CHANGES IN STUDENT TEACHER PERCEPTIONS OF THE STUDENT TEACHER-COOPERATING TEACHER RELATIONSHIP THROUGHOUT THE STUDENT TEACHING SEMESTER

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Abstract

The purpose of the study was to explore student teacher perceptions of the student teacher/ cooperating teacher relationship throughout the student teaching experience. The target population of this study consisted of preservice agricultural education students at Texas A&M University. The accessible sample consisted of student teachers in agricultural education in fall 2004, a group of 33 student teachers. Data were collected via paper instruments at four points during the student teaching semester: 1) the first day of the block; 2) the last day of the block; 3) the midpoint of the 11-week student teaching experience; and 4) the end of the 11-week student teaching experience. Two measures were examined: 1) the student teachers' perceptions of the importance of the relationship and 2) the student teachers' perceptions about the current level of relationship exhibited by their cooperating teachers. The typical student teacher in this study would be a 22 year old white female completing an undergraduate degree. The student teachers' perceptions of the importance of the relationship between student teacher/cooperating teacher did not change. However, the student teachers' perceptions of their cooperating teacher's current level decreased during the student teaching experience.

Introduction/Theoretical Framework

In recent years, the agricultural education profession has faced many challenges. One such challenge has been a shortage of qualified teachers entering the profession. Since 1965, supply and demand of agricultural education teachers in the United States has been studied (Camp, Broyles, & Skelton, 2002). The most recent study in 2001 showed that adequate numbers of potential teachers were produced by university agriculture teacher preparation programs (n = 857). However, only 59.4% (509) of the qualified preservice teachers entered teaching (Camp et al.). In the fall of 2001, there was a need for 1,115 new agriculture teachers and only an estimated 693 new graduates looking for jobs in the teaching profession (Camp et al.).

Typically, student teaching is the capstone experience of a teacher preparation program and occurs during the time in which the decision to enter teaching is made. Student teaching is one of the most important events during the teacher preparation process. Throughout the student teaching experience, the student teacher develops as an educator and gains practical teaching skills in the classroom. It is during student teaching that preservice teachers obtain hands on, real world experience. Numerous researchers (Briers & Byler, 1979; Byler & Byler, 1984; Schumacher & Johnson, 1990; Schumann, 1969) have agreed that the experience of student teaching plays a considerable role in preparation of future teachers.

This study was framed in the situated learning theory and through legitimate peripheral participation. Lave and Wenger (1991) viewed learning as a "situated activity" (p. 29), a "learn by doing" approach. This approach models what teacher educators attempt with the placement of student teachers during their student teaching experience. An important notion within the situated learning theory is

the idea of legitimate peripheral participation. This is the "process by which newcomers become part of a community of practice" (Lave & Wenger, p. 29). As learners participate in the community, they acquire the knowledge and skills required to be practicing members within that community. Conceptually, learners begin the process as preservice teachers. As preservice teachers enter the student teaching experience, they begin acquiring knowledge, skills, and attitudes about teaching. It is during this experience (student teaching) that preservice teachers make their decisions about entering the teaching profession. As depicted in Figure 1, the researchers hypothesize that the relationship between student teacher and cooperating teacher has a direct effect on the legitimate peripheral participation and ultimately has an effect on the decision to enter the community (teaching profession).

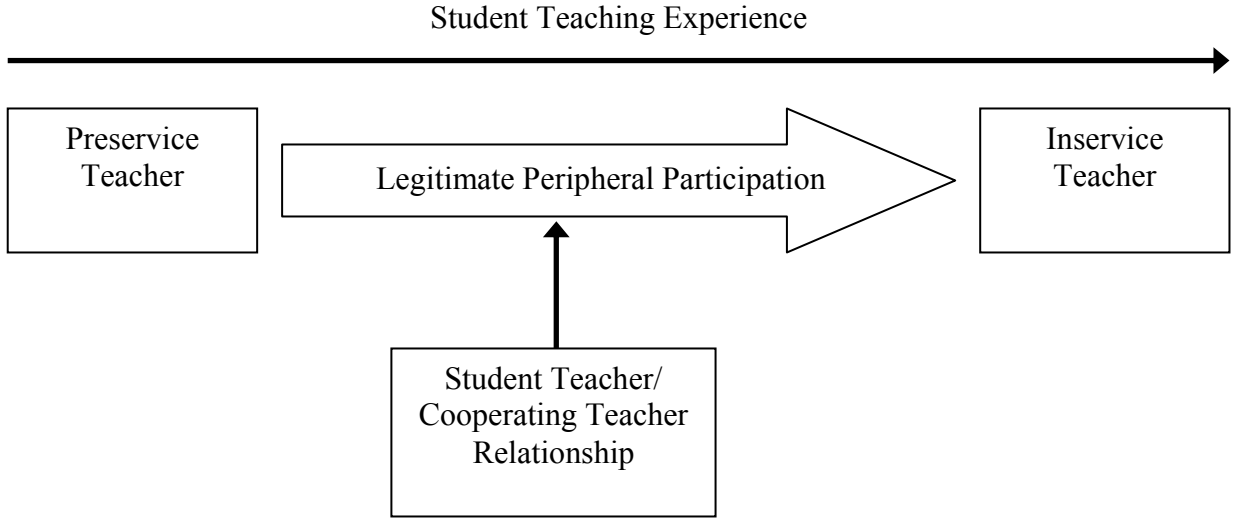

Figure 1. Conceptual model of student teacher/cooperating teacher relationship.

Generally, student teaching involves three groups of individuals – the student teacher, the university supervisor, and the cooperating teacher. Cooperating teachers are often the most influential in the development of novice teachers, as they have the most contact and communication with the student teachers. Norris, Larke, and Briers (1990) stated that "the student teaching center and the supervising [cooperating] teacher are the most important ingredients in the student teaching experience" (p. 58). Other investigators (Deeds, 1993; Deeds, Flowers, & Arrington, 1991; Garton & Cano, 1994; Martin & Yoder, 1985; Roberts, 2006; Roberts & Dyer, 2004) also supported this assertion. Martin and Yoder further argued that a student teacher's success during his or her field experience was based "on the general supervisory climate in the department and on the educational leadership abilities of the cooperating teacher" (p. 21).

In most instances, the relationship that a student teacher has with his or her cooperating teacher is unique. Montgomery (2000) stated that "if the perspective of the cooperating teacher conflicts with the perspective learned by the student teacher, this relationship does not permit a smooth transition for the student teacher" (p. 7). Harlin, Edwards, and Briers (2002), conducted a comparison of student teacher perceptions before and after the student teaching experience. The important elements were grouped into core areas, one of the core areas was the cooperating teacher/student teacher relationship. Items in this area received the highest overall rating in terms of the importance. Student teachers were able to identify the importance of the relationship between the student teacher and cooperating teacher both before and after the student teacher experience (Harlin et al.).

A similar study conducted in 1998 with cooperating teachers identified the importance of the student teacher/cooperating teacher relationship (Briers & Edwards, 1998). Edwards and Briers (2001) did a focus group and a quantitative follow up with a group of cooperating teachers attending a workshop. Participants were broken into core groups, one of which was cooperating teacher/student teacher relationship. This core area yielded five of the 10 highest rated items when the quantitative analysis was completed (Edwards & Briers).

The above-mentioned research documents the importance of the relationship between the student teacher and the cooperating teacher. However, no research could be found that attempted to examine the importance of this relationship and determine if it changes *throughout* the experience. Having this knowledge would allow teacher educators to prepare cooperating teachers to provide differing types of support throughout the student teaching experience. This study sought to investigate this phenomena.

Purpose and Objectives

The purpose of the study was to explore student teacher perceptions of the student teacher/cooperating teacher relationship throughout the student teaching experience. The following research objectives guided the study:

1. Describe the student teachers who participated in this study.
2. Describe student teacher perceptions of the student teacher/cooperating teacher relationship.
3. Determine if student teacher perceptions of the student teacher/cooperating teacher relationship changed during the student teaching semester.

Procedures

This study is part of an on-going larger research project at Texas A&M University. Accordingly, readers may notice similarities in research design, population, and sampling with other published research.

The target population of this study consisted of preservice agricultural education students at Texas A&M University. A purposive sample of students was selected during fall 2004. The accessible sample consisted of student teachers in agricultural education in fall 2004, a group of 33 student teachers. This group was chosen because the students participating in the student teacher block had the information needed about relationships between student teachers and cooperating teachers. Anecdotal evidence suggests that this group was representative of student teachers in agricultural education at Texas A&M University. The preservice teachers were engaged in a four week pre-experience teaching block on the campus and then reconvened at the midpoint of the semester and again at the conclusion of the 11-week field experience. Prior to the beginning of the semester, student teachers were required to spend a minimum of three days observing their cooperating teacher. Data were collected via paper instruments at four points during the student teaching semester: 1) the first day of the block; 2) the last day of the block; 3) the midpoint of the 11-week student teaching experience; and 4) the end of the 11-week student teaching experience. Response rates were 100% at each data collection point.

The instrument utilized for this study was based on research conducted by Roberts (2006) and a thorough review of the literature. Roberts sought to develop a model of cooperating teacher effectiveness by identifying characteristics of effective cooperating teachers. Four categories were identified: teaching/instruction, professionalism, student teacher/cooperating teacher relationship, and personal characteristics. Thirty characteristics were grouped into those categories (Roberts). Content validity and construct validity of the instrument were verified by an expert panel of university teacher educators not involved in the study.

The instrument was pilot tested by a similar sample of preservice teachers at the University of Georgia for reliability and face validity. Data in the pilot test were collected

from 33 participants. Reliability of the student teacher/cooperating teacher section, as measured by internal consistency, was alpha = 0.85. Respondents were also given the opportunity to suggest changes to the format of the instrument. However, no suggestions were given.

The background/demographics section consisted of six items: gender, age (years), semesters of high school agricultural science courses completed, academic classification, race/ethnicity, and agricultural work experience. The section of the instruction used to determine student teacher/cooperating teacher relationship consisted of 14 items. For each item, respondents were asked to indicate the importance of each characteristic and the current level of that characteristic as possessed by their cooperating teacher. Respondents used a five-point scale ranging from 1 to 5 (1 = low, 2 = moderately low, 3 = average, 4 = moderately high, and 5 = high).

Significance levels were set *a priori* at .05. Descriptive statistics were used to describe the sample of student teachers. To achieve the goals of the research objectives, frequencies, percentages, and central tendencies were calculated. Repeated Measures ANOVA was used to determine if student teacher perceptions of the cooperating teacher changed throughout the student teaching experience.

Findings

The first objective sought to describe the sample. Of the 33 participants in the study, 57.6% were female (n = 19). The average age of participants was 23.61 years old (SD = 4.95, n = 33) and ranged from 21 to 47. The median age was 22. Of the 33 respondents, 90.9% indicated their race/ethnicity as white. An additional two respondents (6.1%) indicated Hispanic/Latino, and one respondent (3%) indicated Native Hawaiian or Other Pacific Islander.

The greatest percentage of the participants were classified as undergraduates (n = 24, 72.7%). An additional 9.1% were classified as postgraduates seeking only certification (n = 3). Those classified as postgraduates seeking certification and a second degree represented 9.1% (n = 3), and 9.1% were classified as graduate students seeking certification and a graduate degree (n = 3).

Participants were asked to indicate if they had previous agricultural work experience, and if so, to further describe the nature of the experience. The range of responses ranged from no previous agricultural work experience to full-time employment for more than six months in an agricultural industry. Roughly 30% of the participants in this study (n = 10) indicated that their previous experience was mostly avocational (e.g., assisting a friend "feeding cows" on an occasional weekend, planting and caring for a garden). An additional 27.3% (n = 9) had full-time temporary employment for one or more summers in a production or agribusiness setting. Two respondents (6.1%) indicated that they had no agricultural work experience.

The number of semesters of high school agricultural science courses that participants had previously taken were grouped into five categories (none, 1-2, 3-4, 5-6, and 7-8 semesters completed). Respondents ranged from having taken no semesters of high school agricultural science courses, to having taken 7-8 semesters of agricultural science courses. Thirty-three percent (n = 11) of the participants had taken 7 or 8 semesters of high school agricultural science courses. Eight participants (24.2%) had not taken any high school agriculture courses.

The second objective sought to describe student teacher perceptions of the student teacher/cooperating teacher relationship. This was operationalized by two measures: the importance of specific characteristics; and the current level of relationship that the cooperating teacher exhibited. The means for importance and level of each characteristic measured at the first day of the block (Round 1), the last day of the block (Round 2), the mid-point of the 11-week experience (Round 3), and the end of the 11-week experience (Round 4) can be seen in Table 1. As noted earlier, data were collected at four points during the student teaching semester, two of which occurred prior to the 11-week field experience (at the beginning and end of the four-week

"block"). Perceptions of student teachers measured at this time were likely formed by their observations of their cooperating teacher prior to the semester and any correspondence between the two.

Table 1
Descriptives of Student Teacher (ST) Perceptions of Importance and Level of Relationship Characteristics

	Round 1				Round 2			
	Importance		Level		Importance		Level	
Cooperating Teacher Characteristic	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Encourages ST	4.64	.82	4.47	.76	4.72	.77	4.31	.74
Gives ST freedom to try things	4.58	.50	4.39	.76	4.66	.70	4.38	.75
Turns classes over to ST	4.39	.75	4.53	.78	4.69	.47	4.19	.78
Supports decisions made by ST	4.61	.56	4.27	.79	4.84	.37	4.31	.78
Helps ST plan lessons and activities	4.48	.71	4.10	.96	4.50	.72	4.03	.93
Routinely observes ST	4.42	.87	3.83	1.05	4.38	.91	4.28	.77
Provides constructive feedback to ST	4.79	.42	4.03	.84	4.81	.40	4.31	.74
Provides a variety of experiences for ST	4.70	.59	4.33	.71	4.69	.54	4.34	.79
Assists ST when needed	4.82	.47	4.27	.74	4.75	.51	4.28	.85
Treats ST as a fellow professional	4.73	.57	4.60	.68	4.78	.42	4.38	.75
Anticipates needs of ST	4.48	.76	4.17	.83	4.59	.67	4.19	.82
Provides clear expectations to ST	4.67	.69	4.03	.95	4.75	.62	4.22	.98
Shares resources with ST	4.79	.49	4.65	.76	4.72	.68	4.38	.75
Assists ST in finding a job	3.97	1.10	3.67	.96	4.47	.72	4.16	.85
Grand Means	4.58	.41	4.22	.54	4.67	.48	4.27	.71

Note. Scale: 1 = low, 2 = moderately low, 3 = average, 4 = moderately high, and 5 = high

Table 1, Continued
Descriptives of Student Teacher (ST) Perceptions of Importance and Level of Relationship Characteristics

	Round 3				Round 4			
	Importance		Level		Importance		Level	
Cooperating Teacher Characteristic	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Encourages ST	4.53	.72	3.91	1.25	4.82	.47	3.91	1.33
Gives ST freedom to try things	4.69	.54	4.00	1.20	4.73	.52	4.30	1.05
Turns classes over to ST	4.59	.56	4.19	.93	4.67	.48	4.15	1.25
Supports decisions made by ST	4.75	.51	4.09	1.06	4.88	.33	4.15	1.06
Helps ST plan lessons and activities	4.25	.92	3.44	1.37	4.55	.62	3.27	1.65
Routinely observes ST	4.28	.96	3.31	1.49	4.67	.54	3.33	1.56
Provides constructive feedback to ST	4.75	.44	3.41	1.48	4.85	.36	3.42	1.64
Provides a variety of experiences for ST	4.69	.54	3.78	1.24	4.82	.39	3.88	1.47
Assists ST when needed	4.59	.62	4.06	1.11	4.73	.45	4.06	1.32
Treats ST as a fellow professional	4.69	.54	4.25	1.02	4.88	.33	4.24	1.15
Anticipates needs of ST	4.44	.92	3.75	1.30	4.70	.53	3.76	1.39
Provides clear expectations to ST	4.53	.80	3.48	1.39	4.61	.79	3.79	1.39
Shares resources with ST	4.72	.46	4.06	1.15	4.82	.39	4.36	1.03
Assists ST in finding a job	4.41	.67	3.48	1.26	4.42	.83	3.27	1.59
Grand Means	4.56	.50	3.79	.96	4.72	.33	3.85	1.05

Note. Scale: 1 = low, 2 = moderately low, 3 = average, 4 = moderately high, and 5 = high

As depicted in Table 1, on the first day of the block (Round 1), participants rated he overall importance of the student teacher/cooperating teacher relationship at 4.58 (n = 33, SD = .41). When asked to rate the current relationship level of their cooperating teacher, participants responded with a mean of 4.22 (n = 32, SD = .54). The most highly rated specific characteristic for importance was "Assists student teacher when needed" (M = 4.82, SD = .47), while the least important characteristic was "Assists the student teacher in finding a job" (M = 3.97, SD = 1.10). When examining the relationship level exhibited by the cooperating teacher, "Shares resources with student teacher" (M = 4.65, SD = .76) was the highest and "Assists the student teacher

in finding a job" (M = 3.67, SD = .96) was the lowest.

Four weeks later, at the end of the block (Round 2), participants rated the overall importance of the relationship between student teacher/cooperating teacher 4.67 (n = 32, SD = .48). Participants rated the current relationship level of their cooperating teacher 4.27 (n = 32, SD = .71). The most important characteristic at this point was "Supports decisions made by the student teacher" (M = 4.84, SD = .37) and the least important was "Routinely observes student teacher" (M = 4.38, SD = .91). The same mean (4.38) was observed in the characteristics perceived to have the highest level: "Gives student teacher freedom to try things" (SD = .75), "Treats student teacher as fellow professional" (SD = .75), and "Shares resources with student teacher" (SD = .75). The lowest observed level was for "Helps student teacher plan lessons and activities" (M = 4.03, SD = .93).

Just over five weeks later, at the mid point of the 11-week experience, participants rated the importance of the student teacher/cooperating teacher relationship an average of 4.56 (n = 32, SD = .50). They rated their cooperating teachers' current level at 3.79 (n = 32, SD = .96). At this point, the most important characteristic was "Supports decisions made by the student teacher" (M = 4.75, SD = .51) and the least important was "Helps student teacher plan lessons and activities" (M = 4.25, SD = .92). The highest observed level was for "Treats student teacher as a fellow professional" (M = 4.25, SD = 1.02) and the lowest level was observed for "Routinely observed student teacher" (M = 3.31, SD = 1.49).

At the conclusion of the 11-week experience (Round 4), students teachers rated the overall importance of the student teacher/cooperating teacher relationship 4.72 (n = 33, SD .33). Participants rated their cooperating teachers at a level of 3.85 (n = 33, SD = 1.05). The most important characteristics were "Supports decisions made by the student teacher" (M = 4.88, SD = .33) and "Treats student teacher as a fellow professional" (M = 4.88, SD = .33). The least important was "Assists student teacher in finding a job" (M = 4.42, SD = .83). The highest level was observed for "Shares resources with student teacher" (M = 4.36, SD = 1.03). The lowest levels were observed for "Helps student teacher plan lessons and activities" (M = 3.27, SD = 1.65) and "Assists student teacher in finding a job" (M = 3.27, SD = 1.59).

The third objective was to determine if student teacher perceptions of the student teacher/cooperating teacher relationship changed during the student teaching semester. This was operationalized by looking at the summated means of student teachers' perceptions of the importance and level exhibited by cooperating teachers. Summary data of means for importance and level can be seen in Table 2 and Figure 2. Please note that in Figure 2, the full scale (1 to 5) is not used, so that visibility of the data is clearer.

Table 2
Descriptives of Importance and Level at Each Data Collection Point

	Importance of Relationship		Level Exhibited by Cooperating Teacher	
Data Collection Point	*M*	*SD*	*M*	*SD*
Beginning of 4 week block (Round 1)	4.58	.41	4.22	.54
End of 4 week block (Round 2)	4.67	.48	4.27	.71
Mid point of 11-week experience (Round 3)	4.56	.50	3.79	.96
End of 11-week experience (Round 4)	4.72	.33	3.85	1.05

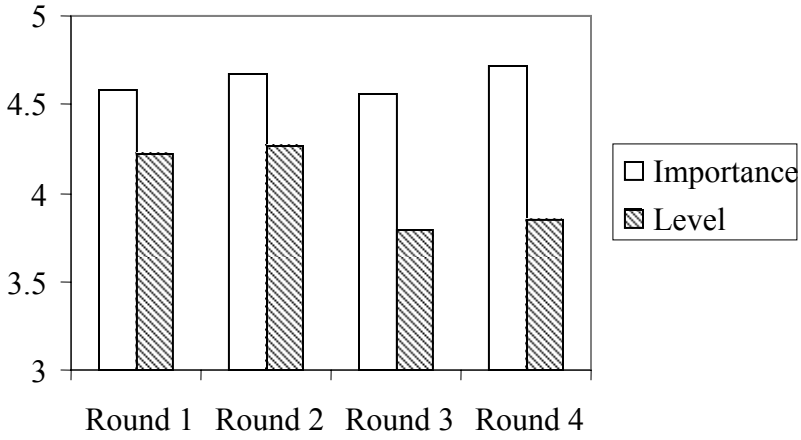

Figure 2. Relationship importance and level means at each data collection point.

To determine if a difference existed in importance, repeated measures analysis was used. Results of the test produced a significance level of $p = .134$ ($F_{3,90} = 1.91$). In this case, the sphericity assumption was met (*Mauchly's W* = .861, $p = .506$). The significance level of $p = .134$ suggests that there were no differences in the importance throughout the four data collection points (Table 3).

Table 3
Student Teacher Perceptions of the Importance of the Cooperating Teacher Relationship

	df	*F*	*p*	Eta Squared	Power
Importance	3	1.905	.134	.06	.478
Error	90				
Total	93				

Note. Sphericity assumption met (*Mauchly's W* = .861, $p = .506$)

The repeated measures analysis was also used to test for differences in perceived level of the relationship with the cooperating teacher (Table 4). This test produced a significance level of $p = .03$ (*Mauchly's W = .640*). In this case, the sphericity assumption was not met; therefore, the Greenhouse-Geisser Adjustment was used. The significance level of $p = .002$ ($F_{2.275,\ 65.966} = 6.674$) suggests that there were differences in the student teachers' perceptions of their relationship with their cooperating teacher relationship level throughout the student teaching semester and at the four data collection points. An examination of the means (Table 2) shows the perceptions of the level decreased as the student teaching experience progressed.

Table 4
Student Teacher Perceptions of Their Cooperating Teachers' Current Level

	df	*F*	*p*	Eta Squared	Power
Level[a]	2.275	6.674	.002	.187	.927
Error	65.966				
Total	68.241				

Note. Sphericity assumption not met (*Mauchly's W* = .640, *p* = .03)
[a] Greenhouse-Geisser adjustment used

Conclusions

Objective one was to describe the student teachers in the study. The profile of a "typical" student teacher in agricultural education would be a 22 year old white female completing an undergraduate degree. This conclusion is similar to that reported by Harlin et al. (2002). It was also concluded that approximately one-third of the participants had mostly avocational work experience (assisting a friend "feeding cows" on an occasional weekend or planting/caring for a garden). Nine other participants indicated that they had full time temporary employment in the agricultural industry. One-third of the participants indicated that they had completed 7-8 semesters of agricultural science courses. Eight participants had not taken any high school agricultural science courses.

Research objective two was to describe perceptions of student teachers of the student teacher/cooperating teacher relationship. During the first round of data collection (Round 1), the average importance of the student teacher/cooperating teacher relationship was moderately high to high. The current level was also moderately high, but lower than the importance. At the second data collection, the average importance level was moderately high to high. The current level of cooperating teachers was also moderately high, but lower than importance. Harlin et al. (2002) reported similarly high importance of the relationship before the 11-week student teaching experience. No studies examined the perceived level. The importance mean for the third round of data collection was moderately high to high. The current level of cooperating teachers was average to moderately high. At the final round of data collection, participants indicated their importance level as high, while current level of their cooperating teacher was average to moderately high. Harlin et al. also reported that the student teacher/cooperating teacher relationship was high at the end of the student teaching experience.

Research objective three was to determine if student teacher perceptions of the student teacher/cooperating teacher relationship changes during the student teaching semester. It was concluded that student teacher perceptions of the importance of the relationship between student teacher and cooperating teacher did not change. Harlin et al. (2002) previously reported no change in the importance of the relationship. However, the research team only examined this phenomenon at two points. In contrast, it was concluded that student teacher perceptions of their cooperating teacher's current level decreased during the student teaching experience.

Recommendations and Implications

For this study, the sample was purposely selected and generalizations could only be made regarding student teachers at Texas A&M University. To provide more generalizability, this study should be replicated using samples from other institutions.

The importance of the cooperating teacher/student teacher relationship

remained relatively constant throughout the student teaching experience. This implies that, regardless of their advancement through legitimate peripheral participation (Lave & Wenger, 1991) towards full entrance into the agricultural education profession, student teachers think the relationship they have with their cooperating teachers is important. Cooperating teachers should be informed of this finding, so they may evaluate and adjust their behaviors accordingly. This study did not evaluate the importance of this relationship once student teachers entered the profession fully. A follow-up study should be conducted to determine if student teachers still think the relationship they have with their cooperating teachers is important once they have entered the profession.

Student teachers' perceptions of the level to which cooperating teachers exhibit the characteristics needed for a good relationship decreased as the student teaching experience progressed, which raises some interesting questions. Given that this study only ascertained perceptions from the student teachers, would cooperating teachers have similar perceptions? Could the actual relationship be objectively measured? If so, would that measure show a similar decrease? What explains the decrease observed? Perhaps cooperating teachers utilize a scaffolding approach and decrease their support as the abilities of the student teachers develop. Regardless, the observed phenomenon, along with the raised questions warrant further investigation.

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