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Supervised Agricultural Experience Programs: An Examination of the Development and Implementation of Urban Programs

Eric D. Rubenstein[1], Andrew C. Thoron[2], Blake C. Colclasure[3], and Jillian A. Gordon[4]

Abstract

Urban schools and school-based agricultural education programs (SBAE) face challenges to engage students in the educational system. Specifically, urban SBAE programs face unique challenges engaging students in the development and implementation of SAE programs. While SAE continues to be considered a central component to the total SBAE program, a lack of research exists on the utilization of SAE in urban programs. Therefore, this qualitative study sought to identify factors present in the development and implementation of exemplary SAE programs in urban schools. Two urban SBAE programs were purposively sampled through a one-day on-site visit, focus group sessions, and one-on-one interviews. Through the use of the constant comparative method, five themes emerged from the data: 1) Engaged Teachers, 2) In-Class Supervision, 3) Student Interest, 4) Partnerships in SAE, and 5) Development of an SAE Culture. The presence of an SAE culture was found throughout the data and was an essential factor to the development and implementation of student SAE programs. The researchers recommend further investigation of the development of an SAE program and the development of a model to assist agricultural education teachers in successfully creating a culture for SAE in their local SBAE programs.

Keywords: Supervised Agricultural Experience Programs, SAE, Urban SBAE

Introduction and Literature Review

Urban schools face unique challenges that must be addressed in today's education system (Netzel & Eber, 2003). According to Netzel and Eber (2003), "Urban school districts have unique challenges due to factors such as size, high poverty rates, diverse communities, and limited resources" (p. 71). The school-community partnership is one such component. Leonard (2011) suggested that successful partnerships must build collaborative student focused relationships. Community partnerships can include a wide-variety of groups such as local businesses, organizations, agencies, foundations, universities, and parents (Leonard, 2011).

One of the most important partnerships described herein, is parental involvement. Reynolds, Crea, Medina, Degnan, and McRoy (2014) found parental invitations were critical to establishing such partnerships. Furthermore, the authors suggested such invitations go beyond traditional communication (e.g. phone calls, emails) and seek to engage parents through activities and extracurricular events (Reynolds et al., 2014). Cappella, Frazier, Atkins, Schoenwald, and Gillsson (2008) encouraged that conversations with parents be conducted orally to reduce

[1] Eric D. Rubenstein is an Assistant Professor of Agricultural Education in the Department of Agricultural Leadership, Education, and Communication at the University of Georgia, 133 Four Towers, Athens, GA 30602, erubenstein@uga.edu.

[2] Andrew C. Thoron is an Assistant Professor of Agricultural Education in the Department of Agricultural Education and Communication at the University of Florida, 307C Rolfs Hall, Gainesville, FL 32611, athoron@ufl.edu

[3] Blake C. Colclasure is a graduate student in the Department of Agricultural Education and Communication at the University of Florida, Rolfs Hall, Gainesville, FL 32611, bcolclasure@ufl.edu

[4] Jillian A. Gordon is a High School Agriculture Teacher at Clarke Central High School, 350 S. Milledge Ave, Athens, GA 30602, jilliangordon@uga.edu

miscommunication between the teacher and parent. Further, Cappella et al. (2008) suggested that parent/teacher communications take place at home to strengthen rapport.

Beyond the parent/teacher relationship, the success of urban students also relies heavily on strong relationships between students and staff (McKillip, Godfrey, & Rawls, 2012). In McKillip, Godfrey, and Rawls (2012) utilized methods of increasing valuable student-teacher relationships included the establishment of teacher advisory roles and opportunities for teachers and students to participate in community-building activities after school. Providing opportunities to increase the factors mentioned above, can positively impact the academic and career success of students enrolled in an urban school (McKillip, Godfrey, & Rawls, 2012).

Agricultural education programs continue to become established in urban areas. Agricultural education programs provide a link to increase positive student-teacher relationships, provide avenues for parental involvement, and build partnerships with community stakeholders and business (Phipps, Osborne, Dyer, & Ball, 2008). Within agricultural education, Supervised Agricultural Education (SAE) programs, originally known as the project method, assist in the establishment of partnerships between parents, community stakeholders, students, and teachers (Phipps et al., 2008). The utilization of the project method has been a fundamental component of agricultural education since its origin (Croom, 2008). As part of the Smith-Hughes National Vocational Education Act of 1917, the project method became a federally mandated requirement for all agricultural education students (Wilson & Moore, 2007).

Stimson (1915) stated that student projects should increase in difficulty, scope, and sequence each year of the agricultural education program. To ensure that student projects' increased in difficulty, scope, and sequence, Stimson developed a set project that students would complete each year. The projects Stimson (1915) required students to conduct were:

- First year – a plant project of kitchen gardening or ornamental planting;
- Second year – an animal husbandry project of raising poultry, sheep, goats, swine, or bees;
- Third year – an advanced plant project of fruit production, market gardening, or producing fruits and vegetables for market;
- Fourth year – an advanced animal husbandry project of dairying, general farm management, or agriculture as a business.

Additional projects could be conducted or continued throughout the four-year agricultural education program. These projects could be the continuation of a previous year's project. Likewise, a student could develop a project to solve a problem on their home farm (Stimson, 1915). While many projects were aimed at increasing student knowledge, Stimson (1915) felt that it was vital for families to be involved in the student's project. Stimson (1915) argued that family interaction would increase the family's knowledge of new research–proven techniques and practices. Further, Stimson (1915) alleged that student–parent interaction formed a relationship that would prove essential in the operation of the farm.

Finally, Stimson (1915) posited that an agricultural instructor had a distinct role in the success of the project method. Heald (1929) reported that since agricultural teachers were employed through the summer, Stimson required a weekly visit to each student's farm. Additionally, teachers were expected to complete mid–summer and mid–winter professional development. Professional development was devoted to assisting teachers in fostering teamwork in their classrooms and communities (Heald, 1929). Stimson (1915) identified teamwork as a vital component of the project method.

Presently, Barrick et al. (2011) defined SAE as: "a planned and supervised program of experience-based learning activities that extend school-based instruction and enhance their [student] knowledge, skills, and awareness of the agricultural industry" (p. 9). SAE programs remain vital to the total school-based agricultural education program (SBAE) (Camp, Clarke, & Fallon, 2000). Hughes and Barrick (1993) purported that individualized instruction through SAE assisted in developing students' self-confidence. Additionally, SAE allows students to develop solid connections between their classroom content and real world situations due to their participation in authentic experiences (National Council for Agricultural Education, 2015). Teachers overwhelmingly support the belief that SAE enhances classroom learning through real-life experience, sense of ownership, learning by doing, and enhanced agricultural knowledge (Camp, Clarke, & Fallon, 2000). Osborne (1988) and Swortzel (1996) reported the agriculture teacher as the most influential component to the utilization of SAE programs in SBAE. More recently, Rubenstein & Thoron (2015) corroborated the importance of agriculture teachers in the development and implementation of SAE programs in rural areas.

While abundant benefits and support for SAE exist within agricultural education (Dailey, Conroy, & Tolbert-Shelley, 2001; Dyer & Williams, 1997; Roberts & Harlin, 2007; Wilson & Moore, 2007), a disconnect remains between SAE philosophy and implementation (Wilson & Moore, 2007). Agricultural education literature has shown decreasing trends in the number of students beginning and completing SAE programs (Dyer & Osborne, 1995; Retallick, 2010; Steele, 1997; Wilson and Moore, 2007). Teachers agreed SAE was an integral component of the three-circle agricultural education model, yet report believing that SAE was inappropriate for their individual situation (Camp, Clarke, & Fallon, 2000). Wilson and Moore (2007) reported that excess paperwork, high student enrollments, and lack of farm backgrounds as factors discouraging teachers in West Virginia from implementing SAE programs. Retallick (2010) quoted an agricultural educator with the following sentiment: "SAE is the interworkings, the engine that makes Ag Ed work, but not as glamorous as FFA or classes" (p. 65). On top of these logistical factors, school administration, parents, and community members view teachers as FFA and agriscience teachers, but not as SAE supervisors. Furthermore, the pervasive perception of agricultural education was that it was only about production and vocational agriculture, limiting the opportunities for students coming from non-traditional backgrounds (Retallick, 2010).

There has been little research done looking specifically at SAE programs related to students and teachers in urban SBAE, however indicators present in past research highlight the importance for further examination of this demographic area (Barrick, Hughes, & Baker, 1991; Retallick, 2010; Steele, 1997). New instructional approaches to SAE have been developed to specifically target non-traditional agricultural students, however SAE continues to decline (Croom, 2008). Agricultural educators list changing demographics and societal attitudes to be the largest struggle in implementing SAE (Retallick, 2010) and research has shown a perceived need to expand the concept and scope of SAE to meet the requirements of a more diverse clientele (Barrick et al., 1991). Historically, agricultural educators have overlooked urban students and their connection to successful SAE implementation (National Research Council, 1988). Teachers list the lack of opportunity within the immediate area, increased need for creativity, and increased effort to find and supervise SAE opportunities as the primary reasons hindering the utilization of SAE programs for diverse groups of students (Retallick, 2010). Research by Henry, Talbert and Morris (2014) reported agricultural educators encountered more challenges within SBAE programs with urban students in comparison to rural students. Bobbitt (1986) found rural teachers placed more emphasis on SAE than their urban counterparts. Dyer and Osborne (1995) posited that major effort must be put forth to provide consistent SAE program focus and direction on a national level.

The importance of SAE in both the rural and urban classroom exists within the experiential nature of SAE (Knobloch, 2003). The experiential learning process of knowledge creation occurs

in four stages; concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). Within the context of agricultural education, Knobloch (2003) proposed the four pillars that support experiential learning in the agricultural education classroom were learning in real-life contexts, learning by doing, learning through projects, and learning by problem solving. SAE provides concrete experience in each of these pillars (Knobloch, 2003). For multicultural urban programs, hands-on activities include participating in first-hand experience offer the highest levels of engagement (Vang, 2010). Therefore, it is important to investigate methods of incorporating experiential learning into urban classrooms.

SAE remains an integral component of the total agricultural education program (Roberts & Harlin, 2007). However, little research has been conducted to examine the processes that agriculture teachers utilize when working with students to develop and implement exemplary SAE programs. Throughout the agricultural education literature base development and implementation processes have been described (Phipps et al., 2008; Stimson, 1917; Talbert et al, 2007), however these processes have been based on philosophy and historical practice. In order for SAE to remain relevant in agricultural science classrooms, it is vital that the definition and development of SAE evolves to address the situation and needs of urban agricultural education students (Barrick, et al., 1991). The previous presented issues of paradoxical SAE philosophy and implementation (Wilson & Moore, 2007), lack of facilities, resources and time (Camp, Clarke, & Fallon, 2000; Retallick, 2010; Wilson & Moore, 2007), and growing concern with meeting the needs of a changing demographic of students (Barrick, et al., 1991; National Research Council, 1988; Retallick, 2010), have caused the relevance of SAE in an urban setting to be questioned. According to Brown, Roberts, Whiddon, Goossen, and Kacal (2015), a lack of student relevance between agriculture subject matter and inner city workings existed. Furthermore, Henry, Talbert, and Morris (2014), suggested that there was a lack of students' perceived connections to practical application of agriculture in urban communities due to unrecognized local agricultural industry. Therefore, this study investigated factors utilized during the development and implementation of SAE programs in urban settings to provide vision on ways to increase urban students' participation in SAE.

Purpose and Research Questions

The purpose of this study was to describe factors present in the development and implementation of exemplary SAE programs in urban schools, validated by Priority Area Four and Priority Area Five of the National Research Agenda (Roberts, Harder, & Brashears, 2016). The following research questions guided this study:

1. What teacher factors were present in the development and implementation of exemplary SAE programs in urban schools?
2. What student factors were present in the development and implementation of exemplary SAE programs in urban schools?
3. What school factors were present in the development and implementation of exemplary SAE programs in urban schools?
4. What community factors were present in the development and implementation of exemplary SAE programs in urban schools?
5. What family factors were present in the development and implementation of exemplary SAE programs in urban schools?

Theoretical Framework

This study utilized a case-study design as described by Creswell (1998). According to Creswell (1998) researchers utilize case study research to conduct in-depth examinations of cases (single or multiple). In this study, researchers examined two agricultural education cases to describe their SAE development and implementation processes that were utilized to assist students with the utilization of SAE programs in SBAE. Furthermore, qualitative studies apply ontological, epistemological, and theoretical perspectives to theoretically ground research (Crotty, 2010).

The realism ontological perspective was utilized in this study due to the individual nature of SAE programs and students' independent engagement in instruction and content. Realism suggests that individuals experience the world around them in their own way and create their own meaning from their interactions. These interactions then assist the learner in generating truths or knowledge that can be used for the further development of knowledge (Turner, 2008). Furthermore, agriculture teachers then engage with the students to assist in the construction of knowledge.

In this study, the researchers utilized the constructionist epistemological perspective and the theoretical perspective of constructivism. Constructivists believe that the reality a human embraces differs from the actual world (Guba & Lincoln, 1990). Therefore, humans must interact with the reality of the world around them to develop their own beliefs and knowledge (Crotty, 2010). Participants in this study were engaged in applying content learned in their agricultural education classroom to real-world environments where they were able to fully engage in developing meaning and knowledge from these interactions.

Finally, the theoretical framework of constructivism refers to an individual's creation of meaning. Constructivists hypothesize that the meaning making process resembles a construction of knowledge where different experiences interact to develop meaning from a variety of situations (Crotty, 2010). In this study, participants actively participated in the development and implementation of individualized SAE programs when developing their knowledge of the SAE development process. Further, participants were able to develop schema between their previous knowledge and interactions with specific content with their authentic learning experiences garnered from their engagement in their SAE program.

Methods

The participants were purposively selected based on the researchers' previous research partnerships and understanding of the utilization of SAE (Koro-Ljungberg, Yendol Hoppey, Smith & Hayes, 2009). The researchers were former agriculture teachers and strongly believed that SAE and experiential education are fundamental components of the total SBAE program. The researchers contacted an agricultural education faculty member and department of education program specialist who identified three to five urban agricultural education programs that met a priori criteria of exemplary SAE programs. The following criteria have been identified to define exemplary SAE programs: (1) 75% of students enrolled in agricultural education courses, at minimum, are engaged in multi-year SAE programs that consist of more than 100 hours of time invested by students (AAAE, 2013); (2) urban programs were SBAE programs where the location had a population of more than 50,000 people (US Census Bureau, 2010).

In order to gather evidence of criteria one, the researchers conducted phone interviews with the agriculture teacher at each of the identified schools. Agriculture teachers were asked to respond the following sample questions:

1. How many unduplicated students are currently enrolled in your agricultural education program?

2. How many of your students are engaged in a Supervised Agricultural Experience program?
3. Do each of the students engaged in an SAE program receive supervision?
4. Do students keep records related to their SAE program?
5. Do student programs increase in scope and sequence? Can you provide an example of a student's program?
6. Are your students engaged in SAE programs that are related to the classroom instruction received in their agricultural education course?
7. In a few sentences, can you describe your thoughts about the role of SAE in agricultural education?
8. Would you be willing to host a researcher at your school to collect additional data? This visit would be of no expense to you.
9. Would you be willing to assist the researcher in recruiting students, their parents, and other program partners?

Following the interviews, the researchers referenced data collected from the United States Department of Education and the United States Department of Agriculture to ensure that the selected schools met criteria two. The selected schools were then notified and onsite visitations were scheduled for data collection. The agriculture teachers were then asked to select twelve students and their parents to participate in the data collection process. Six of the selected students had newly established SAE programs (New SAE Student), while the remaining six students had conducted SAE programs for three years or more (Advanced SAE Student). Additionally, community members that were involved in the selected student SAE programs were asked to participate in a focus group during the on-site visit.

The site visits were scheduled as a one-day period for data collection and observation. Each site visit included two student focus groups, one parent focus groups, one community member focus group, and teacher interview(s). The focus groups were comprised of four and six participants (Morgan, 1988). During the site visit, the researchers observed the teacher's SAE instruction and conducted informal interviews with randomly selected agriculture students who did not participate in the focus group. The informal interviews and observations assisted in establishing consistency between all of students enrolled in the program. Data saturation was achieved and noted through the data collection process.

The researchers utilized a semi-structured interview guide during the interviews and focus groups. The semi-structured guide question topics included: description of the SAE development process, the teachers' SAE philosophy, description of the teachers' SAE instruction, students' perceived role of the agriculture teacher in the development process, and participant's motivation to remain involved in an SAE program. Each focus group and interview was audio recorded and transcribed for data analysis. Each individual interview lasted between 42 and 63 minutes, while focus groups lasted between 48 and 100 minutes. During the transcription process all participants were assigned pseudonyms and all identifiers were removed to ensure data anonymity. Focus group and interview participants received an incentive for their participation. The incentive was utilized as a motivation to participate in the focus group. Parents and community members who participated were provided with $25, while the agriculture teachers were provided with $75 for their participation and assistance with selecting and communicating with the participants.

A four-step constant comparative method, constructed by Lincoln and Guba (1985), was utilized to make comparisons across multiple cases. This study was conducted to identify factors that should be utilized by SBAE teachers when implementing and developing SAE programs in urban secondary SBAE programs. The researchers:

1. Established the creation of categories that described occurrences within the data,
2. Redefined the established themes,
3. Integrated categories as they become more defined during the analysis process, and
4. Constructed the written manuscript.

In order to safeguard the credibility of the research study, the researchers utilized member checking, peer debriefing, persistent observations, referential adequacy materials (materials prepared for parents and students), and triangulation (Dooley, 2007; Lincoln & Guba, 1985). Member checking was conducted both immediately after the focus groups and following the transcription process. Following individual analysis of the data the researchers met to discuss the emergent themes to ensure that all perspectives were considered in the data. Credibility was upheld by engaging in persistent observations of the students and teachers throughout the entire visit to each school. Thorough and thick descriptions of the context and data were utilized to uphold the transferability and provide readers the ability to apply and fully understand the results (Lincoln & Guba, 1985). During this study the researchers kept methodological journals to document methodology decisions and reflection to ensure reliability and trustworthiness (Dooley, 2007).

Findings

The participants in this study included: eight community members, four teachers, 12 parents, and 18 students. See Table 1 for the participants' demographic information.

Table 1

Participant Demographic Information (n=42)

Identification	Gender	Profession
Community Member-1	F	Veterinarian
Community Member-2	M	Retired Agriculture Teacher
Community Member-3	M	Local Farmer
Community Member-4	M	Local Landscape Company Owner
Community Member-5	M	Retired Teacher
Community Member-6	F	Information Technology Specialist
Identification	Gender	Profession
Community Member-7	M	USDA Employee
Community Member-8	F	US Fish and Wildlife Service Technician
Teacher-1	M	High School Agriculture Teacher
Teacher-2	F	Middle/High School Agriculture Teacher
Teacher-3	M	High School Agriculture Teacher
Teacher-4	F	High School Agriculture Teacher
Parent-1	M	Assistant Principal
Parent-2	F	Accountant
Parent-3	F	County Claim Assistant
Parent-4	F	County Extension Agent

Table 1 (continued)

Participant Demographic Information (n=42)

Identification	Gender	Profession
Parent-5	F	County Case Manager
Parent-6	F	Stay at Home Caregiver
Parent-7	F	County Sustainability Manager
Parent-8	M	Sales Associate
Parent-9	F	State Employee
Parent-10	F	Airline Employee
Parent-11	M	Electrician
Parent-12	F	Office Manager
Student-1	F	Advanced SAE Student
Student-2	M	Advanced SAE Student
Student-3	F	Advanced SAE Student
Student-4	F	Advanced SAE Student
Student-5	F	Advanced SAE Student
Student-6	F	Advanced SAE Student
Student-7	F	Advanced SAE Student
Student-8	F	Advanced SAE Student
Student-9	M	New SAE Student
Student-10	M	New SAE Student
Student-11	M	New SAE Student
Student-12	M	New SAE Student
Student-13	F	New SAE Student
Student-14	M	New SAE Student
Student-15	M	New SAE Student
Student-16	F	New SAE Student
Student-17	M	New SAE Student
Student-18	F	New SAE Student

Engaged Teachers

Use of Examples in Instruction. Instruction in SAE occurred in both of the schools that participated in the study. Similarly, previous students' SAE programs were used as examples of potential SAE options for students during the development and implementation process. The examples that were utilized assisted students in selecting and developing an SAE program that met their needs and the teacher's expectations. Student-8 stated "he (teacher) would give us examples from past years, or proficiencies that FFA had recognized at a convention or something of that nature. He presented it in a way that was easy to understand." Teacher-1 noted that he wanted

students to "use examples from their own life" while they were generating ideas for their SAE programs. Teacher-2 added "in the beginning, it is about getting those ideas out there, showing them what's been done before, not that they're limited to that, but just to get their wheels turning." When introducing the topic to students, Teacher-2 stated she retained students' "PowerPoint or a poster board type displays" from prior years SAE showcase to use in-class. During her presentation, Teacher-2 explained, "this is an example of what a few students did … this is what I really liked about this project … this is where this project lacked a little bit" to assist students in critically examining each project. The utilization of examples assisted students in discovering and generating their SAE program topic. Student-1 added that if the examples provided in-class did not help with the generation of an SAE topic that the agriculture teacher(s) "helped keep ideas flowing if we came to a point where we can't really think of anything." The need for an engaged teacher who utilized examples was kept at the forefront of the conversation in the focus groups and interviews and served as an integral component of an exemplary SAE program.

Theoretically Practical and Hands-on. Throughout the SAE development and implementation process the participants noted SAE programs were introduced through engaging learning activities. Teacher-1 noted he utilized "free writes, some exits out the door, and a few opening activities" to begin and end classes when instructing about SAE programs. Student-8 recalled they went "outside and he (Ag Teacher) had some kind of little rhyme or riddle" developed from a mnemonic device that described the different types of SAE. Student-17's agriculture teacher "utilized video clips and interactive stimulation to help make it connect" with students.

When discussing the success of the development and implementation process, Community Member-3 explained SAE as a hands-on learning opportunity that exposed students to "the way it's going to be when you get out of school. You're not going to have somebody feeding you a lecture. It gives them a little leg up on the real world." Community Member-5 further explained student learning in SAE occurred from both success and failure. He explained,

> I think that you can learn much more from failure than you can learn from success. If your SAE project does not succeed in meeting the goals that you had achieved for, but you can look at it and see where you went wrong and decide what you'd do the next time around. That's tremendous success and learning.

Teachers, parents, and students held the same thought of student learning being an essential component of SAE programs. Students and teachers noted that their learning was measured for a grade in their agricultural education course. Students believed an SAE grade needed to be evaluated on an individual basis and that no one rubric or scorecard could fully assess students' SAE programs. Student-2 explained,

> There's no black or white answer. It's going to vary from person to person. I mean just to each their own, I guess. I mean if they think that they're getting very far with their SAE, then that's great for them, because SAE is meant to give confidence and excitement about the field of agriculture and what it can offer for them. It's going to vary from person to person.

SAE was considered an essential component of the agricultural education program. Student-8 described, "Last year I do know that it was 20% of our grade and this year SAE is 45% of our grade."

Teacher/Student Bond. Throughout the SAE development and implementation process, students, parents, and community members noted that students' respect and admiration for their agriculture teachers grew. Community Member-5 explained that SAE helped his son find "his place in the school. He hadn't felt like that for a long time. Just those teachers taking an interest in what

he was doing, and connecting that to school, for him, was huge. It happens for a lot of kids that way." Student-18 explained when having issues with her SAE, she found it easy to talk with her agriculture teachers because they share their own experiences and struggles. She stated, "it's like you get to know them and what they've gone through, so you don't feel bad when you're going through the same thing." Student-16 described her agriculture teachers as being able to "get to know each and every one of us on a more personal level than most teachers" because of their involvement in the SBAE program, including their SAE involvement. Student-18 continued, "the relationship between the ag teacher and the student helps a lot to make your ag experience better, to push your SAE project forward." Because of the relationships built between the agriculture teacher and students, Student-3 believed her relationship with her agriculture teacher allowed for her teacher to "push me to be able to do better … I didn't even know what an SAE was and he worked with me through everything." Throughout the interviews and focus groups, it became evident that the bond developed between the teacher and student influenced the development of relationships between the community and SBAE program, students and students, and parents and their students.

In-Class Supervision

While the participants considered supervision an important component of SAE programs, supervision primarily occurred within the classroom setting. Student-3 explained, during in-class supervision her agriculture teacher constantly reminded students of upcoming "deadlines and all of the basic requirements of the project … when it should be done and how we need to do it." Teacher-2 described her approach to in-class supervision as "checks periodically throughout the semester that they need to fill out and tell us what they've been up to, what percentage of the project they think they've completed. Again, there's space to ask questions and those types of things." The participants explained that on-site supervision occurs through the utilization of community members, parents, and employers. Parent-7 noted, the agriculture teacher "supervises them when they're in-class. My daughter is completing an internship that he [Ag Teacher] helped provide her with, where the veterinarian at that particular vet hospital supervises her. Outside of that particular internship, we [parents] help her if she needs assistance." The conversations that were fostered through in-class supervision experiences assisted in the continuation of those conversations with parents, community members, and school officials.

Student Interest

The development of an SAE program was centered on the conceptualization that the student had to have a genuine interest in the SAE topic. Teacher-2 explained,

> If a student chooses a project and then it doesn't work or they want to pursue a different area, there's no use in beating a dead horse. Pick something different that you are interested in because I don't want them to drag their feet and be miserable through the whole process.

Teacher-4 further explained, "I think if an SAE program is going to work, it has to be from the student's initial motivation to want to do it … they have to have some intrinsic goals and motivation to want to do it." Parents believed having the choice to select a topic of interest, increased students' passion for the topic. Parent-9 explained,

> When they [students] make their choice, it seems like they're picking it because they have passion for it, they want to learn about it, they want to be able to share what they have learned. I think it drives them differently because they're picking it.

Beyond just a connection to the students' interest, students and teachers believed that SAE programs needed to have flexibility to progress with students as they discovered their passions and future career paths. In some cases, students' SAE programs would become more refined each year. Student-3 stated, "originally my SAE started as just agribusiness in general and then it focused down and it progressively got focused in one area." Similarly, some students' interests change courses completely. Student-2 explained, "my SAE started off as a project just about food safety, then that changed into educating the public about food safety, then it changed to elementary education for Ag and then it changed to purely elementary education."

Partnerships in SAE

In the development and implementation process, teachers recognize that they need to develop partnerships with community members and parents to assist students in acquiring the necessary resources to conduct their SAE programs. Teacher-3 developed a "strong working relationship with our advisory board … they are our eyes and ears on the ground" to help secure student SAE resources. Similarly, Teacher-2 sends "letters home to all of my students when I assign the SAE program that explains what it is, that it's an assignment in the class." He believed that the letter informed parents about the details of an SAE program and assisted in engaging parents in students' SAEs. Parent-9 explained when her son would normally "blow stuff by me just to catch a reaction or whatever but when he came up with his project, I thought, 'You got to be kidding me? Who thinks like that?'" By sharing details with this parent and engaging the student in SAE, the agriculture teacher gained a supporter of the SBAE program and SAE.

Beyond the teacher's beliefs, students and community members believed that SAE increased students' motivation to participate in the local FFA chapter. Community Member-6 shared, "I think SAE maybe have motivated some to participate in FFA, rather than vice versa. Sometimes they get into those SAE projects, and they see those connections [between the three components of SBAE] … then you've got a life-long FFA member." Student-5 explained that FFA members

> Influenced me … when we're at state convention, you see all the people that receive their state degree, or at nationals, you see national, the American degrees … all those require people to do their SAE Projects … you can get proficiencies and stuff like and seeing other members excel in that area, makes me want to achieve something greater than just a small project.

Development of an SAE Culture

Through this study, the need for a culture that supports the utilization of SAE was needed for the successful development and implementation of SAE programs. The teachers recognized a need to ensure that consistent requirements were needed in multi-teacher SBAE departments. Teacher-4 explained the process in their multi-teacher program,

> We meet each year and go through the packet and talk about things that have gone well, things that haven't gone well, so that we're all on the same page in what we're doing because if [Teacher-2] doing one thing and [Teacher-3] is doing another, and a kid takes a class from a different person, they're going to say, 'we had to do this with so and so. Now you're making us do this. Why?' We want to make sure we're consistent in our expectations, in how we guide students through the process, so that if they take another class, they know where the road is headed, and we don't have that playing mom against dad type of situations where kids or parents can be upset about how one teacher handles it versus another.

The teachers in this study stated that this process does take time to implement. However, for SAE to be successful they believed it was a vital component to their yearly preparation to introduce SAE programs. Parent-10 explained, "at the end of the day, is it really something that they enjoy doing and are going to tell others about. I think we see that here. The students benefit from their SAEs … that makes all the difference." Community Member-2 noted,

> I believe SAE helps keep young people interested in school … maybe keep them engaged in school … if they like one aspect of school, they will likely do well in other aspects of school … I think it has, in my mind as a former teacher, the SAE program is one of the most valuable components of all of the things that we do.

Conclusions, Implications, and Recommendations

Engaged teachers through all levels of SAE was the outstanding influencer of students developing and implementing a SAE while in a SBAE program. The literature base supports this finding across decades (Osborne, 1988; Swortzel, 1996) as well as settings in both rural (Rubenstein & Thoron, 2015) and urban programs. The strength of which teachers engage students through local examples, founded in the context of the community, was found to be equally important for the student to believe they could develop and implement a SAE program. The researchers concluded that urban programs, led by the teacher, held events similar to job fairs to showcase ideas that were authentic in nature and of local impact and interest to the community in their classrooms, similarly to rural programs as found by Rubenstein and Thoron (2015). Similarly, Henry, Talbert, and Morris (2014) suggested the utilization of several authentic examples to assist students in establishing connections between SAE and the local community. By showcasing local SBAE SAEs, peer-to-peer interactions were fostered and engaged students in recognizing the relevance between the community and their SAE topic. Brown et al. (2015) concluded, a shortcoming of urban programs was the lack of relevance between subject matter and students' daily lives. In this study, the researchers found similar findings for some students; however, the agricultural education teachers in each of the examined cases sought various means to help to reduce this disconnect through various in-class experiences and partnerships with community stakeholders. Through teacher engagement and directions, students were able to establish connections between their daily lives, classroom content, and SAE. Finally, the high level of teacher engagement in SAE spanned classroom instructional time, hands-on practical application of SAE examples, and sustained conversations. SAE was not simply a unit of instruction, nor a conceptual experience that happened outside the classroom, but rather it was integrated and central to the program through authentic investigations, peer-to-peer interaction, classroom grades, and individualized goals of the student. Vang (2010) suggested a similar approach when engaging urban students at the highest level.

The implications of the engaged teachers led to the teacher to student bond just as McKillip, Godfrey, and Rawls (2012) described in the study of relationships between school faculty and urban students. Through SAE, students held high regard for their teacher, at times calling them the ones that care or understand them (as students). This in turn created a learning bond and a learning community where SAE perpetrated through the program. Barrick and Hughes (1991) remain correct that the individualized instruction of SAE assists students in developing self-confidence and a realization they can conduct an SAE. Therefore, it is recommended SBAE teachers make SAE an integral and continual focus of the classroom through instruction in and about agriculture and highlighting of SAEs conducted at the local level. It is also recommended that teacher education programs model what SAE instruction looks like on a day-to-day level in the total school-based program for preservice teachers. Curriculum development and agriscience professional development should assist teachers in establishing a SAE focus in their local program.

Specifically, in-class supervision was found to be a foundation for successful SAE development and implementation. Individualized in-class teacher to student encouragement led to conversations between students and parents. This conclusion is supportive of Reynolds et al. (2014) who stated parental engagement of student activities was critical in the urban setting. Programs in this investigation either sent letters home or held meetings with parents; however, both programs provided an in-class structure and supervision that initiated the need for students to engage in conversation with their parents. In-class supervision created a connection between parents and the SBAE program. Parental support of SAE and SBAE increased student motivation to implement and maintain an SAE. This conclusion leads to the recommendation of parental support and parental education of SAE pointed out by Rubenstein (2014) of rural SBAE programs that incorporate SAE successfully. This extra effort in urban programs was called for by Bobbitt (1986) decades ago, and it was still found to be one of the factors to implementation of successful SAE programs in urban SBAE. It is recommended that teachers and teacher educators This goes above and beyond being counted as a portion of the course grade, but connects parental awareness and support to student learning in the SBAE program.

Partnerships in SAE were formed through engaged teachers, parental support, and a network of partners that focused specifically on SAE. It is recommended that SBAE programs develop an advisory council of partners that focus specifically on SAE. It is common that SBAE programs have a FFA Alumni that has an initial focus on FFA, awards, and recognition. Equal to an alumni chapter, SBAE programs maintain an advisory council, which has a primary focus on the total program, facility, and curricular needs. However, both groups have primary motivators that may cause for SAE to become overlooked for other pressing concerns of the SBAE program.

Lastly, the development of an SAE culture was found to be a concluding theme throughout all the findings. An SAE culture that includes engaged teachers, parental figures, students, and community members takes years to develop. Rubenstein (2014) found that an SAE culture developed over a five-year period and involved growth in relationships between teachers and partners and centered on student engagement. This finding further supports the work of Roberts and Harlin (2007), of SAE being an integral component of a total SBAE program. As more urban SBAE programs emerge, research must identify factors that contribute to the success of these programs., Finally, a handbook for new teachers should be created in regards to integration of SAE culture into an SBAE program. Student motivation and drive should be further investigated to establish motivating factors for success in implementing SAE programs.

Recommendations

Further investigation needs to be done in urban SBAE programs especially in the realm of SAE. Therefore, the researchers recommend the following recommendations for future research to examine:

1. Student motivation should also be investigated on the students drive to sustain a SAE programs over time and identify if sustained SAE programs lead to student career engagement in the industry of agriculture.
2. Student motivation and drive should be further investigated to establish motivating factors for success in implementing SAE programs.
3. Investigations should be sought to explain how SAE culture is created in urban SBAE programs.
4. A model for SAE culture should be developed and then tested in urban SBAE programs.
5. The lack of relevance between subject matter and students' daily lives to propose different methods that can be utilized by urban agriculture teachers to alleviate the disconnect between the relevance of class content and student's daily lives.

6. The feasibility of an advisory committee of partners who focus on student SAE program development. The implications might lessen the burden of time, recourses, and relevance pointed out as barriers to implementation by Retallick (2010).

Furthermore, the authors propose the following recommendations for teacher educators to :

1. Develop a handbook for new teachers should be created in regards to integration of SAE culture into an SBAE program.
2. Integrate SAE culture development and maintenance into agricultural teacher education program curriculum.

Finally, the authors propose the following recommendations for practitioners to:

1. Prepare a classroom structure that supports student learning through individualized SAE.
2. Ensure that all students are provided an opportunity to engage in an SAE program.

References

American Association for Agricultural Education. (2013). *Teacher Education SAE Competencies.*

Barrick, R. K., Hughes, B. M., Baker, M. (1991). Perceptions regarding supervised experience programs: Past research and future direction. *Journal of Agricultural Education, 32*(4), 31-36. doi:10.5032/jae.1991.04031

Barrick, R. K., Whitson, R., Staats, J., Gruis, D., Hastings, H., Neyhart, J., Davenport, B., Cano, J., Foor, R., Retallick, M. S., & Estepp, C. (2011). *Report of the experiential learning planning committee for The National Council for Agricultural Education.*

Bobbitt, F. (1986). *An examination of the opinions and supervised occupational experience programs of selected vocational agricultural instructors in the U.S.* (Staff Study). East Lansing: Michigan State University, Department of Agricultural and Extension Education. (ERIC Document Reproduction Service No. ED 274 816)

Brown, N. R., Roberts, R., Whiddon, A. S., Goossen, C. E., & Kacal, A. (2015). Paxton revisited: The essence of the lived experiences of urban agricultural education students. *Journal of Agricultural Education, 56*(1), 58-72. doi: 10.5032/jae.2015.01058

Camp, W. G., Clarke, A., & Fallon, M. (2000). Revisiting supervised agricultural experience. *Journal of Agricultural Education, 41*(3), 13-21. doi:10.5032/jae.2000.03013

Cappella, E., Frazier, S. L., Atkins, M. S., Schoenwald, S. K., & Glisson, C. (2008). Enhancing schools' capacity to support children in poverty: An Ecological Model of School-Based Mental Health Services. *Administration and Policy in Mental Health*, *35*(5), 395–409. http://doi.org/10.1007/s10488-008-0182-yCroom, D. (2008). The development of the integrated three-component model of agricultural education. *Journal of Agricultural Education, 49*(1), 110-120. doi:10.5032/jae.200801110

Crotty, M. (2010). *The foundations of social research: Meaning and perspective in the research process.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications Inc.

Dailey, A. L., Conroy, C. A., & Tolbert-Shelley, C. A. (2001). Using agricultural education as the context to teach life skills. *Journal of Agricultural Education*, *42*(1), 11-19. doi:10.53032/jae:2001.01011

Dooley, K. E. (2007). Viewing agricultural education research through a qualitative lens. *Journal of Agricultural Education, 48*(4), 32-42. doi:10.5032/jae.2007.04032

Dyer, J. E., & Osborne, E. W. (1995). Participation in supervised agricultural experience programs: synthesis of research. *Journal of Agricultural Education, 36*(1), 6-14. doi:10.5032/jae.1995.01006

Dyer, J. E., & Williams, D. L. (1997). Benefits of supervised agricultural experience programs: a synthesis of research. *Journal of Agricultural Education*, *38*(4), 50-58. doi:10.5032/jae.1997.04.050

Guba, E., & Lincoln, Y. (1990). *Can there be a human science?* Person-Centered Review, 130-154.

Henry, K. A., Talbert, B. A., & Morris, P. V. (2014). Agricultural education in an urban charter school: perspectives and challenges. *Journal of Agricultural Education*, *55*(3), 89-102. doi: 10.5032/jae.2014.03089

Hughes, M., & Barrick, R. K. (1993). A model for agricultural education in public schools. *Journal of Agricultural Education*, *34*(3), 59-67. doi: 10.5032/jae.1993.03059

Knobloch, N. A. (2003). Is experiential learning authentic? *Journal of Agricultural Education*, *44*(4), 22-34. doi: 10.5032/jae.2003.04022

Kolb, D. A. (1984). *Experiential learning*. Upper Saddle River, New Jersey: Prentice Hall.

Koro-Ljungberg, M., Yendol-Hoppey, D., Smith, J. J., & Hayes, S. B. (2009). Epistemological awareness, instantiation of methods, and uniformed methodological ambiguity in qualitative research projects. *Educational Researcher, 38*(9), p 687-699. doi:10.31021/0013189X09351980

Leonard, J. (2011). Using Bronfenbrenner's ecological theory to understand community partnerships: A historical case study of one urban high school. *Urban Education, 46*(5), 987-1010. doi: 10.1177/0042085911400337

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.

McKillip, M. E., Godfrey, K. E., & Rawls, A. (2012). Rules of engagement: Building a college-going culture in an urban school. *Urban Education, 48*(4), 529-556. doi: 10.1177/004208591257163

Morgan D.L. (1988). *Focus groups as qualitative research*. London: Sage Publications.

National Council for Agricultural Education. (2015). Philosophy and Guiding Principles for Execution of the Supervised Agricultural Experience Component of the School Based Agricultural Education Program. Retreived from: https://www.ffa.org/SiteCollectionDocuments/sae_guiding_principles.pdf

National Research Council. (1988). *Understanding agriculture: New directions for agriculture.* Washington, DC: National Academy Press.

Netzel, D. & Eber, L. (2003). Shifting from reactive to proactive discipline in an urban school district: A change of focus through PBIS implementation. *Journal of Positive Behavior Interventions, 5*(2), 71-80. Retrieved from http://eds.b.ebscohost.com.proxy-remote.galib.uga.edu/eds/pdfviewer/pdfviewer?vid=2&sid=14380eca-8398-4c12-8945-6c45402ab0c3@sessionmgr114&hid=117&preview=false

Phipps, L. J, Osborne, E. W., Dyer, J. E., & Ball, A. (2008). *Handbook on agricultural education in public schools* (6th ed.). Clift Park, NY: Thomson Delmar.

Osborne, E. W. (1988). Planning and supervision strategies for SOE programs in agriculture. *Journal of the American Association of Teacher Educators in Agriculture, 29*(4), 49-56. doi: 10.5032/jaatea.1988.04049

Retallick, M. C. (2010). Implementation of supervised agricultural experience programs: The agriculture teachers' perspective. *Journal of Agricultural Education*, *51*(4), 59-70. doi:10.5031/jae.2010.04059

Reynolds, A. D., Crea, T. M., Medina J., Degnan, E., & McRoy, R. (2015). A mixed-methods case study of parent involvement in an urban high school serving minority students. *Urban Education, 50*(6), 750-775. doi: 10.1177/0042085914534272

Roberts, T. G., & Harlin, J. F. (2007). The project method in agricultural education: then and now. *Journal of Agricultural Education*, *48*(3), 46-56. doi:10.5032/jae.2007.03046

Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). A*merican Association for Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.

Rubenstein, E. D., & Thoron, A. C. (2015). Supervised agricultural experience programs: An examination of committed teachers and student centered programs. *Journal of Agricultural Education*, *56*(3), 75-89. doi: 10.5032/jae.2015.04075

Steele, R. (1997). Analysis of the continuing decline in use of supervised agricultural experience (SAE) in New York State. *Journal of Agricultural Education*, *38*(2), 49-58. doi:10.5032/jae.1997.02049

Swortzel, K. A. (1996). Perceptions regarding planning activities and supervision strategies for supervised agricultural experience programs. *Journal of Agricultural Education*, *37*, 47-55. doi:10.5032/jae.1996.02047

Talbert, B. A., Vaughn, R., Croom, D. B., & Lee, J. S. (2007). *Foundations of agricultural education*. Danville, IL.

Turner, B. S. (2008). The constructed body. In J. A. Holstein & J. F. Gubrium (Eds.), *Handbook of constructionist research,* (pp. 493-510). New York, NY: The Guilford Press.

United States Census Bureau. (2010). *2010 Census Urban and Rural Classification and Urban Area Criteria.* Retrieved from https://www.census.gov/geo/reference/ua/urban-rural-2010.html

Vang, C. T. (2010). *An educational psychology of methods in multicultural education*. New York, NY: Peter Lang Publishing.

Wilson, E. B., & Moore, G. E. (2007). Exploring the paradox of supervised agricultural experience programs in agricultural education. *Journal of Agricultural Education*, *48*(4), 82-92. doi:10.5032/jae.2007.04082