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The Impact of Time Spent Student Teaching on the Decision to Enter the Field: A Longitudinal Study

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Abstract

Due to the lack of qualified agricultural education teachers needed to fill yearly vacancies on the secondary school level, educators at Texas Tech University conducted a longitudinal study concerning how student teachers spend their time during their student teaching experience in an attempt to identify if this time spent has an impact on the decision to enter the field. Findings showed student teachers were engaged for a total of 713.83 to 931.23 hours on average during their student teaching experience. Longitudinally, time spent in the classroom, in FFA activities, and in SAE observations varied at different points in the semester. A logistic regression revealed 18-28% of the variance in the decision to teach may be explained by the amount of time grading student work and with laboratory preparation and maintenance. Recommendations for practice include encouraging student teachers to participate in as many activities as possible. Further research should be conducted to identify more factors influencing the decision of student teachers to enter the field.

Keywords: student teaching; career decision

Introduction

The supply gap of agricultural education teachers has been identified as one of the most important and pressing issues in the profession (Myers et al., 2005; Smith et al., 2018). In fact, in more than 50 years, there has not been a time where there was an adequate supply to fill the available positions and vacancies (Kantrovich, 2007). In 2009 the supply and demand data indicated a 26% shortage of qualified graduates needed to fill available positions across the nation (Kantrovich, 2010). The chronic shortage continues according to a recent study (Smith et al., 2018).

Some of the chronic shortage is a result of the high demand to fill attrition-based vacancies. In the most recent supply and demand report published by the American Association for Agricultural Education (AAAE), over 500 vacancies were created by individuals leaving the profession completely rather than moving laterally between states or retirement (Smith et al., 2018). Stress, burnout, and conflicts caused by the struggle to balance work and life expectations are some of the causes leading to the decision for teachers to choose another field (Ingersoll & Smith, 2003). Workload and finding a balance in workload expectations have been the subjects of multiple studies and have helped generated a better perspective on what is creating attrition-based vacancies (Hainline et al., 2015; Murray et al., 2011; Sorenson et al., 2016).

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Investigating the causes for the high demand of agricultural education teachers is only part of the solution for addressing the shortage. A look at the supply side is needed as well. Camp et al. (2002) suggested that the shortage of qualified agricultural education teachers was a result of agricultural teacher preparation programs not graduating enough newly certified candidates. To combat this issue, recruitment campaigns like the national "Teach Ag" program have been created to help increase the number of students entering teacher certification.

Low collegiate level enrollment numbers are only part of the problem associated with the short supply of agricultural education teachers. Parmley et al. (1979) suggested the problem with filling vacancies was not a function of too few students graduating, but rather from a low percentage of newly certified teachers entering the field. This position was supported by Kantrovich (2007) who found 53% of new graduates in agricultural education teacher certification programs entered the profession. This was followed with another study showing 70% of new teachers entering the field (Roberts et al., 2009) and further supported by Lawver and Torres (2011) who concluded the number of vacant positions was smaller than the number of graduates available to fill the positions.

Theoretical Framework

The theoretical underpinning of this study is the connection between student teaching experiences and Bandura's theory of self-efficacy. Bandura (1986) described self-efficacy as a person's perceptions toward their ability to plan and execute actions in a specific area and identified mastery experiences, vicarious experiences, social persuasion, and emotional/physical states as key developmental influencers of self-efficacy.

Within this study we primarily focused on mastery and vicarious experiences. Mastery experiences are activities engaged directly by the individual. Bandura (1986) concluded the more positive experiences one has in completing a task, the more self-efficacy one will have in that area. The connection between time engaged in an activity and increased confidence in the activity was supported by McKim and Velez (2017) who noted a connection between time spent in leadership activities and leadership self-efficacy.

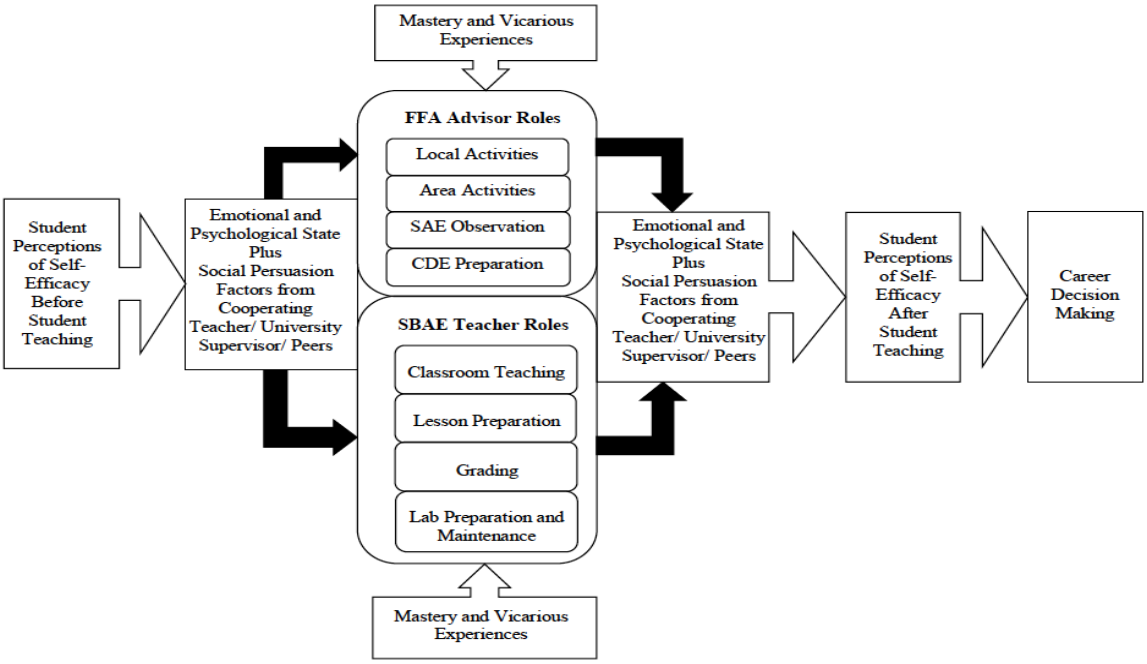
Vicarious experiences are those events in which an individual observes another engaged in an area of interest. Within the context of student teaching, these activities could be observing a cooperating teacher, watching other student teachers or teachers in a different field, and reflecting on shared experiences with peers. Aside from mastery experiences, vicarious experiences are the second greatest influencer on self-efficacy development (Bandura, 1977).

Social persuasion is the feedback one receives prior to or after engaging in an activity. In a student teaching experience, this is most often in the form of feedback from university supervisors and cooperating teachers but may also come from peers or family members. Physiological and emotional states are the physical and emotional feelings one is experiencing before, during, and after completing a task. Although studies have linked social persuasion and physical/emotional states to self-efficacy beyond Bandura's writings (Clark et al., 2015), the literature is limited regarding their influence on self-efficacy development contributing to the difficulty in measuring the constructs (Wolf et al., 2010).

This study adopted the conceptual model presented in Figure 1 which depicts the relationships between the elements of social persuasion and student teaching experiences. It is based on the idea that a student enters the student teaching experience with certain levels of self-efficacy driven by past experiences and social persuasion factors. During student teaching, individuals have extended opportunities for mastery and vicarious experiences that, when coupled with social persuasion factors

following student teaching, lead to a career decision regarding entering the classroom (Frost et al., 2018).

Figure 1
Conceptual Model of Self-efficacy Development Routes During the Student Teaching Process



Note. Conceptual model used with permission from Frost et al. (2018).

Purpose and Objectives

Because of the shortage of teachers choosing to enter the profession and the reported connection between heavy student teaching workload and early burnout (Fives et al., 2007), the teacher educators at Texas Tech University sought to critically examine the practices associated with its teacher certification program in agricultural education. The purpose of this longitudinal study was to quantify how student teachers spend their time during their student teaching experience at Texas Tech University and to determine the impact this time spent has on the decision to teach over a three-year period. The following research objectives were established to guide this study:

1. Compare the time devoted to the student teaching experience of students in the 2017, 2018, and 2019 student teaching cohorts at Texas Tech University.
2. Compare the progression of time spent during the 15-week student teaching experience longitudinally between the 2017, 2018, and 2019 student teaching cohorts at Texas Tech University.
3. Identify members of the 2017, 2018, and 2019 student teaching cohorts at Texas Tech University who entered the field of secondary school agricultural education.
4. Determine the relationship between time spent during student teaching and the decision to enter the field of agricultural education as a secondary school agricultural education teacher.
5. Determine if there are significant predictors for the decision to teach agricultural education after student teaching based on time spent in student teaching activities.

Methods

This descriptive, longitudinal study was conducted over three years to quantify how agricultural education student teachers at Texas Tech University were spending their time during their experience and to determine the impact this time had on their decision to teach secondary school agricultural education. After human subjects IRB approval from Texas Tech University, programmatic data were collected from the spring student teaching cohorts from 2017 (n = 15), 2018 (n = 21), and 2019 (n = 22) for a total of N = 58. As part of their student teaching course requirements and for a grade, student teachers submitted weekly reports documenting hours worked. Student teachers classified their time in categories based on the work of Torres and Ulmer (2007). The categories were the following: 1) Observing Cooperating Teacher, 2) Conferencing with Cooperating Teacher, 3) Preparation for Instruction, 4) Classroom/Laboratory Teaching, 5) Laboratory Preparation and/or Maintenance, 6) Grading/Scoring Students' Work, 7) Administrative Duties (Program Management), 8) Professional Activities (Meetings, In-service), 9) SAE Observations and Livestock Shows, 10) Local FFA Activities, 11) District, Area, and State FFA Activities, 12) CDE Preparation, and 13) Adult Education.

Students in the 2017 and 2018 cohorts submitted reports using a Microsoft Word template that was completed and emailed to their university supervisor at the end of each week. The 2019 cohort used a Qualtrics instrument that was developed, identical in content to the original Microsoft Word template. The electronic survey was distributed every Monday morning and was submitted by the end of the week. Weekly data were collected and entered into Microsoft Excel spreadsheets, organized, and checked for missing or incomplete data. Any student reporting data sets with missing or abnormal values were contacted and the issues were corrected.

Data from the included years were combined into a single set and exported to IBM SPSS v 25.0 for analysis. Means, standard deviations, minimums, maximums, frequencies and percentages were calculated for descriptive data. A Pearson point-biserial correlation was calculated to determine the relationship with time spent student teaching and the decision to teach. This study met the requirements of Fraenkel et al. (2012) in that correlational research should be conducted with a minimum sample size of 30. Statistical significance was established a priori at a p-value of .05. To determine how much variance in the decision to teach that could be predicted by time spent engaged in student teaching activities, a logistic regression was calculated. All assumptions described by Field (2018) were met since the model was linear, constant, normally distributed and the variables were all the appropriate type for the model.

Findings

The first objective of this study was to compare the time devoted to the student teaching experience by students in the 2017, 2018, and 2019 student teaching cohorts at Texas Tech University. To accomplish this objective, hourly information reported by student teachers was compiled and analyzed by cohort for the different areas identified by Torres and Ulmer (2007). During the 2017 student teaching cohort, the average greatest amount of time over the 15-week period was spent in classroom/laboratory teaching (M = 154.03, SD = 80.20). Closely behind was district, area, and state FFA activities with an average of (M = 114.60, SD = 132.44) total hours dedicated to the activity over the semester. A minimum of 0.0 hours and a maximum of 535.0 hours was reported for time in district, area, and state FFA activities. The lowest level of student teacher engagement was in professional activities (M = 8.37, SD = 7.67). Finally, the 2017 student teaching cohort averaged a total of (M = 713.83, SD = 155.37) hours of engagement in the student teaching process over 15 weeks. For a complete summary of the 2017 cohort student teaching hours, refer to Table 1.

Table 1

Average Hours Spent Student Teaching for the 2017 Cohort Over a 15 Week Period (n = 15)

Time Category	*M*	*SD*	Min.	Max.
Observing Coop. Teacher	87.10	60.77	12.0	212.0
Conference with Coop. Teacher	43.39	30.06	0.0	113.0
Preparation for Instruction	60.27	40.04	15.5	156.0
Classroom/Laboratory Teaching	154.03	80.20	43.0	291.5
Laboratory Prep/Maintenance	21.50	29.23	0.0	113.0
Grading/Scoring Students' Work	35.33	17.40	9.0	72.0
Administrative Duties	13.30	32.70	0.0	131.0
Professional Activities	8.37	7.67	0.0	30.5
SAE Observations and Shows	66.67	101.00	0.0	413.5
Local FFA Activities	51.80	55.89	4.5	196.0
District, Area, State FFA Act.	114.60	132.44	0.0	535.0
CDE Preparation	48.67	22.09	10.0	78.5
Adult Education	8.80	17.84	0.0	70.0
Total Student Teaching Hours	713.83	155.37	385.0	1,079.0

In the 2018 student teaching cohort, there is a slight increase from the 2017 cohort in average total hours reported for the semester (M = 762.54, SD = 186.66). Hours spent in classroom/ laboratory teaching were similar at (M = 165.43, SD = 65.08). There was a decrease in hours devoted to district, area, and state FFA activities with the 2018 cohort (M = 71.56, SD = 52.97). Time spent on SAE observations and attending livestock shows (M = 149.05, SD = 167.53) was higher than that of the 2017 cohort. The minimum time reported for SAE observation and livestock show attendance was 0.0 hours while the maximum reported was 668.0 hours. Engagement in adult education was the lowest area reported with an average of (M = 0.48, SD = 1.36). A summary of the hours spent student teaching for the 2018 cohort is presented in Table 2.

Table 2

Average Hours Spent Student Teaching for the 2018 Cohort Over a 15 Week Period (n = 21)

Time Category	*M*	*SD*	Min.	Max.
Observing Coop. Teacher	88.31	62.53	2.0	229.5
Conference with Coop. Teacher	30.98	19.70	0.0	56.5
Preparation for Instruction	72.65	47.00	0.0	178.0
Classroom/Laboratory Teaching	165.43	65.08	38.0	272.0
Laboratory Prep/Maintenance	24.69	19.37	0.0	63.5
Grading/Scoring Students' Work	29.75	18.13	6.0	60.5
Administrative Duties	9.90	15.75	0.0	67.5
Professional Activities	14.61	14.08	0.0	48.0
SAE Observations and Shows	149.05	167.53	0.0	668.0
Local FFA Activities	43.39	48.32	2.0	180.0
District, Area, State FFA Act.	71.56	52.97	0.0	217.0
CDE Preparation	61.74	48.35	0.0	217.0
Adult Education	0.48	1.36	0.0	5.0
Total Student Teaching Hours	762.54	186.66	475.3	1,128.5

On average student teachers from the 2019 student teaching cohort were engaged in more total hours of experience for the entire semester (M = 931.23, SD = 161.11) than the students in the 2017 and 2018 cohorts. There was also an increase in time spent on classroom/laboratory teaching (M = 246.00, SD = 62.36) and SAE observations and livestock show attendance (M = 208.27, SD = 108.15).

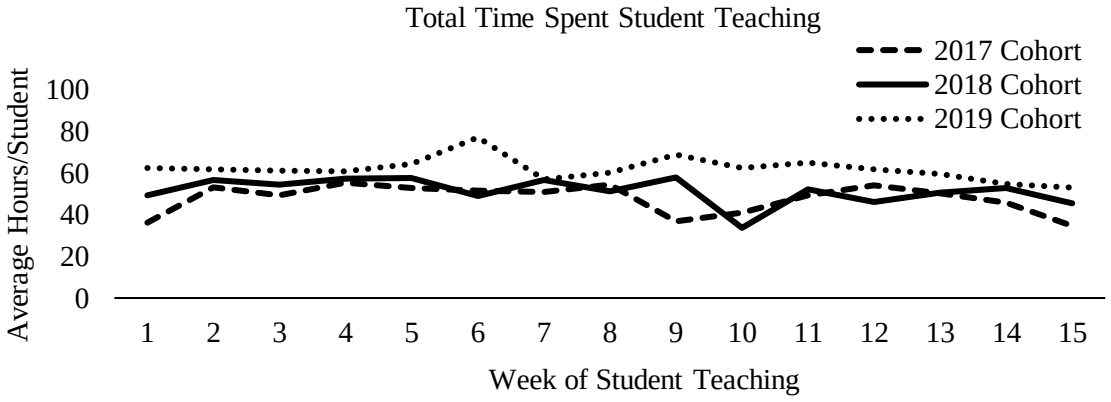
The area of lowest participation reported for the 2019 cohort was administrative duties (*M* = 7.77, *SD* = 10.65). The complete breakdown for the average time spent student teaching for the 2019 cohort over a 15-week period is presented in Table 3.

Table 3
Average Hours Spent Student Teaching for the 2019 Cohort Over a 15 Week Period (n = 22)

Time Category	*M*	*SD*	Min.	Max.
Observing Coop. Teacher	62.05	38.89	0.0	162.0
Conference with Coop. Teacher	39.32	30.94	3.0	121.0
Preparation for Instruction	115.05	68.05	20.0	245.0
Classroom/Laboratory Teaching	246.00	62.36	109.0	354.0
Laboratory Prep/Maintenance	19.86	23.06	0.0	74.0
Grading/Scoring Students' Work	32.18	26.72	1.0	86.0
Administrative Duties	7.77	10.65	0.0	38.0
Professional Activities	16.95	14.63	1.0	55.0
SAE Observations and Shows	208.27	108.15	47.0	480.0
Local FFA Activities	30.55	34.71	0.0	144.0
District, Area, State FFA Act.	55.14	41.10	0.0	144.0
CDE Preparation	81.36	81.99	0.0	296.0
Adult Education	16.73	47.98	0.0	227.0
Total Student Teaching Hours	931.23	161.11	579.0	1,268.0

The second objective of this study was to compare the progression of time spent during the 15-week student teaching experience longitudinally between the 2017, 2018, and 2019 student teaching cohorts at Texas Tech University. For total hours spent student teaching, students reported a generally low number of hours for Week 1 (*M* = 36.17, SD = 16.89) in 2017, (*M* = 49.48, SD = 17.69) in 2018, and (*M* = 62.55, SD = 17.96) in 2019. A general increase in hours was observed through Week 5, where there begins to be some variability between cohorts. The last third of the semester, there was a general gradual decrease in total hours reported, ending with (*M* = 34.70, *SD* = 16.89) in 2017, (*M* = 45.38, *SD* = 15.16) in 2018, and (*M* = 53.09, *SD* = 12.79) in 2019 for Week 15. A comparison of total hours for all 15 weeks for the 2017, 2018, and 2019 cohorts is presented in Figure 2.

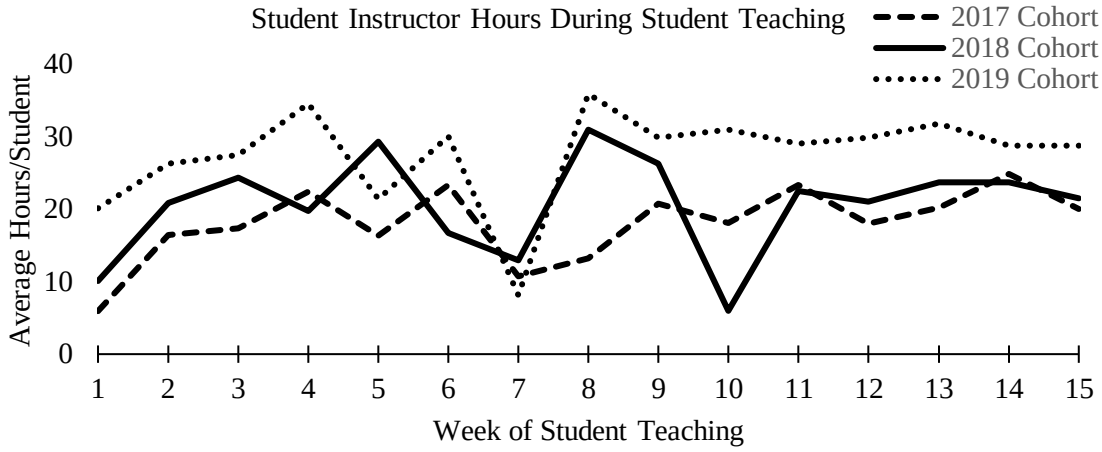
Figure 2
Comparison of Weekly Progression of Total Hours Logged by Student Teachers



To compare the progression of instructor activities throughout the semester, hours were summed for preparation for instruction, classroom/laboratory teaching, laboratory preparation and/or

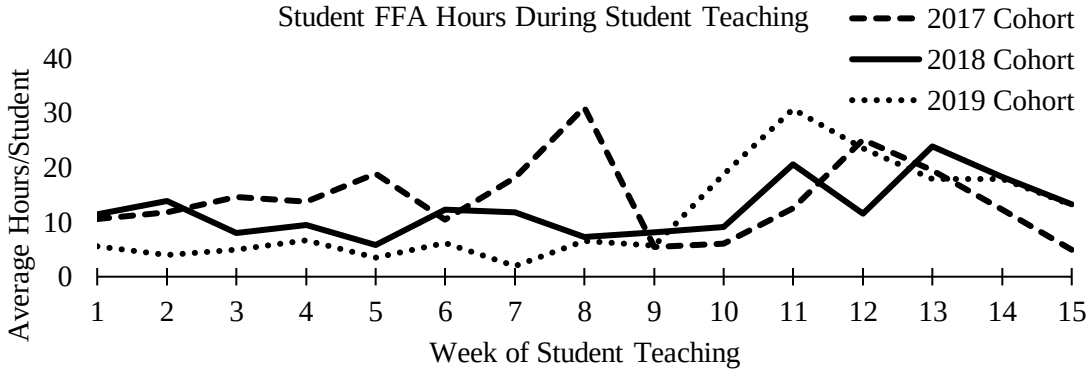
maintenance, and grading/scoring students' work. A general increase was reported from the beginning of the semester until about Week 5 in instructor activities. There was a consistent decline in instruction for Week 7 across all three cohorts with (M = 10.77, SD = 7.56) in 2017, (M = 13.04, SD = 14.63) in 2018, and (M = 8.14, SD = 7.44) in 2019. Student teachers finished the semester with instructor hours greater than Week 1 across all three cohorts. A comparison of instructor hours reported for the 15 weeks of the three cohorts is presented in Figure 3.

Figure 3
Weekly Progression of Instructor Hours Logged by Student Teachers



A comparison of total FFA hours was conducted by summing the hours reported for local FFA activities, district, area, and state FFA activities, and CDE preparation. The greatest amount of time reported for FFA activities was generally reported in the second half of the semester. In 2017 this occurred in Week 8 (M = 31.03, SD = 30.54), in 2018 it occurred in Week 13 (M = 23.88, SD = 16.27) and in 2019 it occurred in Week 11 (M = 30.73, SD = 17.53). The 15-week comparison for FFA hours during student teaching for all three cohorts is presented in Figure 4.

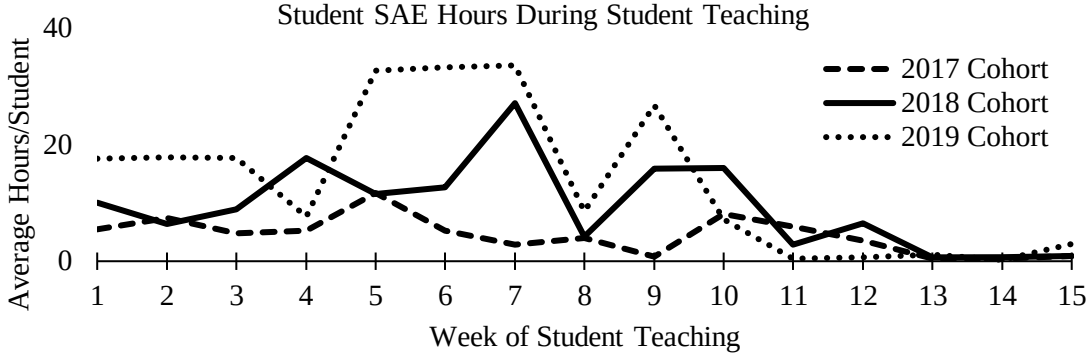
Figure 4
Weekly Progression of FFA Hours Logged by Student Teachers



Finally, a comparison was conducted of SAE observation and livestock show attendance hours reported by student teachers in the 2017, 2018, and 2019 student teaching cohorts. There are two points in the semester when SAE hours for student teachers peak; during the late first half of the semester and

early in the second half of the semester. For all three cohorts, the maximum average hours reported for SAE observation and livestock show attendance occurs during the first half of the semester. The 2017 cohort peaked at (M = 11.70, SD = 22.34) in Week 5 and the 2018 and 2019 cohorts peaked at (M = 27.12, SD = 34.44) and (M = 33.59, SD = 29.05) respectively in Week 7. A complete comparison of average SAE hours reported by student teachers over 15 weeks is presented in Figure 5.

Figure 5
Weekly Progression of SAE Hours Logged by Student Teachers



The third objective of this study sought to identify members of the 2017, 2018, and 2019 student teaching cohorts at Texas Tech University who entered the field of secondary school agricultural education immediately after graduation. No students from the cohorts were identified as having entered the profession after a semester or year break after graduation. In the 2017 cohort (f = 13, 86.7%) entered the field, resulting in the greatest percentage teaching high school agricultural education. The 2019 student teaching cohort had the lowest percentage of students entering the field (f = 16, 72.7%) with the 2018 student teaching cohort slightly above (f = 16, 76.2%). A summary of those choosing to teach secondary school agricultural education is presented in Table 4.

Table 4
Decision to Enter the Field of Secondary School Agricultural Education (N = 58)

	Teaching		Not Teaching	
Cohort	*f*	%	*f*	%
2017 (*n=15)*	13	86.7	2	13.3
2018 (*n=21)*	16	76.2	5	23.8
2019 (*n=22)*	16	72.7	6	27.3
Totals	45	77.6	13	22.4

The fourth objective of this study was to determine the relationship between time spent during student teaching and the decision to enter the field of agricultural education as a secondary school agricultural education teacher. Grading/scoring students' work (r_{pb} = -.32, p = .02) was the only category with a moderate relationship (Davis, 1971). The remaining categories were either low or negligible relationships. A complete list of correlation coefficients for time spent student teaching and the decision to teach is presented in Table 5.

Table 5

Relationships Between Time Spent Student Teaching and Decision to Teach (N = 58)

Student Teaching Time Category	Teaching Decision (r_{pb})
Grading/Scoring Students' Work	-.32*
Laboratory Preparation and/or Maintenance	.19
Overall Total Hours Spent Student Teaching	.18
FFA Activities – Local Level	.18
Professional Activities (Meetings, In-Service)	.16
Conference Time with Cooperating Teacher	.10
SAE Observations and Recording (Including Livestock Shows)	.09
CDE Preparation	.08
Adult Education	.08
Administrative Duties – Program Management	.08
FFA Activities – District, Area, and/or State Level	.08
Preparation for Instruction	-.07
Classroom/Laboratory Teaching	.04
Observing Cooperating Teacher	-.06

Note. Decision to teach coding: Decision not to teach = 0, Decision to teach = 1; *$p < .05$.

The final objective of this study sought to determine if there were any significant predictors for the decision to teach agricultural education after student teaching based on time spent engaged in student teaching activities. Since the decision to teach is a binary variable, a logistic regression was calculated. Before results of the logistic regression can be interpreted, a goodness of fit must be examined for the model. According to the Hosmer and Lemeshow Test, □$_2$ = 3.48 and $p = .45$, therefore it is not statistically significant (□ > .05) indicating an acceptable fit of the model. Results for the Hosmer and Lemeshow Goodness of Fit Test are presented in Table 6.

Table 6

Hosmer and Lemeshow Goodness of Fit Test

	□$_2$	*df*	*p*
Step 1	3.48	8	.45

The initial regression model predicted 77.6% of the cases correctly. The final regression model improved to 81.0% of the cases predicted correctly. Nagelkerke's R_2 (0.285) and Cox & Snell R_2 (0.186) were calculated to determine practical significance of the regression model indicating between 18.6% and 28.5% of the variability in the decision to teach secondary school agricultural education after student teaching was explained by the variables in the model. Grading student work and laboratory preparation and maintenance were the only two predictors that were statistically significant at the □ = .05 level and so were included in the model. Overall model results for the two predictors are presented in Table 7.

Table 7

Summary of Logistic Regression Analysis Predicting Decision to Teach

Predictor	□	*SE*	*OR*	95% CI	Wald	*p*
Grading Student Work	-0.05	0.02	0.95	[0.92, 0.99]	7.85	.01
Lab Preparation and Maintenance	0.04	0.02	1.04	[1.00, 1.08]	4.58	.03

Note. Alpha level for significant *p*-value established at .05 a priori.

Conclusions, Implications, and Recommendations

From the findings of this study, conclusions can be drawn about time spent in the student teaching experience and the decision to enter the field. Concerning total student teaching hours completed by each cohort, the 2019 cohort averaged over 150 hours more than cohorts of the previous two years. As with the previous two cohorts, the 2019 group spent the greatest portion of their student teaching experience engaging in classroom/laboratory instruction. The extended practice with classroom/laboratory instruction should theoretically improve their self-efficacy in teaching ability according to Bandura's self-efficacy theory. In the area of SAE observations and livestock show attendance, the 2018 and 2019 student teaching cohorts had substantially higher participation rates than the 2017 student teaching cohort, while at the same time the 2017 student teaching cohort reported higher district, area, and state FFA time than in 2018 and 2019. This may in part be due to the location of student teacher placements. In Texas some programs have a higher emphasis on attending livestock shows, while other programs have a higher emphasis on FFA CDE participation or classroom teaching during the spring semester.

Typically, at the beginning of the semester, student teachers are instructed to spend more time observing their cooperating teacher. The 2019 student teaching cohort averaged approximately 100 hours more in classroom/laboratory instruction than the previous two cohorts. The 2019 cohort also reported approximately 25 hours less in cooperating teacher observation, indicating they may have been able to start teaching earlier in the semester or they may have been allowed to teach a greater number of classes earlier in the semester. From the weekly longitudinal data, it can be seen that student teachers in the 2019 student teaching cohort started the semester teaching more hours weekly than in 2017 and 2018. With the exception of a few weeks, the 2019 cohort remained above the other two cohorts in terms of instruction time, supporting the possibility that the student teachers may have been assigned to teach more class periods per day.

By examining the weekly longitudinal data, a few trends emerged. The 2019 student teaching cohort consistently reported a higher total average in time spent engaged in the student teaching process compared to the 2017 and 2018 student teaching cohorts. This indicates these student teachers were more involved in the process on average than those of the previous two years. Concerning hours dedicated to instruction and preparation for instruction, all three cohorts reported a decline in time spent in this area during Week 7. This aligns with a livestock show frequently attended by schools in the state, the San Antonio Livestock Show. There is also some variability between the three cohorts between Weeks 4 and 10. This likely can be explained by other livestock shows in the state such as the Houston Livestock Show and Rodeo. Which species of livestock a program emphasizes and regional location will determine when and where the program attends a livestock show, resulting in less classroom/laboratory instruction.

Aligning with the same period of time, Weeks 4 through 10, the number of hours reported for observing SAE projects and attending livestock shows is the greatest. After Week 10 there is a sharp decline to nearly no time dedicated to SAE observations. This is likely due to the end of livestock showing and sale of animals. While there are still a few SAEs to observe at the end of the school year that are not livestock projects, the greatest number of SAEs in the cooperating schools with student teachers in this study are animal related and therefore will be sold at that time.

In the last five weeks of the semester, there is an increase in reported student teacher hours dedicated to FFA activities. In Texas most FFA CDEs occur in April and early May, aligning with this increase in time spent. Some schools will attend invitational competitions, while many will attend area and advance to state level competitions. Advancement of teams and attendance of invitational CDEs likely contribute to the variability of the time spent between cohorts. Many district and area level FFA

conventions take place during this time period too. At conventions FFA award and degree checks occur, requiring more time to help with these activities.

From the longitudinal data, it can be concluded student teachers are engaged in all three areas of agricultural education: classroom instruction, FFA, and SAE. These occur at various times in the semester, however the quantity of time dedicated to each area is similar. Student teachers that participate in all three areas of an agricultural program during their experience should in theory be exposed to many different activities to help them become more efficacious in directing a well-balanced program of their own in the future. However, according to Fives et al. (2007), high workloads placed on student teachers may create early burnout, impacting their decision to enter the field. Is this the case with agricultural education student teachers?

To answer the early burnout question, the number of student teachers who chose to enter the field must be determined. This study found an overall average of 77.6% chose to teach secondary school agricultural courses after student teaching. When this decision is correlated with the different categories of time measured during their experience, only grading student work had a significant, moderate correlation. This indicates the amount of time spent student teaching likely is not related to whether or not a student teacher decides to enter the field. Concerning grading student work, the negative correlation indicates the more time a student teacher spends grading student work, the less likely he or she will decide to teach. According to the regression analysis from this study, roughly 18-28% of the decision to teach can be predicted by combining time spent grading and the amount of time a student teacher works on laboratory preparation and maintenance. Even with this information, there is still roughly 72-82% unknown for what affects the decision.

An implication of this study is the contradiction of the work of Fives et al. (2007). The number of hours agricultural education student teachers are engaged in the student teaching process does not seem to create early burnout or prevent them from choosing to enter the field. Another area of interest was the percentage of students deciding to teach in the student teaching program at Texas Tech University was slightly higher compared to results reported in previous studies (Kantrovich, 2007; Roberts et al., 2009). Furthermore, the conclusions from the regression analysis of this study may indicate student teachers do not enjoy grading papers but may enjoy time in the laboratory. This information could be valuable for teacher education programs interested in improving student teaching experiences.

Several recommendations for practice emerged from this study. Teacher educators should encourage their students to engage in as many activities as possible during their student teaching experience so the students will have the opportunity to gain the most knowledge and experience. The allocated time for student teaching is limited at most institutions, therefore student teachers should be encouraged to participate in as many experiences related to secondary school agricultural education teaching roles as possible, even if it is outside of the allocated student teaching time. Experiences such as attending district, area, and state meetings or conventions, degree checks, leadership and career development events, and livestock validations are all events that can reap additional benefits for a student teacher by increasing their awareness of their future obligations. However, caution should be exercised when recommending student teachers do as much as possible during the semester in order to prevent early burnout as identified by Fives et al. (2007). Since there was a negative correlation with decision to enter the field of teaching and the amount of time spent grading student work, teacher educators should instruct their students in ways to grade or evaluate students more efficiently.

Further research should be conducted to identify what amount of time spent student teaching causes early burnout. Additional research should also be conducted at other institutions across the country to see if there are similar results on the decision to enter the field and to compare how student

teachers are spending their time during the experience. Another area of research that should be conducted is gathering self-efficacy information from student teachers during their student teaching experience to determine if there is a relationship with time spent in student teaching activities and levels of self-efficacy. With little evidence pointing to time spent student teaching influencing the decision to enter the field, additional efforts should be made to identify reasons why pre-service teachers decide against entering the field to combat the problem of reoccurring teacher shortages.

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