

An Exploration of Teacher Experiences Starting/Restarting Agriculture Programs in Michigan

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Abstract

Through this study, I interviewed teachers in Michigan who started new school-based agricultural education programs from 2013 to 2024. The need for this research comes from the increased demand for career and technical education programs. Currently, limited research exists regarding teachers' experiences, both failures and successes, when starting school-based agricultural education programs. This study focused on how these programs were started or restarted, an overall understanding of the program, and program successes and failures. Five themes were found including the need for a strong foundation of community and administrative support and involvement; the need for a qualified and enthusiastic candidate (teacher); program funding and capital investment; challenges that arose; and agri-science program, development and success.

Introduction

According to the United States Department of Agriculture (USDA) in 2022, employment in the agricultural industry has increased since the turn of the century; additionally, agriculture-related industries have supported another 19.6 million jobs (USDA, 2022). In 2023 community colleges with vocational programs saw enrollment grow by 16.0% (National Student Clearinghouse, 2023). With a shift to trade programs versus four-year degrees, we have seen an increase in demand for career and technical education programs. In recent years, we have seen a rise in the desire of educational institutions to start/restart school-based agricultural education (SBAE) programs in Michigan. According to the National FFA Organization, “an SBAE program prepares students for successful careers in a lifetime of informed choices in the global agricultural, food, fiber, and natural resources system.” However, limited research exists relating to teachers' experiences starting/restarting agriculture programs. As the demand continues to grow for career and technical education programs, an increase in understanding of these processes is necessary for further growth and development.

Literature Review

According to the Michigan Department of Education (MDE), planning and developing a new Career and Technical Education (CTE) program may be a full-year process. Before an agricultural educator may even be hired, an agricultural committee and/or search team needs to be in place. The agricultural committee needs to include agricultural community member's from

a variety of different agricultural professions and backgrounds (Miller, 2018). This agricultural committee sets the foundation for determining program needs, conducting a comprehensive local needs assessment, and serves as a steering committee for the agricultural education program. After creating an agricultural committee, the next step is hiring an agriscience educator. This individual should fit the needs, goals, and objectives, of the district/program. In addition, it is vital to find someone who has the enthusiasm, drive, and willingness to grow your program. To fill this need, instructors with or without experience can be considered (Miller, 2018). It is important to note that if a teacher applies with prior teaching experience, they often apply due to being closer to family, time, administrative support, community support, and pay (Haddad et al., 2019). Teachers defined community as administration, alumni, students, colleagues, administrative staff, mentors, and co-teachers (Haddad et al., 2019).

In agricultural education, advisory councils are the entities that bridge the gap between the community and the local school (Masser et al., 2014). The role of the program advisory committee is to provide input on planning, development, implementation, operation promotion, evaluation, technical skills, credentialing, and maintenance of the program that supports continuous improvement (MDE, 2023). In Michigan, it is required that the program advisory committee meets a minimum of two times a year. When first filling out a program application, you must conduct a meeting considering the following: program sequence (based on employment opportunities and community needs), program delivery, leadership opportunities available to students (National FFA Organization), program recruitment strategies, equity, access, safety training, facilities and equipment, and long-range improvement of the program. Overall, the program planning process in agricultural education involves input from agricultural industry members, school administration, community demographics, local economy, parents/family of students, educational funding, teachers and staff, and available facilities (Masser et al., 2014). Overall, beginning a new agricultural program in Michigan is difficult, a committee must recognize the need, an educator must be hired, and then an educator must integrate classroom instruction, student leadership (FFA), and Supervised Agricultural Experiences to students and community that have limited prior knowledge and understanding of agricultural education.

Most of the above research focuses on the need for an advisory committee, the need for a qualified educator, and why an educator may consider starting a new program. However, limited research exists on teachers' overall experiences in starting/restarting an agricultural education program.

Methods

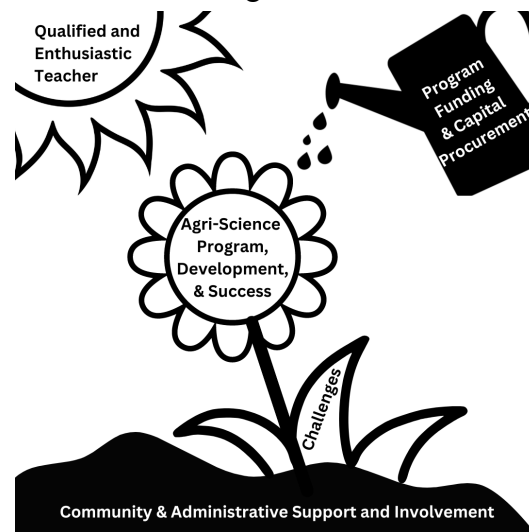
Before I present the findings, methods, and conclusions I acknowledge my standpoint as a Career and Technical Educator (CTE) who has started an SBAE in the past and is in the process of starting another. In addition, I have experience working in agricultural and CTE policy. I acknowledge that my positionality influenced this project and that my resources were important tools throughout this process.

Originally, this study sought to interview teachers starting new agricultural education programs in Michigan from 2019 to 2024. However, few that have started new agriculture education programs are still teaching at the same program or they started the program more than five years ago. The study was then expanded to include individuals currently teaching at new(er) programs from 2013 to 2024. Twelve possible candidates were contacted for interviews and four were able to participate. These individuals were both traditionally trained and non-traditionally trained (coming from industry). Interviews were conducted via Zoom on a one-to-one basis. Study participants were asked seven questions ranging from the community in which the program resides, how the program began, the successes of beginning the program, and the failures in beginning the program.

An example of a question on understanding the community included, “Tell me about the community (or communities) in which your agricultural program resides?” An example of a question that focused on how the program began is, “Tell me the story of how you started the program.” An example of a question regarding the success of starting the program included, “What have been the success you have experienced when starting the agricultural program?” An example of a question relating to failures in beginning the program included, “What led to the failures that you mentioned?” The interviews were recorded and sent to a third-party group for transcribing. Upon receiving the transcribed interviews, the data were then cleaned. After the data had been cleaned they were analyzed using open and axial coding (Flick, 2009; Strauss & Corbin, 1990). Originally, 15 themes were identified in the data, and quotes were pulled falling within the themes. The themes were then reorganized into five categories with multiple sub-themes under each category. Audit checks were performed by another researcher at various points during the data analysis and coding process.

Results

Figure 1.



The figure above represents the five themes found within this study. Community and Administrative support and involvement serve as the foundation or soil needed for any agricultural program to grow. The Qualified and Enthusiastic Teacher(educator) serves as a needed source of energy for the program's continued growth and success. Program Funding and Capital Investment are similar to water due to the needed nutrients for the program to continue to flourish. However, with any flower (program) that needs to grow, there are always challenges. The weeds serve as Challenges such as; lack of resources, balancing the three-circle model, and student recruitment. However, if the program (flower) can take in the needed nutrients it will out-compete the weeds (challenges) and bloom a beautiful flower that is the Agri-Science Program, Development, and Success.

Overall five themes emerged from this study. First *community and administrative support and involvement* are the groundwork for starting a new agricultural program. This theme included administrative support, community support, and involvement. Administrative support can be defined as allowing the teacher to feel supported in teaching endeavors, program building, and recruitment and ensuring a well-fostered environment for student/workplace enrichment. One individual said, “The superintendent who was finishing up her last few months as superintendent before she retired. Her main mission was to bring as many CTE classes to the school as she possibly could. Agricultural education was one of them because she saw how big the need was, how many kids were co-opting to other schools to get those types of services...my experiences have not been turned down by them or put off by them. That has been important, that has helped build the program to what we are now.” This was an ongoing theme in each interview as they all cited their superintendents playing an instrumental role in bringing the agricultural program by recognizing a need within the community and school. Community support and involvement can be defined as the ability to rely on the community and connect with groups and individuals who share a common interest in the development and growth of the agricultural program (Association of Career and Technical Education [ACTE], 2021). Each participant stressed that the community's need for the agricultural program was there before they stepped into their role. One participant said, “We are the only CTE program at our school. So it offers kids a unique opportunity, to get involved in agriculture or to do hands-on things and it fills that need in the community... You can't do it all on your own. You have to ask for help, and there are a lot of people out there, I'm sure in every community that want to help out.” Each individual provided an example of how their program relies on continuing community support.

After the groundwork has been laid with community and administrative support and involvement the next step is finding a teacher. This leads us to our second theme of *qualified and enthusiastic educators*. Each individual that was hired in their respective school district had gone through an interview process that highlighted their relevant training, skills, past experiences, and knowledge, including the mastery of agricultural, food, and natural resources knowledge and understanding methodologies to teach the content. Something interesting to note is that each of the individuals lived/had grown up in the surrounding community in which they started/restarted the agricultural program. Under this theme, there are two subcategories. The first is program

advocating/communicating which is the ability to gain support of the school-based agricultural education program. Participants highlighted the need to advocate for their program with students, the community, and co-workers. One participant said, “The ability to grow the program has to do with the ability to connect with kids and build good relationships with kids... But it's all about the relationships that you have with people, both your staff, your coworkers, but then mainly the kids because they're the ones that are going to be taking your class.” In addition, each participant noted that being excited about the content was necessary to foster student engagement and continued recruitment of students into the courses, noting the importance of teacher enthusiasm. One participant captured this idea perfectly by saying, “It's not about the kids. It's about you. The teacher finds something you're passionate about and does that. And the kids will follow you. Agriculture is such a wide field. There's something in there that drew you to it, to begin with as a teacher or as a student, and it's all possible.”

Another theme that was noticed throughout the study was *program challenges*. This can be defined as something new and difficult for the program to overcome while operating. These challenges included a wide plethora of ideas, however, this category can be easily broken down into three sub-themes. The first one is balancing the three-circle model. Overall, agricultural education programs are based on a three-circle model that develops the whole student through classroom and laboratory instruction, student leadership, and work-based learning experiences known as Supervised Agricultural Experience (SAE) projects. Each participant had been in FFA and an agricultural education program, however, they noted one of the biggest struggles was being able to integrate each piece of the three-circle model. One participant said, “Because there's three circles doesn't mean that they're all necessarily equal and balanced at the same time. One might be taking a bigger presence than others at certain times, and that's fine in any context, but especially in a new program where you can't expect the kids or me to be able to effectively do all of those things at the same time and for them to be perfect.” Another participant went on to say, “never having a program, the biggest challenge or failure, I think, and really, it's only my failure the lack of knowledge [FFA]...” The biggest piece when starting a new program is the classroom instruction. It is difficult to elaborate on FFA and SAE when students have never participated in or understood the depth of the program. Another subcategory is the lack of resources. This can be defined as the lack of money and physical materials. Each participant had difficulty when first getting started because there were few resources to implement that hands-on learning piece. In addition, in many programs just beginning there is no funding provided by the state of Michigan for the first year. Most of the upfront costs come from the school. One participant said, “We don't have a lot of resources or access to resources, which can be hard and challenging within our program.” Another said when speaking with their college cohort, “And they asked me what I'm doing? Nothing. Because we have no money right now. It's a very discouraging feeling.” A few participants noted a feeling of “jealousy” and comparison when viewing their lack of resources compared to other programs within their area. The difficulty in balancing the three-circle model in addition to juggling the lack of resources first provided can then lead us to our last challenge (sub-theme) of student recruitment. Student recruitment can be

defined as the ability to attract new students and get them to enroll in the course/program. Each participant noted the difficulty of earning the “trust” of the students who had originally enrolled in their program. One participant elaborated on the difficulty of breaking down this barrier by saying, “You know, you have to develop that rapport with kids to where, you're kind of someone they want to be around, that they feel comfortable in your class, and that you provide a good learning environment for them.”

The next theme that was noticed was *program funding, capital investment and procurement*. This can be defined as the ability of the program to receive funding, generate self-sustaining funding, and receive grants for the acquisition of facilities and resources. Each participant cited the need for funding to receive resources to provide an enhanced hands-on learning environment. One participant said, “Their[administration] big goal when we met was that I had to sustain myself so that I have enough students go through my program and our competitors are high enough that FFA pays for itself.” Another participant went on to note the continued community support of the program through facility procurement through a bond. They said, “Our facilities have grown substantially since I've been here with the help of a bond project.” The funding and increase in capital investments have allowed more students to gain real life hands-on learning opportunities and allowed for a continued retention of students throughout the program.

The last theme noticed throughout the study was the *Agri-Science Program, Development, and Success*. This category highlighted the continued success of the program measured by the individuality of the program and student drive/ownership within the program. The first sub-category is program freedom and niche which can be defined as the ability to choose the path of the program based on advisor abilities, community needs, and resources available. Each participant noted the appreciation of being able to start a program based on their interests and community needs. One participant said, “I think, to start a new program, it can be intimidating or scary, but I have loved it. It's more fun to build your program and to lead in comparison to a program that has been traditional and set in its ways that you may not have a chance to change.” Another participant said, “I focused on setting some traditions or expectations with some of the kids, and that's built upon from year one.” The other subcategory is student ownership. This is defined as the ability of the students to lead the classroom/program based on their interests and needs through hands-on learning. Each participant cited student ownership as a large piece of their program ensuring student interests and needs were met for the continuing success of the program. One participant said, “I want the kids to have some ownership and autonomy over what we're doing.” Another stated, “... following student interests, I'm always asking kids, what do you want to do because I want them to run the program.”

Conclusion and Recommendations

Starting/restarting agriculture programs is a difficult task. However, if we continue to see a trend toward increased interest in trade schools, the demand for vocational programs will

continue to rise. To start an SBAE program, it is important to have a foundation of strong community and administrative support. The school/community must hire a qualified and enthusiastic teacher who will advocate for program funding and increased capital investment. Thus, leading to continued success in the Agri-Science program. Whether starting a new program or entering an existing program, challenges with lack of resources, student recruitment, and balancing the three-circle model will arise. However, an enthusiastic teacher and strong community/administrative support will aid in overcoming these challenges.

To support the qualified candidate, interested schools and communities hoping to start an agricultural, food, and natural resources program should consider visiting neighboring SBAE programs for further research and understanding. The administration should work with their local Intermediate School District and State Supervisor for Agricultural Education, the Michigan Department of Education to gain further knowledge. Teachers should reach out to local agricultural entities to further foster community support.

It is important to note that this study engages a limited number of participants. This could be due to the lack of programs beginning during COVID-19 or the lack of individuals continuing at the program that they started. Further research should be conducted using a larger research pool and elaborating on questions dealing with each of the identified themes. Furthermore, additional research could include conducting a case study of an SBAE program that has been recently started/restarted. It starts with a vision--a vision to start a program that does more than just open but flourish. A program that showcases all three areas of the agricultural education model, supports the community and the instructor and incorporates a passion for agriculture in and outside the classroom (Miller, 2018).

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