionalism – 10 items, and cooperating teacher personal – 10 items), each accompanied by two five-point response scales, one for *importance* and the other for *level*. For *importance*, the stem question was, "how important is it?" The scale for importance ranged from 1 = *low* to 5 = *high*. For *level*, the stem question was, "what level does my cooperating teacher exhibit?" The scale for level also ranged from 1 = *low* to 5 = *high*. At each of the four data collection points, the instrument also contained a single item to determine intention to teach, "Do you plan to teach agricultural education when you graduate?" This question was accompanied by a seven-point response scale: 1 = definitely yes, 2 = yes, 3 = probably yes, 4 = unsure, 5 = probably no, 6 = no, 7 = definitely no. At the first data collection point, the instrument also contained a series of demographic questions. Teacher education faculty at Texas A&M University not otherwise involved in the research reviewed the instrument to establish construct and content validity. Reliability analysis was conducted post hoc and yielded Cronbach's alpha values for the two constructs (importance and level), accompanying the four cooperating teacher dimensions (eight total scales) between .85 and .96. It was assumed that the demographic questions had "accurate, ready made answers" and thus allowed respondents to reliably provide the requested information (Dillman, 2000).

Teaching efficacy was assessed using the *Teacher's Sense of Efficacy Scale* (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001). The long form of TSES was used, which consisted of 24 items, with a stem question of "How much can you do?" and accompanied by a nine-point scale of 1 = *nothing* to 9 = *a great deal*. Validity and reliability ( $\alpha = .94$ ) for the instrument have been established and are reported by Tschannen-Moran and Woolfolk Hoy.

Descriptive data were analyzed using frequencies, percentages, means, and standard deviations. Pearson product

moment correlations and point biserial correlations were used to describe the relationships between two variables. Analysis of variance was used to determine differences in variables. Backward regression was used to select the set of variables that explained the greatest amount of variance in a student teacher's intent to teach.

### Findings

Initially, there were 87 student teachers in the sample. As mentioned previously, it was decided a priori to omit participants with missing data because of the time-sensitive repeated measures design of this study. Accordingly, complete data were collected from 80 student teachers (see Table 1). The mean age was 22.49 ( $SD = 1.84$ ) and ranged from 21 to 33. The sample consisted of slightly more males ( $n = 42$ , 52.5%) than females ( $n = 38$ , 47.5%). Most

student teachers were undergraduate students ( $n = 70$ , 87.5%).

Previous experiences of student teachers were varied (Table 1). Nearly all had been enrolled in high school agricultural education courses ( $n = 73$ , 91.2%), with a large majority enrolled for 4 years ( $n = 57$ , 71.3%). Previous agricultural work experience also varied, with only one participant (1.3%) who indicated no previous experience. Sixteen student teachers (20.0%) had a vocational experience, defined as occasionally helping a friend or working on a weekend, 11 (13.8%) had part-time employment, 24 student teachers (30.0%) had full-time employment for a short period, and 28 student teachers (35.0%) had full-time work experience, either during the summer or prior to beginning college. A large majority of participants were white ( $n = 77$ , 96.3%), and only three were Hispanic (3.8%).

Table 1  
*Descriptive Summary of Participants*

		University 1	University 2	University 3	Total
		<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)
Gender	Male	18 (59.1%)	17 (89.5%)	7 (41.2%)	42 (52.5%)
	Female	26 (59.1%)	2 (10.5%)	10 (58.8%)	38 (47.5%)
Acad. status	Undergrad	38 (86.4%)	18 (94.7%)	14 (82.4%)	70 (87.5%)
	Grad	6 (13.6%)	1 (5.3%)	3 (17.6%)	10 (12.5%)
HS ag exp.	None	7 (15.9%)	0 (0%)	0 (0%)	7 (8.8%)
	1 Year	4 (9.1%)	0 (0%)	0 (0%)	4 (5.0%)
	2 Years	2 (4.5%)	3 (15.8%)	2 (11.8%)	7 (8.8%)
	3 Years	2 (4.5%)	1 (5.3%)	2 (11.8%)	5 (6.3%)
	4 Years	29 (65.9%)	15 (78.9%)	13 (76.5%)	57 (71.3%)
Ag work exp.	None	1 (2.3%)	0 (0%)	0 (0%)	1 (1.3%)
	Avocational	13 (29.5%)	1 (5.3%)	2 (11.8%)	16 (20.0%)
	Part time	7 (15.9%)	2 (10.5%)	2 (11.8%)	11 (13.8%)
	Full time, temp	13 (29.5%)	6 (31.6%)	5 (29.4%)	24 (30.0%)
	Full Time	10 (22.7%)	10 (52.6%)	8 (47.1%)	28 (35.0%)

First, zero-order correlations between the descriptive variables and the student teachers' final intent to teach were examined (Table 2). None of the descriptive variables were significantly correlated to intent to teach. Accordingly, it was decided to omit these variables from further analyses. Gender was correlated with high school agricultural education experience ( $r = .27$ ) and agricultural work experience ( $r = .44$ ),

indicating that males were likely to have taken more agricultural education courses and likely to have had more agricultural work experience. Additionally, high school agricultural education experience was correlated with agricultural work experience ( $r = .35$ ), indicating that the longer a student teacher was enrolled in high school agricultural education courses, they had more agricultural work experience.

Table 2  
Zero-order Correlations Between Descriptive Variables and Intent to Teach

Variable	1	2	3	4	5	6
1. Intent to teach	—	.11	-.01	.05	.14	.09
2. Age		—	.09	.40*	-.13	.18
3. Gender <sup>a</sup>			—	-.10	.27*	.44*
4. Academic level <sup>a</sup>				—	.11	-.01
5. HS ag experience					—	.35*
6. Ag work experience						—

<sup>a</sup>Point biserial corr.; Gend: 1 = male, 0 = female; Accl. lev: 1 = grad; 0 = undergrad.

\* $p < .05$ .

Student teachers were asked to indicate their perceptions of the importance of characteristics related to a cooperating teacher's effectiveness (Table 3). On four dimensions (teaching/instruction, professionalism, relationship, and personal) collected at the beginning of the block (Round 1), the end of the block (Round 2), the middle of the field experience (Round 3), and the end of the field experience (Round 4), responses averaged from 4.49 to

4.70. In round 1, the mean importance was high (4.55,  $SD = .36$ ), in round 2, it was slightly higher (4.57,  $SD = .37$ ), in round 3, it was nearly the same (4.56,  $SD = .37$ ), and in round 4, it was at the highest (4.68,  $SD = .32$ ). Statistically, mean importance changed  $F_{(2.67,181.77)} = 6.62, p = .001$  but did not differ for university  $F_{(2,68)} = .14, p = .87$ . Therefore, it was decided to include four repeated measures of overall importance in further analyses.

Table 3  
Importance and Level of Cooperating Teacher Characteristics Repeated Through the Experience

Construct	Importance				Level	
	Round 1 <i>M (SD)</i>	Round 2 <i>M (SD)</i>	Round 3 <i>M (SD)</i>	Round 4 <i>M (SD)</i>	Round 3 <i>M (SD)</i>	Round 4 <i>M (SD)</i>
Teaching/ Instruction	4.58 (.43)	4.53 (.44)	4.56 (.39)	4.66 (.34)	4.19 (.64)	4.36 (.53)
Professionalism	4.57 (.42)	4.65 (.42)	4.57 (.43)	4.70 (.37)	4.32 (.66)	4.43 (.59)
Relationship	4.49 (.41)	4.54 (.44)	4.56 (.43)	4.66 (.40)	4.18 (.72)	4.26 (.76)
Personal	4.56 (.38)	4.59 (.42)	4.57 (.42)	4.70 (.37)	4.33 (.63)	4.34 (.70)
Overall	4.55 (.36)	4.57 (.37)	4.56 (.37)	4.68 (.32)	4.26 (.58)	4.35 (.58)

Note. Scale: 1 = low to 5 = high.

Student teachers were also asked to indicate the level to which their cooperating teacher exhibited the effective characteristics (Table 3). Although data were collected at all four points of the study, it was determined that asking a student teacher to evaluate the level exhibited by their cooperating teacher before the field experience began would not provide accurate data. Accordingly, only data collected at round 3 and round 4 were used in analysis. The mean level of these characteristics exhibited in the middle of the experience (round 3) was high (4.26,  $SD = .58$ ), and at the end of the experience it was also high (4.35,  $SD = .58$ ). Statistically, level did not change  $F_{(1,72)} = .47, p = .49$  nor differ among universities  $F_{(2,72)} = 2.049,$

$p = .14$ . Consequently, a measure of overall level was calculated and included in additional analyses.

Teaching efficacy was also assessed at four points during the student teaching semester (Table 4). The mean overall teaching efficacy score began at 7.04 ( $SD = .90$ ), at the end of the block had risen to 7.36 ( $SD = .78$ ), then fell during the middle of the field experience to 7.06 ( $SD = .84$ ), and then rose to its highest level at the end of the experience, 7.56 ( $SD = .82$ ). Overall teaching efficacy did change through the semester ( $F_{(2,52,161.54)} = 5.27, p = .003$ ) but did not differ by university ( $F_{(2,.65)} = .43, p = .65$ ). Consequently, four measures of overall teaching efficacy were included in further analyses.

Table 4  
*Teaching Efficacy Repeated Through the Experience*

Construct	Round 1	Round 2	Round 3	Round 4
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
TE – Engagement	6.86 (.91)	7.20 (.84)	6.80 (.96)	7.39 (.87)
TE – Instruction	7.00 (1.00)	7.42 (.84)	7.23 (.90)	7.66 (.87)
TE – Classroom mgmt	7.25 (1.07)	7.46 (.83)	7.15 (.99)	7.61 (.90)
Overall teaching efficacy	7.04 (.90)	7.36 (.78)	7.06 (.84)	7.56 (.82)

*Note.* Scale: 1 = *nothing* to 9 = *a great deal*.

*Objective 1: Determine if intent to teach prior to student teaching is different than after student teaching*

Intent to teach was measured before and after the student teaching semester (Table 5). In general, student teachers began the semester with an intent to “probably” teach (5.06,  $SD = 1.60$ ), although differences were noted between universities, with participants at University 3 being more likely to teach (5.88,  $SD = .93$ ), participants at University 2 being less likely

to enter teaching (4.53,  $SD = 1.58$ ), and participants at University 1 in the middle (4.98,  $SD = 1.72$ ). At the end of the semester, students at University 1 and University 3 had greater intentions to teach (5.30,  $SD = 1.80$  and 6.06,  $SD = 1.64$ , respectively) than they had before student teaching. In contrast, students at University 2 had lower intentions to teach (4.11,  $SD = 1.82$ ). Statistically, analysis of variance revealed that intent to teach did not change ( $F_{(1,77)} = .02, p = .88$ ).



Table 5  
*Intent to Teach Before and After the Experience*

University	Before experience	After experience	<i>F</i>	<i>p</i>	$\eta^2$
	<i>M (SD)</i>	<i>M (SD)</i>			
University 1	4.98 (1.72)	5.30 (1.80)			
University 2	4.53 (1.58)	4.11 (1.82)			
University 3	5.88 (.93)	6.06 (1.64)			
Overall	5.06 (1.60)	5.18 (1.87)	.02	.88	.00

*Note.* Scale: 1 = *absolutely no* to 7 = *absolutely yes*.

*Objective 2: Determine if intentions to teach vary at different universities*

An examination of the descriptive statistics presented above (Table 5) showed that students at Universities 1 and 3 had greater intentions at the end of the experience, whereas students at University 2 had lower intentions. To determine statistically if intent to teach was different at the three universities, the between subjects effects of the analysis of variance were examined. This confirmed that intentions to teach differed by university ( $F_{(2,77)} = 5.29$ ,  $p = .01$ ,  $\eta^2 = .12$ ).

*Objective 3: Determine which variables are predictive of student teachers' intent to teach after student teaching*

To explain the greatest amount of variance in intent to teach, all variables that exhibited a significant zero-order correlation to intention were included in the backward regression procedure. Agresti and Finlay (1997) noted that in exploratory research, backward regression is an appropriate method to determine which variables contribute to explaining the greatest amount of variance in a response variable. First, the categorical variable of university (three possibilities) was transformed into two dummy-coded variables (UnivA and

UnivB). Then, the following dummy coding was used: (a) if a student teacher was from University 1, then UnivA = 0 and UnivB = 0; (b) if a student teacher was from University 2, then UnivA = 1 and UnivB = 0; and (c) if a student teacher was from University 3, then UnivA = 0 and UnivB = 1.

Using the procedures explained above and earlier analysis, the following variables were entered into the model: UnivA, UnivB, intent to teach at the beginning of the experience, cooperating teacher importance measured at four points (4 variables), the level of cooperating teacher effectiveness, and overall teaching efficacy measured at four points (4 variables). Through a backward regression procedure, the variables were omitted until the model included only variables that contributed significantly to predicting intent to teach at the end of the semester. Because of the dummy coding procedure, UnivA and UnivB were both kept in the model. As seen in Table 6, intent to teach at the beginning of the experience ( $Std\ B = .67$ ,  $p = .00$ ) had the largest effect on the model. UnivA, the dummy variable contrasting University 2 with Universities 1 and 3, was also a statistically significant predictor.

Table 6  
*Regression Model to Explain Teaching Intent at End of Experience*

Variable	<i>B</i>	Std. Error	Standardized <i>B</i>	<i>t</i>	<i>p</i>
Intent at beginning	.78	.10	.67	8.12	.00
UnivA	-.84	.36	-.19	-2.33	.02
UnivB	.06	.38	.01	.15	.88

*Note.*  $r^2 = .53$ , adjusted  $r^2 = .52$ ; Two dummy variables created to enter university into the model.

### Conclusions, Implications, and Recommendations

The purpose of this study was to explore how the student teaching experience and other variables influenced student teachers' intentions to teach. The typical student teacher in this study was a 22-year-old, white, male undergraduate who had been enrolled in agricultural education in high school and who had worked full time in agriculture.

Based on the findings of this study, it was concluded that intentions to teach do not change during the student teaching experience. Although this conclusion may seem logical to some, it may also contradict observations of others. Regardless, the current study adds to the knowledge base by providing empirical evidence about student teachers' intentions to teach. No previous research with agricultural education student teachers has examined intentions prior to and following the student teaching experience in which to compare the current results.

It was also concluded that intentions to teach vary by university. Examining the supply and demand of agricultural education teachers (Kantrovich, 2007) revealed differences in the portion of newly qualified teachers from different universities who elected to teach. Of notable interest in the current study was that intentions were stable over time but that students at one of the universities began the experience just slightly above unsure and ended the semester as unsure. A qualitative examination of differences in these universities is recommended.

Finally, based on the findings of this study, it was concluded that the best predictor of a student teacher's intent to teach after student teaching was their

intention before student teaching. Previous work that examined the effect of student teaching on intentions to teach in agricultural education could not be found. The current findings were inconsistent with the work of Kasperbauer and Roberts (2007b), Hillison et al. (1987), and Cole (1984), who all found that previous high school agricultural education experience was most predictive of intention to teach.

One explanation for the strong relationship between intentions before and after student teaching and little change in intentions could be the available curricula in "agricultural education" of the departments at these three universities. All three departments had nonteaching agricultural education degrees. So, it is possible that during agricultural education coursework taken the semesters prior to student teaching that if a particular student realized that teaching was not his or her desire, he or she may have changed to a nonteaching degree program. Thus, students who remained in a teaching degree had firm intentions prior to the student teaching experience. It is recommended that an examination be conducted to determine how many of the students actually took teaching jobs after graduation and if those with higher intentions to teach were the ones who took teaching jobs.

The findings of the current study raise questions concerning the importance of the student teaching experience toward career decisions. Those touting student teaching as "the most important part of a preservice teacher program" may need to reconsider their stance, at least in terms of the experience's determining if a preservice teacher will enter teaching. For the students in this study, the student teaching experience did not change intentions on whether to

enter teaching; this decision had been determined prior to student teaching, with student teaching merely confirming their decision.

The researchers in this study do still believe in the overall importance of student teaching as benefits have been confirmed in a number of studies (Edwards & Briers, 2001; Harlin et al., 2002; Kasperbauer & Roberts, 2007a; Young & Edwards, 2006). However, though many other researchers have cited the importance of student teaching to all aspects of developing new teachers, including decision to teach, the current study suggests that student teaching may not be as helpful in developing the decision to teach as it may be with other aspects of preservice teacher education. Accordingly, it is recommended that during the student teaching experience, activities focused on career decision making be replaced with activities designed toward developing teaching-related skills. If a student's decision to teach is already firm, it would be wasteful to devote time and effort toward changing this decision. Instead, one might devote that same amount of time and effort into developing more effective teachers who will meet the needs of tomorrow's school children.

For preservice teachers who ultimately choose agricultural education teaching as their profession, there are inherent benefits to student teaching that can be gained; there are likely also benefits for those who decide not to teach and instead enter other professions (Borne & Moss, 1990). Additionally, it may be important to know more about our preservice teachers and decision to teach. For instance, do students who indicated full-time work experience in agriculture want to be agriculturists first and educators second, assuming agricultural work is unavailable? Qualitative inquiry could help us answer these questions and delve deeper into determining predictors of decision to teach.

The other variable predictive of intent to teach was university. In this particular study, differences in the three universities were observed, and thus "university" was predictive of intent to teach. This had not been found in other research. One possible way to use this information would be to

determine universities where intent to teach is high and then study aspects of the program to determine if programmatic activities or other variables could be incorporated at other universities to improve intent to teach and thus decision to teach.

Finally, the question remains regarding when preservice teachers decide to teach. In this study, intent to teach was measured immediately prior to student teaching. However, the researchers did not determine at what point prior to student teaching this decision was actually made or the intent to teach became "firm." Was the decision made before enrolling in the preservice program? Was the decision made after taking an early field experience course and observing teachers and students in the real world? Knowing when this decision was made could make it possible to provide experiences and interventions that could impact decision to teach.

## References

- Agresti, A., & Finlay, B. (1997). *Statistical methods for the social sciences* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Biraimah, K. (1988). Preservice teachers' career expectations by gender, socioeconomic status, and academic achievement levels. *Florida Journal of Educational Research*, 30(1), 83-91.
- Borne, C., & Moss, J. W. (1990). Satisfaction with agricultural education student teaching. *Journal of Agricultural Education*, 31(2), 29-34.
- Cole, L. (1984). Oregon vocational agriculture teacher placement and retention factors. *The Journal of the American Association of Teacher Educators in Agriculture*, 25(3), 2-12.
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method* (2nd ed.). New York: John Wiley and Sons.

Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective. *Journal of Vocational and Technical Education*, 16(1). Retrieved May 2, 2008, from: <http://scholar.lib.vt.edu/ejournals/JVTE/v16n1/doolittle.html>

Edwards, M. C., & Briers, G. E. (2001). Cooperating teachers' perceptions of important elements of the student teaching experience: A focus group approach with quantitative follow-up. *Journal of Agricultural Education*, 42(3), 30-41.

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn and Bacon.

Harlin, J. F., Edwards, M. C., & Briers, G. E. (2002). A comparison of student teachers' perceptions of important elements of the student teaching experience before and after an 11-week field experience. *Journal of Agricultural Education*, 43(3), 72-83.

Hillison, J., Camp, W. G., & Burke, S. R. (1987). Why undergraduates choose agricultural education as a major: 1980 vs. 1985. *The Journal of the American Association of Teacher Educators in Agriculture*, 28(2), 2-7.

Kantrovich, A. J. (2007). *A national study of the supply and demand for teachers of agricultural education from 2004-2006*. Retrieved May 2, 2008, from: <http://aaae.okstate.edu/files/supplydemand07.pdf>

Kasperbauer, H. J., & Roberts, T. G. (2007a). Changes in student teacher perceptions of the student teacher-cooperating teacher relationship throughout the student teaching semester. *Journal of Agricultural Education*, 48(1), 31-41.

Kasperbauer, H. J., & Roberts, T. G. (2007b). Influence of the relationship between the student teacher and cooperating teacher on student teacher's decision to enter

teaching. *Journal of Agricultural Education*, 48(1), 8-19.

Knobloch, N. A. (2006). Exploring relationships of teachers' sense of efficacy in two student teaching programs. *Journal of Agricultural Education*, 47(2), 36-47.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Oliver, J. D., & Hinkle, D. E. (1982). Occupational education research: Selecting statistical procedures. *Journal of Studies in Technical Careers*, 4(3), 199-208.

Roberts, T. G. (2006a). A philosophical examination of experiential learning theory for agricultural educators. *Journal of Agricultural Education*, 47(1), 17-29.

Roberts, T. G. (2006b). Developing a model of cooperating teacher effectiveness. *Journal of Agricultural Education*, 47(3), 1-13.

Roberts, T. G., Harlin, J. F., & Ricketts, J. C. (2006). A longitudinal examination of teaching efficacy of agricultural science student teachers. *Journal of Agricultural Education*, 47(2), 81-92.

Rocca, S. J. (2005). *Predicting preservice agriculture teachers' intentions to teach utilizing person inputs, contextual influences, teacher efficacy, and outcome expectations*. Unpublished doctoral dissertation, University of Florida, Gainesville.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.

von Glasersfeld, E. (1995). A constructivist approach to teaching. In L. P. Steffe & J. Gale (Eds.), *Constructivism in education* (pp. 3-15). Hillsdale, NJ: Lawrence Erlbaum Associates.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Young, R. B., & Edwards, M. C. (2006). A comparison of student teachers' perceptions of important elements of the student teaching experience before and after a 12-week field experience. *Journal of Agricultural Education*, 47(3), 45-57.

Zumwalt, K., & Craig, E. (2005). Teachers' characteristics: Research on the demographic profile. In M. Cochran-Smith & K. M. Zeichner (Eds.), *Studying teacher education: The report on the AERA panel on research and teacher education*. Washington, DC: American Educational Research Association.

T. GRADY ROBERTS is an Associate Professor in the Department of Agricultural Education and Communication at the University of Florida, P.O. Box 110540, Gainesville, FL 32611-0540. E-mail: [groberts@ufl.edu](mailto:groberts@ufl.edu).

JULIE F. HARLIN is an Associate Professor in the Department of Agricultural Leadership, Education, and Communications at Texas A&M University, MS 2116, College Station, TX 77843-2116. E-mail: [j-harlin@tamu.edu](mailto:j-harlin@tamu.edu).

GARY E. BRIERS is Professor in the Department of Agricultural Leadership, Education, and Communications at Texas A&M University, MS 2116, College Station, TX 77843-2116. E-mail: [g-briers@tamu.edu](mailto:g-briers@tamu.edu).