

Student-Teacher Interaction with Cooperating Teacher

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Introduction/Need for Research

There is a nationwide shortage of agricultural science teachers. According to Smith, Lawver, & Foster (2018), there was still a demand for teachers even after schools hired non-licensed individuals to teach agricultural education. Many studies have shown student teaching is a necessary experience to have (Briers & Byler, 1979; Byler & Byler, 1984; Hamman et al., 2006; Schumacher & Johnson, 1990; Schumann, 1969). This experience can also determine if they will stay in the profession and continue to teach (Kasperbauer & Roberts, 2007; Sorensen et al., 2018). With student teaching playing an essential role in the decision to remain in agricultural education, the experience needs to be beneficial. A significant portion of student teaching is the interaction the student teacher has with their cooperating teacher. This relationship is a pivotal contributor to the student teacher becoming successful in the future (Schumann, 1969). With over 1,000 positions to fill in 2018 and over 3,000 students enrolled in an agricultural education major, we should not have a shortage (Smith et al., 2018). Only 74.9% of students who graduated nationwide are teaching, according to Smith et al. (2018). Finding out why graduates are not pursuing a teaching position in agricultural education is essential. If the trend continues, more programs will be forced to close, and students will be affected. Educators are challenged to determine the reasons why graduates are not entering the profession (Kasperbauer & Roberts, 2007). Kasperbauer & Roberts (2007) notes that the issue to address is the quality of the student teaching experience with the cooperating teacher.

Theoretical Framework

Interactions between the student teacher and cooperating teacher are critical (Hamman, Fives, & Olivarez (2007). Granott (1993) proposed a theoretical framework keeping in mind the work of Vygotsky and Piaget. The interaction model created by Granott (1993) has two dimensions. The horizontal dimension represents the degree of collaboration, and the vertical dimension is the relative knowledge and expertise between the participants. Granott (1993) also created the collaborative interaction model that has nine sections describing collaboration and relative expertise. As a student teacher/cooperating teacher pair, the collaborative interaction would be ideal at scaffolding (Granott, 1993). That allows the student teacher to learn from the cooperating teacher and have guidance in the classroom. If a student teacher and cooperating teacher have an imitation relationship, the student teacher might not pursue a teaching position.

Methodology

The target population was the student teaching cohorts in 2017, 2018 and 2019 at Texas Tech in the Department of Agricultural Education and Communications. A study by Hamman et al. (2006-2007) provided the Learning to Teach Questionnaire, which looks at the interaction between the student teacher and their cooperating teacher. 26 questions were asked with a Likert-type scale to examine if interaction had an association on their decision to teach. The analysis for this research was quantitative in nature.

Results & Findings

The participants in this study were 71% female ($N = 32$) and 29% male ($N = 13$). Of the participants, 16% were from the 2017 cohort ($N = 7$), 31% from the 2018 cohort ($N = 14$), and 53% from the 2019 teaching cohort ($N = 24$). 64% of participants pursued an agricultural

teaching position ($N = 29$), while the remaining 36% of students did not ($N = 16$) for various reasons including graduate school or entered another profession. During the student teaching experience, 33% of participants had another student teacher present ($N = 15$), while 67% were the only student teacher with their cooperating teacher ($N = 30$). A majority of participants were at schools with two (38%; $N = 17$) or three cooperating teachers (31%; $N = 14$). 16% had only one cooperating teacher ($N = 7$) while the rest had four (13%; $N = 6$), and 2% had six cooperating teachers ($N = 1$).

A point bi-serial correlation was run to determine the association of the student teacher interaction with their cooperating teacher and the student teachers' satisfaction on their decision to teach. Davis (1971) was used to describe all correlations in the study. The correlation between student teacher interaction and decision to teach was moderate ($r_{pb} = .45$). The relationship between student satisfaction and decision to teach was also moderate ($r_{pb} = .31$).

Point bi-serial correlations were also ran to determine if five variables had a relationship with the student teachers' decision to teach. The correlation between the number of nights away at CDE contests was low ($r_{pb} = .27$). The number of CDE's attended was low ($r_{pb} = .26$). The correlation between number of nights away at stock shows was also low ($r_{pb} = .23$) and the number of stock shows attended was low ($r_{pb} = .23$). The lowest correlation was the student teachers' decision to teach based on the number of cooperating in the department, which was negligible ($r_{pb} = .04$).

Phi correlations were ran to see if gender or another student teacher present had a connection to their decision to teach. The correlation between gender and decision to teach was low ($r_{pb} = .27$), and the correlation between another student teacher present and decision to teach was low ($r_{pb} = -.26$).

Conclusions, Implications & Recommendations

Overall, the student teaching experience is vital to the student teachers' decision to teach. Both the student interaction with their cooperating teacher and their satisfaction with the experience had moderate correlations. Cooperating teachers need to be interacting at a high-rate with student teachers and eager to share their knowledge. Two-thirds of the decision to teach can be explained by the gender, student teacher interaction, if another student teacher was present, number of teachers, and number of stock shows and CDE's attended.

It is recommended that this study be repeated on a larger scale. With more participants included in the study, multivariate analysis could be employed to determine what impacts a student teachers decision to teach upon graduation. When university supervisors are selecting placements, it is recommended the potential for a high degree of interaction between the cooperating teacher and student teacher exists. Cooperating teachers who allow their student teachers to jump in, be part of the team and take responsibility is recommended. Cooperating teachers who are more personal and engage with their student teacher could increase the number of graduates entering the profession each year.

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