Middle School Teachers' Concerns about Facilitating Student Learning in Supervised Agricultural Experiences

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Introduction, Review of Literature, and Purpose

Middle school has been described as a time in which a young person between ages 10 to 14 undergoes rapid and profound cognitive, emotional, physical, and social changes (National FFA Organization, 2009). During this time, young people begin making sense of the world by asking questions to adults, reflecting on previous experiences, examining their morals and values, and seeking peer acceptance and belonging (National Middle School Association, 2010). Further, middle school students begin to ponder about their future careers (National FFA Organization, 2009). A middle school is a place of discovery; therefore, everything at this level of education should be exploratory, even though students' school-based explorations may not lead them to a future career (National Middle School Association, 2010)

Historically, agricultural education in middle schools has emphasized hands-on learning, to foster interdisciplinary skills, teamwork, leadership, and personal development (National FFA Organization, 2009). Since 1988, when middle school students gained access to National FFA membership, enrollment has steadily increased, reaching 196,556 students in the 2021-2022 academic year, with 108,853 being FFA members (National FFA Organization, 2023). Despite this growth, challenges have persisted, including struggles with teacher preparedness (Tucker & McHugh, 2022; Jones et al., 2020), the need for middle school curriculum and teacher professional development (Rayfield & Croom, 2010), and more knowledge about assisting students with FFA award applications, SAE data management, motivating students, and community relations (Golden et al., 2014). Further, Rayfield and Croom (2010) advocated for greater recognition of middle school FFA and SAE award programs. As such, it has become necessary to investigate the challenges that exist to facilitating quality learning in middle school agricultural education. Using a constructionism lens (Crotty, 1998), the purpose of this investigation was to understand the concerns of middle school agricultural education teachers regarding facilitating quality learning in middle school SAE programs.

Methodology

This study used an interpretive qualitative design to facilitate data collection and analysis (Merriam, 2009). Through this framing, we made sense of how exemplary middle school teachers facilitated quality student learning through Supervised Agricultural Experience (SAE) programs. The study utilized purposeful and snowball sampling methods to select middle school teachers facilitating exemplary SAE programs. Seven states with the highest middle school enrollment and FFA membership were chosen: Georgia, Virginia, Delaware, Oklahoma, and Wisconsin. State agricultural education leaders nominated teachers they considered exemplary, but Florida and Missouri were excluded due to a lack of response and data on middle school SAEs. Two teachers from each selected state received personalized emails with study details and consent requests. In this study, two methods of first-cycle coding were employed: in vivo coding and values coding (Saldaña, 2021). Axial coding was then used to categorize the first-cycle codes based on similarities (Saldaña, 2021). As a result of this process, findings emerged.

Findings

Despite the benefits of SAE programs, the middle school teachers in this investigation experienced several challenges that they perceived affected their ability to facilitate quality learning for middle school students engaged in SAEs. For example, Participant #4 indicated that "SAEs [were] time-consuming." A significant reason for this was that the middle school agricultural education teachers in this study reported varying instructional time with the students, ranging from nine weeks to a full year. On this note, Participant # 2 indicated: "I don't have a lot of time, considering we are on a marking period schedule… Once [the students] get to high school, and [the students] have the teachers all year round, they can dive deeper into their SAE program." To maximize classroom time, however, Participant # 8 incorporated a group SAE project in which the middle school students read Farm Bureau's *Book of the Year* and created educational activities based on the book to improve elementary students' agricultural literacy. Upon completion of the project, students documented their experiences in the AET.

Because of additional responsibilities assigned to middle school agricultural education teachers, SAEs were another item on their already "full plate." Participant #4 explained: "I'm expected to advise [students' SAEs] …my role has evolved from that, too. But I also have the responsibility of all the other components of the program." Further, the middle school agricultural education teachers struggled to decide when to begin students on their SAE journey. Participant #8 shared: "We really don't even talk about it as a unit until their 8th-grade class. The teachers also noted that middle school students struggled to grasp the conceptual nature of SAEs. As a result, they perceived that middle school students often required heavy teacher guidance because they "lack[ed] the independent skills" (Participant #4) to complete SAEs in ways that high school students would. For example, Participant #8 argued that SAEs were a "very abstract concept for 8th graders." Because middle school has historically been the entry point for students entering the agricultural education program, these students "don't have the skillset" or "ability" to meet the learning demands required for Immersion SAEs (Participant #8).

Conclusions, Implications, and Recommendations

Similar to Eck and Davis (2023), who investigated barriers to the successful implementation of SAE programs at the middle school level, the teachers in this study expressed challenges in facilitating student learning effectively through SAEs. Time emerged as a significant factor influencing the success of SAEs for many middle school teachers, with instructional time varying from nine weeks to a full year and from block schedules to daily engagement over an academic year.

Understanding the challenges teachers face when facilitating learning through SAE programs was crucial to beginning to rethink SAEs at the middle school level. Because of variations in instructional time and scheduling, future research should explore whether a program or project approach to SAEs would be more effective at the middle school level. This shift could allow for students to be exposed to multiple SAE projects while maintaining high-quality instruction. Additionally, future research should investigate diverse SAE project types for middle school students, and efforts should be made by the National FFA Organization to recognize exemplary middle school SAE projects and programs, ensuring equal opportunities for all students to participate.

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