Research

Teacher Perception of the Georgia Middle School Agricultural Education Curriculum and its Relationship to Secondary Agricultural Education Enrollment.

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Introduction/Need for Research

Middle school agricultural education programs are some of the earliest forms of formal education in agriculture that a student can receive in the United States. Agricultural Education in middle school provides students with exposure to the agriculture industry and helps them to understand the requirements of careers within the field (Frick, 1993). Middle school programs have been identified as significant influences upon the overall growth, development, and stabilization of enrollment in secondary agricultural education programs. These programs serve a vital role in the recruitment and retention process and ultimately contribute to the overall success of agricultural education (Cupp & Weaver, 1994). Herren and Denham (1990) found that effective middle school agricultural education programs are essential in the recruitment of students within secondary agricultural education programs. This study assists in the solution to AAAE research priority number four which is meaningful, engaged learning in all environments (Edgar, Retallick, & Jones, 2016). More specifically, this study focuses on the solution to the research priority question, which states, "How can delivery of educational programs in agriculture continually evolve to meet the needs and interests of students?" (Edgar, Retallick, & Jones, 2016, p. 39).

Theoretical Framework

Kolb's (1984) experiential learning theory served as the theoretical framework of this study. Experiential learning is a critical component of successful agricultural education programs because it engages students in the learning process and promotes critical thinking and problem-based learning (Wozencroft, Pate, Griffiths, 2014). The conceptual model for the study identifies the three components of middle school agricultural education and demonstrates the interconnected nature and subsequent relationship to secondary enrollment. The components presented in this model are consistent with the most predominant model of agricultural education, which includes the interrelationships between classroom and laboratory instruction, supervised agricultural experience, and FFA (Phipps & Osborne, 1988). The conceptual model for this study demonstrates the potential of the three components of middle school agricultural education and how they can ultimately shape a student's perception of agricultural education, which contributes to secondary enrollment decisions.

Methodology

The purpose of this study was to describe middle school agricultural education teacher perception of the curriculum and its relationship to enrollment in secondary agricultural education programs. The research objective that guided this study was to describe middle school agricultural education teacher's perceptions on how classroom/laboratory experiences, FFA experiences, and SAE experiences are related to a student's decision to enroll in a high school agricultural education course. The population for the study was all middle school agricultural education teachers in Georgia. A simple random sample of the population was calculated using Cochran's (1977) sample size formula for continuous data and minimum return sample size. This descriptive and correlational study used a quantitative non-experimental survey research design to collect data from the teachers included in the sample. The questionnaire was designed to collect data on teacher's perceptions of the effects of middle school experiences on student's decisions to enroll in a high school agricultural education course. The questionnaire was presented via a five-point Likert-type survey and based upon the experiences a middle school

agricultural education student may have in each of the three components of the agricultural education program model. Faculty and graduate students at Auburn University served as a panel of experts to ensure content and face validity of the instrument. No changes were made to the instrument as a result of this review. Cronbach's alpha was calculated to determine the reliability of experiences in agricultural education (α=0.92, 0.89, & 0.95) scales for classroom/laboratory, FFA, and SAE experiences respectively as it pertained to the influence on secondary enrollment.

Findings

Teachers perceived "Hands-on learning" (*M*=4.82, *SD*=0.45) to have the greatest influence upon a student's secondary enrollment decision and "Learning about the history of American agriculture" (*M*=3.60, *SD*=0.88) as the lowest influence as it pertains to classroom and laboratory experiences. Teachers perceived "Being an FFA member" (*M*=4.90, *SD*=0.30) to have the greatest influence upon a student's secondary enrollment decision and "Participating in FFA fundraising efforts" (*M*=4.07, *SD*=0.81) as the lowest influence as it pertains to FFA experiences. Teachers perceived "Raising/exhibiting livestock" (*M*=4.68, *SD*=0.60) to have the greatest influence upon a student's secondary enrollment decision and "Learning record keeping skills through SAE program" (*M*=3.86, *SD*=0.95) as the lowest influence as it pertains to SAE experiences. FFA experiences represented four out of the top five most influential experiences, which also included the most influential experience "Being an FFA member" (*M*=4.90, *SD*=0.30).

Conclusions

All three components of agricultural education were represented in the top ten most influential experiences on secondary enrollment with four from classroom/laboratory, four from FFA, and two from SAE. Previous research on middle school experiences related to secondary enrollment as perceived by students revealed different findings. Students indicated that classroom and laboratory experiences had the greatest influence on secondary enrollment with the top ten most influential experiences having six from classroom and laboratory experiences, three from SAE experiences, and only one from FFA experiences. While students may have varying levels of involvement in the FFA, every student has unique educational experiences in the classroom on a day-to-day basis. Students have reported these experiences as the greatest influence upon their decision for continued enrollment. This indicates a discrepancy between what teachers believe have the greatest influence upon secondary enrollment and what actually influences students (Chapman, Barrick, & Thoron, 2016).

Implications/Recommendations

The agricultural education program model should serve as the guiding model for the instructional/curriculum design process in agricultural education courses. Agricultural educators tend to place greater value and emphasis on one of the three components. Agricultural educators need to fully understand the value and importance of classroom/laboratory instruction and not over emphasize one component of the agricultural education program model over another. Professional development strategies need to be in place to ensure that teachers understand the value of the agricultural education program model and feel comfortable and confident in providing quality experiences for students in all areas. Agricultural educators tend to place a heavier emphasis on FFA experiences, however students have indicated that their experiences in classroom and laboratory instruction have the greatest influence upon their secondary enrollment decisions. Therefore, classroom and laboratory instruction has a major impact on a student's overall experience in agricultural education, which could be a key factor as it pertains to matriculation.

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