

**Teacher Perceptions of the Impact and Challenges of Middle School Agricultural Education Experiences in Kansas**

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### **Introduction/Literature Review**

Middle school is the time to get students involved in future career areas and explore what type of education, vocational school or college will be needed (Anderman & Maehr, 1994). Agricultural education should provide students the skills needed for future employment through classroom, FFA, and laboratory experiences (Hughes & Barrick, 1993). Middle school students have unique developmental traits that are different from elementary age students and high school age students (Booker, 2018). Researchers wanted identified perceived challenges agriculture teachers have when teaching a middle school agriculture class in Kansas; and investigate the potential impact of middle school agricultural experiences on personal growth and high school agricultural education participation.

### **Conceptual Framework**

The conceptual framework for this study included career exploration and belongingness. Middle school students are at a development stage in which they are excited to learn, curious, and are beginning to become aware of future career decisions they need to make in the near future (Budke & Woodin, 1971). Goodenow and Grady (1992) define sense of belonging when applied to middle school students as feeling personally respected, included, accepted, and supported by teachers and other adults. Providing high quality middle school agricultural experiences has the potential to positively impact students' career decision process and provide a sense of belonging for each student.

### **Methodology/Methods**

A recruitment email was sent to all Kansas agriculture teachers ( $N = 240$ ) at the end of August 2018 requesting they complete a researcher-designed survey to investigate middle school agricultural experiences. A total of 154 teachers ( $n = 154$ ) completed the survey, with a response rate of 64%. The survey was evaluated by a committee to check for content validity and made recommendations to improve the survey. Post-hoc reliability was conducted on the 11 scale items resulting in a Chronbach's alpha of .85. Furthermore, these results cannot be generalized to other states, but may offer suggestions for future studies in other states.

### **Results/Findings**

Of the 154 Kansas agriculture teachers who participated in this study, 102 teachers (66%) indicated they teach some type of middle school (6<sup>th</sup> - 8<sup>th</sup> grades) agriculture class. Incomplete surveys were removed from further analysis, therefore 100 teachers indicated teaching middle school courses, 51 teachers did not teach any type of middle school courses. Teachers were asked to identify the challenges of teaching a middle school agriculture class. The biggest challenges indicated by teachers included students have different interest and involvement levels ( $n = 47$ ), lack of middle school FFA CDEs offered above the local level ( $n = 42$ ), too full of a class schedule ( $n = 33$ ), lack of resources and curriculum ( $n = 31$ ), lack of middle school FFA LDEs offered above the local level ( $n = 27$ ), recruitment ( $n = 20$ ), and insufficient funds ( $n = 18$ ). Additional challenges included insufficient class length ( $n = 10$ ), location of middle school ( $n = 9$ ), administrative support ( $n = 7$ ), and other ( $n = 11$ ). (Teachers were able to select more than one challenge; therefore, the percent total does not equal 100). No teachers selected community support as a challenge to teaching middle school agriculture. Researchers also investigated the potential impact of middle school agricultural experiences on personal growth and high school

agricultural education participation. Teachers were asked to perceive middle school student growth in several areas. These areas were assessed based on a scale from 0 = not interested to 100 = extremely interested. The ranking started off with the highest perceived growth was agricultural awareness with a mean of 69.67 (SD = 21.42), next personal growth (M = 69.20, SD = 18.93), performance in agriculture class (M = 67.84, SD = 17.08), career awareness (M = 66.47, SD = 21.33), leadership (M = 57.63, SD = 21.33), and accountability for agricultural course work (M = 56.42, SD = 21.17). Last, teachers were asked to perceive the impact middle school agricultural education had on high school agricultural education by evaluating several areas. The areas were assessed based on a scale from 0 = not interested to 100 = extremely interested. The highest ranked area was an increased enrollment in secondary agriculture classes with a mean of 70.83 (SD = 24.14). Then ranked by the following: increased involvement in FFA CDEs (M = 61.46, SD = 21.71), increased involvement in FFA LDEs (M = 54.63, SD = 23.09), increased participation in SAEs (M = 51.72, SD = 23.09), and increased “Burn Out” (M = 31.33, SD = 23.80).

### **Conclusions/Recommendations**

The purpose of this study was to investigate the impact and challenges Kansas agriculture teachers have teaching middle school agriculture classes. This research found challenges of teaching a middle school agriculture class included different interest/involvement levels, lack of middle school FFA CDEs offered above the local level, too full of class schedule, and lack of resources and curriculum. Having a more challenging curriculum would help middle school students with the transition to high school, by allowing them to have more responsibilities and learning different strategies to foster confidence for high school (Cauley & Jovenovich, 2006). A recommendation for practice includes supporting teachers in developing a curriculum and providing in-service on effective teaching practices for this age group. Another recommendation for future research is to explore additional events to expose middle school students to state-level events in Kansas FFA.

This study also found teachers perceived middle school students grew in agricultural awareness, personal growth, performance in agriculture class, and career awareness. Rossetti and McCaslin (1994) reported middle school students were more knowledgeable about agricultural careers, agriculture in general, and benefited more than high school students from hands-on experiences. A recommendation is for teachers to work with their local school districts and administrators to fit a middle school agriculture course into the curriculum.

Teachers perceived middle school agriculture experiences had increased enrollment in high school classes and FFA CDEs. Myers, Dyer, and Breja (2003) reported that one of the most common recruitment methods agriculture teachers used was individual contact by the teacher with a potential student. A recommendation for future research is to repeat this study in 5 to 10 years to identify improvements to middle school agricultural experiences. Also, conduct this study in other states to investigate the extent middle school agriculture experiences are happening across the country. A final recommendation for research is a longitudinal study of students who participated in middle school agriculture through high school to determine the effects of early agricultural education on career choice, academic achievement, and participation.

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