

**School-Based Agricultural Education Teacher Aspirants Interest in CASE Curriculum
Training to Support Early Career Success**

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Introduction

School-based agricultural education (SBAE) continues to face numerous challenges, although the greatest continues to be the preparation of qualified teachers (Eck & Edwards, 2019). Roberts et al. (2009) identified the primary predictors related to an SBAE teacher aspirants' intent to teach was their teacher preparation program and their motivation to teach prior to their clinical teaching experience. A primary factor within motivation to teach lies within a pre-service teacher aspirants' self-efficacy (Sylvia & Hutchinson, 1985). The desire for self-efficacy within the SBAE teaching profession stems from the "increased emphasis on student and teacher performance" (Roberts & Dyer, 2004, p. 82). This increase emphasis or expectation often leads to teachers leaving the profession, as nearly 40% of teachers leave within the first two years (Marlow et al., 1997).

Properly preparing teacher aspirants can help temper these concerns (Gilad & Alkalay, 2014), as the need to satisfy career demands necessitates SBAE teachers to draw on appropriate knowledge and skills (Roberts & Dyer, 2004). When considering first year teachers, self-efficacy related to needed content knowledge is often low, leading to an ongoing struggle to deliver relevant learning experiences (Burriss et al., 2010). Thus, faculty in Agricultural Education at Oklahoma State University (OSU) decided to implement a new course focused on classroom and laboratory teaching methods in the context of Curriculum for Agricultural Science Education's (CASE) *Introduction to Agriculture, Food and Natural Resources* (AFNR) curriculum. Therefore, this study aimed to evaluate the current perceptions and interest of this of SBAE teacher aspirants at OSU related to this optional elective course.

Theoretical Framework

This study was grounded in the theory of planned behavior (TPB; Ajzen, 1991). As TPB considers the attitude, norms, and perceived control related to an individual's intention toward a behavior (Ajzen, 1991). Within this study, the behavior is participating in a pre-service course providing CASE curriculum certification, ultimately leading to the integration of CASE curriculum as a future SBAE teacher. One of the primary factors within this study relates to a SBAE teacher aspirants' attitude toward the behavior, as behaviors can be favorable or unfavorable depending on outside factors, including subjective norms and perceived behavioral control (Ajzen, 1991). Therefore, an SBAE teacher aspirants' intention toward integrating a STEM enhanced curriculum (i.e., CASE) in [State] was essential as currently less than 2% of SBAE teachers in [State] are certified to deliver CASE curriculum (CASE, 2022).

Methodology

SBAE teacher aspirants preparing to student teach during the 2023 to 2024 school year at OSU (N = 43) were asked to scan a QR code and complete a questionnaire if they were interested in CASE curriculum. Twenty-one (48.8%) students responded to the five-item questionnaire, answering items related to their interest and experience with CASE curriculum and STEM

integration as they consider their future career. Pertinent demographics gathered SBAE teacher aspirants' gender, academic year, previous exposure to CASE and SBAE, and intent to teach. The questionnaire was developed following the recommendations of Dillman et al. (2014) and was evaluated for face and content validity by Agricultural Education faculty members at OSU prior to distribution. SPSS version 28 was used to analyze descriptive statistics.

Results/Findings

Fifteen of the 21 respondents were female, but none of the respondents had previous exposure to CASE curriculum, although all of them had a secondary agricultural education experience. Seven were in the second semester of their junior year, with the remainder being in the first semester of their junior year. All 21 participants currently plan to enter the SBAE teaching profession. When asked if they were interested in taking a semester long course preparing them to teach CASE, all responded yes, with 95% ($n = 20$) having reported a willingness to integrate CASE during their clinical teaching experience. Participants expressed interest in CASE because of its ability to help them “learn more about effective teaching” and “provide a high quality and up to date curriculum”. They further explained the connections “CASE provides to national standards and STEM are important as the opportunities within the agriculture industry are endless and creating a learning environment to prepare students for the future is essential.” Additionally, 20 of the participants expressed interest in highlighting STEM in agriculture as future teachers. Expressing that “it is essential to add STEM into lessons so that students can connect agriculture to real world scenarios.”

Conclusions/Implications/Recommendations

Nearly half of the students within SBAE teacher preparation program at OSU expressed interest in a semester long CASE AFNR focused course, with the majority (71.4%) being female. The gender breakdown was representative of the OSU program and with the course being an option/elective within a 120-credit hour program, the level of interest seemed appropriate. Of the study's participants, 95% expressed interest in integrating the curriculum into student teaching and their future SBAE programs, as they felt that the course would help them improve “content and teaching knowledge.” Aligning with the need for both of those skills to be effective SBAE teachers (Roberts & Dyer, 2004), ultimately impacting their self-efficacy (Sylvia & Hutchinson, 1985). All of those who participated, indicated a current plan to enter the SBAE profession, reducing the barrier of being motivated to teach (Roberts et al., 2009). Overarchingly, this newly developed course, along with motivated students, should help to produce well prepared teacher aspirants (Gilad & Alkalay, 2014), prepared to tackle current SBAE demands, hopefully offsetting the current trend of teachers exiting the profession (Marlow et al., 1997).

It is recommended that future research studies explore the impact of such a course on SBAE career preparedness, self-efficacy, and career tenure. OSU faculty are encouraged to continue monitoring SBAE teacher aspirant preparedness and self-efficacy as it relates to the student teaching experience, career entrance, and career tenure, adjusting as needed. SBAE teacher preparation faculty nationwide should consider the impact their coursework has on early career success and the potential impact of such a course.

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