Comparing the Allocation of Time of Individual Student Teachers in the Roles of FFA Advisor and School Based Agricultural Teacher in Two Cohorts

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Introduction

Student teaching is a capstone experience in teacher preparation programs that provides an opportunity for students to take on the responsibilities of a full-time teacher through experiential learning placements (Krysher, Robinson, Montgomery, & Edwards, 2012). The student teaching experience is also an opportunity for high-impact, real-world experiences that create changes in student teachers (Smith & Rayfield, 2017). Determining the allocation of time spent by student teachers during their experience can help point to the changes that occur during the experience and provide information on the quality of the teacher preparation program placement. Allocation of time during the student teaching experience can have both positive and negative effects. Fives, Hamman, and Olivarez (2007) posited that high workloads placed on student teachers may be creating early burnout, potentially impacting their decision to enter the field. However, Krysher, Robinson, and Edwards (2015) reported an increase in self-efficacy of teaching skills with an increase of hours spent teaching as a preservice student.

Theoretical Framework/Purpose

The relationship between self-efficacy and positive experiences in a task (Bandura, 1986) serves as the theoretical framework for this study. As noted by Pfitzner-Eden (2016), increases in teacher self-efficacy are associated with a diminished intension to quit the profession. Every year since 1965, there have been unfilled secondary teaching vacancies in the field of agricultural education (Kantrovich, 2007). One cause of these vacancies, as noted by Roberts, Greiman, Murphy, Ricketts, and Harlin (2009), is only a fraction of eligible college graduates enter the field of teaching. From this perspective, researchers at Texas Tech University began a comprehensive evaluation of its teacher preparation program in 2017. This study is a continuation of earlier work with the purposes of: 1) describing and comparing the allocation of hours spent by individual student teachers from the spring 2018 cohort in the areas of serving as a secondary agricultural instructor and an FFA advisor and 2) comparing the data from the spring 2018 student teaching cohort to their contemporary group from 2017.

Methodology

Students in the agricultural education teacher certification program at Texas Tech University submitted, as part of their course requirements, weekly reports of time allocated in 13 different areas of their student teaching experience. Hours were recorded using an instrument utilized by Torres and Ulmer (2007) in their study of student teachers. Reports were checked for completeness and any questions regarding accuracy or possible discrepancies were clarified with the student prior to data entry. Once verified, all data were entered into a Microsoft Excel worksheet. For this study, data from eight specific categories were combined to create two summated variables. The variable "School Based Agricultural Education (SBAE) teacher" included time from the categories of preparing for instruction, grading student work, laboratory preparation/maintenance, and classroom instruction. The variable "FFA advisor" was calculated from the categories of SAE observation, FFA activities (local), FFA activities (area and state), and CDE preparation. Once the data were compiled and categorized, means, standard deviations, and other descriptive measures were calculated using Excel functions and verified in SPSS using procedures outlined by Field (2014).

Findings

The 2018 cohort ($N = 21$) collectively averaged 327.1 hours as an FFA advisor ($SD = 174.9$) which was higher than the 2017 cohort ($N = 15$, $M = 281.7$, $SD = 166.6$). A similar increase was found in SBAE teaching hours where the 2018 cohort mean ($M = 309.9$ hours, $SD = 108.0$) was greater than the mean for 2017 students ($M = 271.1$, $SD = 126.2$). The range of time spent as an FFA advisor was larger in 2018 (Min = 81.3, Max = 770.5) than 2017 (Min = 92.5, Max = 658.0). The same was true for SBAE teacher hours where 2018 students reported a minimum of 116.0 and a maximum of 502.0, which was a greater difference than found in 2017 (Min = 111.5, Max = 543.0). Despite the increase in ranges, 2018 data had fewer outliers. As FFA advisors, there were five students in 2017 with reported hours outside of one standard deviation and two beyond two standard deviations. As SBAE teachers, this same group had seven students reporting hours between one and two standard deviations and one outside the two standard deviations mark. For 2018, no students reported hours more than two standard deviations from the mean and the number of student teachers reporting SBAE teacher hours greater than one standard deviation dropped to four. Individual student hours for 2018 students are presented in Figure 1.

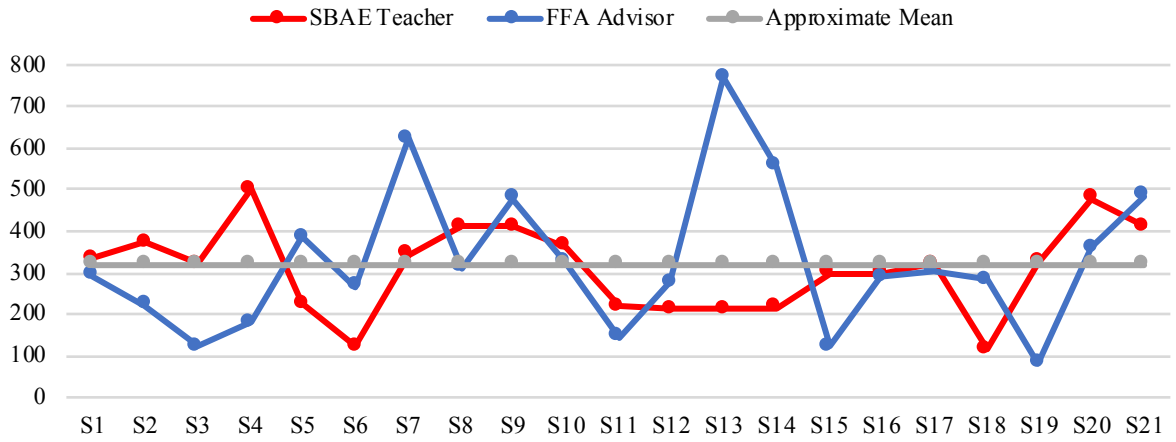

Figure 1. Hours allocated by 2018 student teachers (S1..S21) in the roles of FFA advisor and SBAE teacher. The approximate mean was calculated by averaging the means of the two data sets and was required for image clarity.

Conclusions, Implications, and Recommendations

While there are fewer extremes in the reported hours when comparing 2018 to 2017 student teachers, there are still reported values well outside the mean. A short-term implication is the potential for individual student teaching experiences to produce new teachers with decidedly different levels of self-efficacy in the areas associated with serving as an FFA advisor and SBAE teacher. According to literature, there are connections between the amount of time spent on a task and self-efficacy levels in that task (McKim & Velez, 2017; Krysher et al., 2015). Low feelings of self-efficacy are associated with a reduced intention to stay in the profession (Pfitzner-Eden, 2016). The potential exists for long-term implications in teacher retention and turnover. This study should be replicated at Texas Tech University to establish longitudinal trends as well as at other institutions on a national scale. Conversations comparing data of student teacher activities at the national level can help lead to professional guidelines or recommendations of best-practices for teacher certification programs in agricultural education.

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