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Value and Expectations of Supervised Agricultural Experiences as Expressed by Agriculture Instructors in Oklahoma Who were Alternatively Certified

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The purpose of this qualitative descriptive study was to determine the value and expectations for student participation in supervised agricultural experience (SAE) programs, as expressed by first–year, agricultural education teachers in Oklahoma who were alternatively certified. This study revealed that teachers in this study value the fact that the SAE program: (a) prepares students for future, possible careers by developing their skills for college and life beyond high school; (b) allows students to build relationships and make connections with community industry representatives; and (c) enables teachers to build personal relationships with students by making home visits. Teachers in this study expect students to own and manage their own SAE program, keep accurate data (i.e., record books) of their SAE programs, and compete at a high level with their SAE. Additionally, these teachers expect the SAE program to teach students responsibility, accountability, and work ethic. Finally, these teachers believe that students should have a variety of SAE programs.

Keywords: alternatively certified teachers, supervised agricultural experiences, expectancy–value theory

Introduction

Historically, agricultural education has had a rich history of being experiential in nature (Roberts, 2006). As such, students are empowered to apply their learning of theories and concepts to real–world settings. The National Strategic Plan and Action Agenda for Agricultural Education (The National Council for Agricultural Education, 1999) states that "Agricultural Education prepares students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber, and natural resources systems" (p. 3). To that end, agricultural education teachers must be adept at teaching relevant content in a hands–on, experiential manner.

Generally, secondary agricultural education teachers are expected to perform numerous job–related skills. Roberts and Dyer (2004) concluded that, "being an effective agriculture teacher goes beyond classroom teaching" (p. 94). As such, Roberts and Dyer (2004) listed eight duties in which agricultural education teachers are expected to perform as part of their job description. Among these eight is the supervision of students' supervised agricultural experience (SAE) programs.

Supervising agriculturally–related projects has been a duty of agricultural education instructors since the passing of the Smith–Hughes Act in 1917 (Phipps, Osborne, Dyer, & Ball, 2008). Historically, Rufus Stimson is credited with developing the idea that students should participate in a project method to increase their understanding of agriculture (Moore, 1988; Phipps et al., 2008). SAEs are intentional, student–centered activities that occur outside of the formal classroom or laboratory setting under the supervision of the agricultural education teacher (Phipps et al., 2008) and should be a great benefit to students' understanding of agriculture and life (Dyer & Williams, 1997).

In line with the National Strategic Plan and Action Agenda for Agricultural Education (The

National Council for Agricultural Education, 1999), Roberts and Ball (2009) developed a content–based model for teaching agriculture (Figure 1).

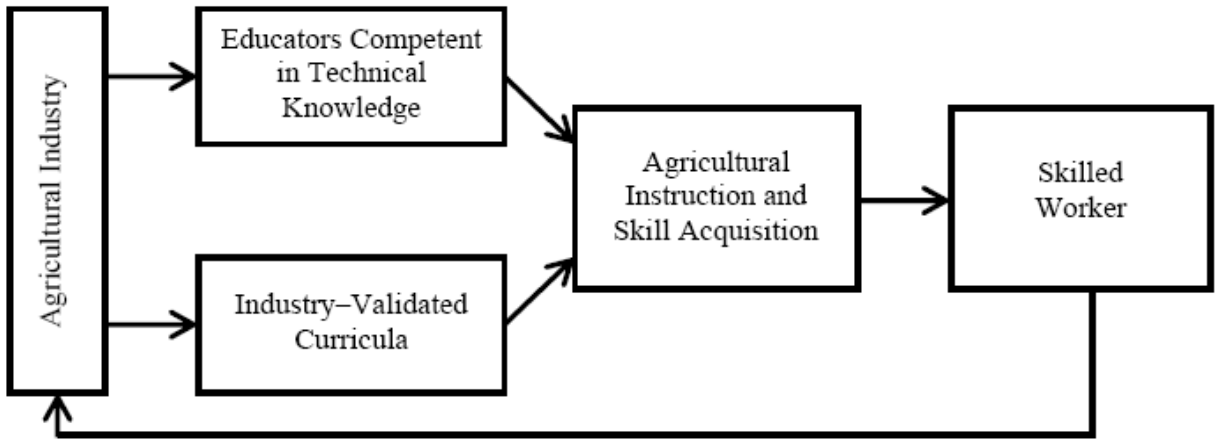

Figure 1. A content–based model for teaching agriculture (Used with permission from Roberts & Ball, 2009)

The authors posited that secondary agricultural education should exist to prepare students for post–secondary education as well as industry–related employment. As such, agricultural education instructors should be cognizant of agricultural industry needs and be competent at preparing students for the skills necessary to become a skilled worker in the agricultural industry.

One means for accomplishing this goal could be through emphasizing the SAE program. Ramsey (2009) noted that it should be expected of teachers to use the SAE program as a vehicle to prepare students for agriculturally–related careers. Ramsey (p. 6) stated that

> The benefits of SAE can be categorized in a variety of areas . . . [such as] the technical competencies that hold potential for being transferred from students' SAEs to the work–site. This transfer of skills acquired by students through experiential learning is an important theme associated with secondary agricultural education, i.e., preparing students for entry–level careers in the agricultural industry.

Jenkins and Kitchel (2010) found that quality SAE programs are contingent upon two factors: goal setting and student satisfaction. Specifically, a quality SAE program involves students who set goals proactively for their SAE. Another quality indicator of SAEs involves the level of student satisfaction in achieving the goals set for their SAE program.

Although every agricultural education instructor is faced with a variety of job responsibilities (Roberts & Dyer, 2004), it would appear that these duties would be most difficult for individuals who have never encountered pre–service preparation or the student teaching internship (i.e., Alternatively Certified [AC] teachers) (Young & Edwards, 2006). Yet, with the growing need for educators in today's society, nearly every state has begun offering AC programs to certify individuals with little to no pedagogical skill experience (Darling–Hammond, 2000; Feistritzer & Haar, 2008; Lynch, 1996; Walsh & Jacobs, 2007). Little is known as to how effective AC teachers have been in the classroom (Robinson, 2010). And, even less is known about the effectiveness of AC agricultural education teachers related to serving as an academic leader in a comprehensive agricultural education model (Roberts & Dyer, 2004). As such, a specific need exists to determine the perceptions of AC

teachers regarding their values and expectations of the SAE program (Robinson, 2010).

Research has indicated that AC teachers often arrive in classrooms with real, former industry experience (Ruhland & Bremer, 2002). As such, it is plausible that understanding, appreciating, and emphasizing student SAE programs would be of great interest to AC teachers. However, Dyer and Osborne (1996) stated that, "teachers may be the greatest detriment of SAE program quality" (p. 26) because of their lack of college preparation in that area. Therefore, it is important to assess how AC teachers, who have likely never encountered any college preparation in SAEs, value the program and formulate expectations of students related to SAE participation.

It has been suggested that teachers can improve students' SAE programs through classroom discussions (Dyer & Osborne, 1996). However, "no study could be found which supported the inverse position" (p. 25). Specifically, Dyer and Osborne concluded that, "no empirical evidence could be found to support the value of SAE programs as an instructional tool" (p. 28). Further, teachers' expectations of the SAE component can influence the degree to which students participate (Dyer & Osborne, 1996). Therefore, identifying AC teachers' values and expectations for improving classroom instruction and preparing students for post–secondary education and employment in industry (Roberts & Ball, 2009) is an imperative task.

The theoretical framework for this study was based on the expectancy–value theory. In their description of the theory, Schunk, Pintrich, and Meece (2008) stated that, "expectancies are people's beliefs and judgments about their capabilities to perform a task" and "values refer to the beliefs students have about the reasons why they might engage in a task" (p. 44). Eccles (2007) stated that the expectancy–value model relates to "the individual's expectations for success, and the importance or value the individual attaches to the various options perceived by the individual as available" (p. 105). As such, an individual's experiences over time (successes and failures) influence the degree of expectation for completing the task. Related to this success or failure is the value an individual places on a task, which is influenced by the intrinsic desire or amount of interest toward completing it (i.e., the attainability of completing the task, the "cost" of performing the task, and the usefulness of completing the task).

Purpose of the Study

The purpose of this qualitative descriptive study was to determine the value and expectations of student participation in SAE programs, as expressed by first–year agricultural education teachers in Oklahoma who were alternatively certified. The basic research question involved in this study was, "What are AC teachers' expectations and values regarding SAEs?"

Methods

This qualitative descriptive study consisted of open–ended questions in face–to–face interviews with first–year, AC teachers in Oklahoma who were encountering the resident teacher (RT) program. Qualitative descriptive studies allow the researcher to minimize interpretation and focus more on describing the phenomenon for "what is" (Sandelowski, 2000). "Qualitative descriptive designs are typically an eclectic but reasonable and well–considered combination of sampling, and data collection, analysis, and re–presentational techniques (Sandelowski, 2000, p. 337). Further, these type of studies "offer a comprehensive summary of an event in everyday terms of those events" (p. 336). Because this study dealt with a phenomenon not reported widely in the agricultural education literature base, the qualitative descriptive method was deemed most appropriate and relevant. As such, a 14–question interview protocol was employed that emphasized the purpose of the study (Table 1).

The protocol was flexible in design to allow for deeper, probing questions. "Probes are used to deepen the response to a question, increase the richness and depth of responses, and give cues to the interviewee about the level of response that is desired" (Patton, 2002, p. 372). The researchers used the protocol and probes to obtain relevant responses to their line of inquiry by adopting Patton's four methods for controlling an interview:

> (a) knowing what you want to find out; (b) asking focused questions to get relevant

> answers; (c) listening attentively to assess the quality and relevance of responses; and (d) giving appropriate verbal and nonverbal feedback to the person being interviewed. (pp. 375–376)

Table 1
Interview Protocol

	Questions
1.	What is SAE program quality and what are the key determinants?
2.	What is the instructional value of SAE programs?
3.	What are the effects of SAE program quality on student achievement?
4.	Explain how students of varying learning styles achieve more/less from SAE programs?
5.	What is the role of a teacher education program and teacher in–service in preparing beginning teachers to assist with quality SAE programs?
6.	What methods are most effective in preparing teacher candidates to effectively provide SAE programs to their students?
7.	How do the type and quality of SAEs influence the value received by the student?
8.	Which teaching methods are most effective in providing SAE instruction at the secondary level?
9.	What facilities are necessary for a quality SAE program and how do they impact today's SAE's?
10.	How do the SAE needs of rural, suburban, and urban students differ?
11.	How do community characteristics affect SAE program quality?
12.	What effects do grading/evaluation methods have on student SAE program quality?
13.	Do state/national policies have an impact on SAE program quality?
14.	What level of involvement should the parent play in SAE program quality?

The participants for this study consisted of first–year, AC teachers encountering their resident teacher (RT) program. In all, five teachers (four males and one female) were identified, and all five agreed to participate in the study.

For anonymity purposes, male pseudonyms were used in reference to direct quotations, regardless of which teacher response was used. Specifically, two participants held degrees in animal science, one participant held a degree in agricultural business, one participant held a degree in agricultural education – professional education (i.e., non–teaching option), and one participant held a degree in agricultural communications. Geographically, these participating teachers represented three of the five districts in Oklahoma – northwest, southwest, and southeast. Because each participant was a first–year teacher in Oklahoma, he/she was subjected to the RT program.

Robinson (2010) documented that the RT program is Oklahoma's form of a teacher induction program. Regardless of academic discipline, all first–year teachers in Oklahoma are observed three times by three committee members (principal, mentor teacher, and university supervisor) throughout the academic school year. Based on the observations of all three committee members, a recommendation is made at the end of the year to "pass" the teacher and allow him/her to obtain their full teaching license in Oklahoma, or to "recommend a second year" in the RT program in an effort to hone the teacher's pedagogical skills better.

Specifically, the lead researcher served as the university supervisor for each of these first–year AC teachers. Due to the small sample size of first–year AC teachers (n = 5) and the amount of time the lead researcher spent in the field observing and critiquing AC teachers as a RT committee member (10–12 hours per teacher), the qualitative method of data collection was chosen (Dooley, 2007).

The researchers served as the instrument for the study (Guba & Lincoln, 1989). Each AC teacher was interviewed using a protocol that consisted of questions adopted from recommendations by Dyer and Osborne (1996), who conducted a synthesis of the literature on SAEs. Data collected for this study were taken

from personal, face–to–face interviews. Interviews were conducted either in the AC teachers' school office or on campus at Oklahoma State University during summer in-service workshops.

Each interview was conducted by the researchers and transcribed verbatim (Patton, 2002). Then, each transcription was submitted back to the interviewees as a member check to establish credibility (Guba & Lincoln, 1998; Merriam, 1998) and to ensure that the data transcribed portrayed the interviewee's thoughts accurately. To ensure dependability of the data (i.e., reliability of the data over time), the researchers utilized a rigorous set of guidelines during each interview session (Guba & Lincoln, 1989). For example, the same basic interview protocol was followed with each teacher. Additionally, the researchers provided an audit trail to guarantee the dependability and credibility of the data (Trochim, 2006). To ensure confirmability (Guba & Lincoln, 1989), all data were analyzed line–by–line by the lead instructor (Patton, 2002) and coded into themes depending on recurring words and statements (Patton, 2002).

Specifically, the researchers visited each AC teacher personally three times throughout the course of the academic year – once in mid–September, once in mid–February, and once in mid–April. In an effort to build a trusting relationship with the AC teachers and to not interfere with the RT committee work, the interviews were not performed until the last observation of the committee had occurred.

Although a protocol was employed in the study, it did not impede the participants' ability to waiver from the assigned questions. Because a qualitative design needs to be flexible (Dooley, 2007), the researchers allowed participants to expound upon their thoughts whenever necessary. As such, probing questions were used throughout each interview in an effort to maximize the participants' responses (Patton, 2002).

Findings

Theme: SAE Program Philosophy

When asked about the purpose of the SAE program, each AC teacher responded that the SAE program component of the agricultural education model is a highly effective, impactful, and relevant tool that is used to assist students in acquiring important life skills and experiences. AC teachers acknowledged that, due to the variability in programs, numerous opportunities exist for students to participate in SAEs. As such, each teacher attempts to obtain participation in SAEs from every one of their students.

Greg said emphatically, "I really try to get every student involved. I think it [SAE] is a very good program where they [students] can make some money and learn some life preparation for college and on down the road." Cal stated, "A strong program is one that they are active in and learning from." He added that it is important for students to gain "real–world experience" in order to expand their knowledge about a certain agricultural industry. Jon said that SAEs should be used as a "foundational tool" in which students can build skill sets for a potential career.

Jon furthered his thought by stating,

> I think SAE involvement is very important. It teaches them life skills. It teaches them responsibility. It teaches them everything! Whenever they get out in the real world, they are going to be much farther ahead of those kids who did not do a SAE program.

When asked how he would define a quality SAE program, Mike replied, "Quality isn't how much money they put in it. Quality isn't [having] the best facilities. Quality is that kid that knows his project. And, quality is that kid that does it himself."

Theme: Career Preparation

When asked about the value of the SAE program, teachers recognized that due to its inherent experiential nature, SAEs allow students to develop important career preparation skills. The teachers in this study stated that valuable skills are learned by students and that the program is successful in preparing them for life if it is student owned and managed.

Sam stated, "SAEs from my perspective is a way of growing and developing to the person you will become. SAEs give students accountability, and that's something I've noticed a lot of students lacking." Mike added, "I think it [SAE] can be life changing for kids. You give

them a direction and sometimes you change their pathways with [their] projects."

In an effort to expose students to possible future employment, Jon said many of his students "work for agriculture businesses" as part of their SAE. This experience is invaluable to his students. He added, "They just want to go to school and then come right down there [to their job] and work. And, they have that relationship with those industries already to help them whenever it's time for that [full–time employment]."

Greg emphasized that if students find a SAE that they enjoy, "it gets them on a better career path." Sam stated that SAEs are imperative for students seeking employment because they help students make connections with industry. Jon stated that he stresses to his students with livestock SAEs to join breed associations as a way of connecting with industry representatives. Additionally, Sam stressed that, ultimately, employers want to see that students have real–world experience, and SAEs are a great tool for students to achieve this notion.

Theme: Enriching Instruction

Additionally, these teachers noted the instructional value of the SAE program. The agricultural education model is integral in nature. As such, each part of the model should inform the others. A relatively equal amount of time should be devoted by the teacher to each part of the model. And, students should be involved in all parts of the model so the students' SAE involvement can be integrated into the classroom setting.

When asked about the instructional value of students' SAE programs, Cal stated that the value varies from one individual to the next. Some students gain more from their experiences than others. Mike emphasized that, "kids like to be able to tell about their projects. It lets them do a little teaching." As such, emphasizing the SAE program with students can increase their internal motivation. Greg stated that he uses students' SAEs "as an icebreaker" before and during class. Because he visits students' SAE programs at their homes, he develops personal relationships with them. As such, once they enter his classroom, he has something to begin talking about with them immediately.

Additionally, discussing SAE programs aloud in class is good for all students because, vicariously, there may be something said that helps another student with his/her SAE program. Jon said, "I can bring a lot of their experiences into the classroom, and if they are having problems, I can bring it in and discuss it with the whole class." Greg noted that when he uses examples of students' SAEs in his class lectures, students listen because there is a sense of meaning and relevance added to his topic.

Some of the instructional values of having students participate in a SAE program is the development of critical thinking skills. Once developed, these skills can be used by students in the classroom to enhance the discussion of course material. In essence, they broaden the scope and breadth of students' understanding and enrich the class session for each person involved. Greg stated, "I think hands–on learning and decision making are two very important aspects of the SAE [program]. I think it [SAE program] really increases confidence in students when they can make a decision on their projects without calling me."

Jon noted numerous intangibles of students who have SAEs as compared to those who do not. He smiled and said,

> It [SAE program] makes them work harder. For instance, the kids who show [i.e., exhibit livestock] know that they have to be eligible to show. So, not only is that hard work reflected in their SAE work, those kids are more apt to be more prompt to have things turned in, and they're always more organized.

Theme: Student Participation and Achievement

Teachers have expectations of the SAE program. Each teacher noted their expectation for students to participate in a SAE program. In addition to students participating in the SAE program, teachers also expect students to perform at a high level with their program. In some cases, teachers expect students to win awards and earn money for their efforts.

Jon stated emphatically, "I would hope that as much time and effort as they put in to it [their SAE program], that their expectations are as high as mine." Sam stated that students in his program are most interested in achieving the state FFA degree. That degree is incumbent upon students having a profitable SAE program. For other teachers, they believe students are

most interested in participating in SAEs because of their ability to earn money. Greg stated,

> Money is a great motivation. I hope they want to learn something about it [their SAE] and see some development, but that's not always the easiest sell. They [students] are not going to say they want to learn anything. They want to win awards and make money.

When asked to respond to the effects of the SAE program quality on student achievement, Greg stated, "The better it [SAE] is, the better they are going to do in a contest [i.e., Career Development Events – where students learn about and compete in events related to career development]." Therefore, Greg works hard with his students so they can represent the agricultural education program well at competitions. He believes students' success with their SAEs serves as a great motivational tool for other non–participative students.

Mike echoed this sentiment by stating that he values SAEs because he sees them as a way to motivate his students to remain in the program. Specifically, Mike stated, "It gives them enough drive to stay in school and pass." As such, SAEs serve as a form of retention for his students. He stated that his goal is to find a SAE program for each student that is of interest to them. Then, through working with that student on his/her SAE, motivation is increased as is the willingness to remain enrolled in secondary agricultural education. Related to continuing enrollment, he uses current students who have SAEs to recruit students who do not. He stated, "My kids do more good than I can do. They get each other interested more than I can."

Jon noted that some of his students amaze him with their ability to participate in numerous SAEs while also being active in other school functions and programs. He stated,

> I don't know how some of these kids make it. By the time they get home, take care of the animals, take care of their crops, or whatever their SAE program is, and then they got school, and a lot of them play sports, they must feel as though they are being pulled in fifty different directions all the time.

Teachers noted the benefits of the SAE program on student learning. Jon stated, "The greatest benefit is the responsibility of taking care of something and reaping the rewards of that." As such, SAE participation holds numerous opportunities to teach students life lessons. Greg stated pointedly, "Records are 'big' with me. Having some success in award areas [is also 'big' with me]." Sam stated that SAEs are a great way to get students involved in something positive and keep them off the streets. He believes SAEs provide students a reason for not getting into trouble because "they have some sense of accountability and responsibility."

Teachers also expect students to take their SAEs seriously. Jon stated,

> My deal is it's either all in or all out. We are not going to do anything half way because they're not going to waste their time, their parent's time, their parent's money, and my time. It's just the way it is. They're going to get committed and do it right.

Mike added,

> I want them to have a good project. Everybody wants to win. [However] I want those kids to learn something from them [SAEs]. I don't want those kids that I have to tell everything to. I want them to learn progressively. I want them to be self–sufficient.

Theme: Barriers to the SAE program

Unfortunately, some teachers stated that, although they would like all students to have a SAE, it is difficult due to students' lack of interest. As such, the SAE program suffers because students do not value it as much as teachers. Teachers also alluded to the fact that SAEs can be time consuming and costly for students.

Although each teacher emphasized the importance of SAE participation for their students, they also acknowledged that not every one of their students has an active SAE program. When asked about the barriers of the SAE program, issues involving students' time commitment to their SAEs and the available resources needed for SAEs arose. Greg responded that the stereotype of the program and

money can be factors for some students. Greg explained further,

> I think students don't realize that they can have a project that's not a livestock project. Especially in small towns, I think it's [SAE] really livestock show focused. When we break that barrier, I think it will make it a lot easier for kids to get involved in one [SAE].

Jon agreed that some students' parents do not have the financial ability to provide the facilities needed for a strong SAE program. Greg elaborated, "Mom and dad don't have boo coos of money sitting there for them [students] to have the best facilities to improve that SAE." He added, "A lot of times, it [a quality SAE program] boils down to the almighty dollar."

Jon also indicated that time was a major barrier which prevented some students from participating in a SAE program. "They [students] are just so strung out. There are only so many hours in the day." Cal agreed,

> They've got to have all this time to devote to their SAE program to make it go. A lot of kids that really have those strong programs are also your strong athletes so they are having to battle to figure out time management at this early age.

Interest also plays a factor in students' participation in the SAE program. Jon said matter–of–factly, "Some just don't care, period! There are just some kids you are not going to make them do anything." Mike agreed in a frustrated tone, "They don't have that drive."

Conclusions

The purpose of this qualitative descriptive study was to determine the value and expectations of student participation in SAE programs, as expressed by first–year agricultural education teachers in Oklahoma who were alternatively certified. All five AC teachers interviewed in this study have basic, foundational knowledge of the SAE program and its purpose. Additionally, all five teachers value the program and have certain expectations for students in fulfilling requirements for their SAE program. Specifically, teachers in this study value the fact that the SAE program prepares students for potential careers by developing their skills for college and life beyond high school. This finding is consistent with the opinion by Roberts and Ball (2009) who stated that the purpose of the secondary agricultural education program is to prepare students for college and the workforce, simultaneously. Additionally, SAE programs allow students to build relationships and connect with community industry representatives, and enable teachers to build personal relationships with students by making home visits. As such, these teachers now have something to talk about with students that enriches classroom and laboratory instruction with meaningful and relevant examples.

Teachers in this study expect students to own and manage their SAE program, keep accurate data (i.e., record books) of their SAE programs, and compete at a high level with their SAE. Additionally, these teachers expect the SAE program to teach students responsibility, accountability, and work ethic. Finally, these teachers believe that students should have a variety of SAE programs.

When students realize the benefit or value of how their SAE program will impact their lives, they are more willing to participate. Per the Expectancy–Value theory, these teachers noted that students are more apt to participate in SAEs when the rewards are great (Eccles, 2007).

Recommendations for Practice

Based upon the findings of this study, it can be noted that these AC teachers might have a limited or narrow understanding of what constitutes a SAE program. Although the teachers in this study mentioned their expectation for students to have a variety of SAEs, it is unknown if these teachers truly understand enough about the "opportunities" that exist in the SAE program to share those ideas with their students adequately. Roberts and Dyer (2004) concluded that sometimes AC teachers are unaware of certain professional knowledge due to a lack of pedagogical preparation. As such, professional development should exist to inform these AC teachers of all the various opportunities that exist for student SAE programs. Overcoming the perceived barriers identified in this study (i.e., stereotype, money, time, and interest) should be a topic

addressed during these workshops. Then, teachers could embrace and promote a wider variety of SAE possibilities for students, which might allow for greater student involvement in SAE programs (Eccles, 2007).

Further, because a major finding of this study was that these AC teachers expected their students to own and manage their SAE programs, it is important to determine how these teachers are evaluating these programs and the effect they are having on students regarding their career and life preparation. Jenkins and Kitchel (2010) suggested that teachers should assist students in developing realistic and attainable SAE program goals. Therefore, professional development is warranted to assist AC teachers in developing plans, per a SAE policy statement, for helping students set and achieve their individual SAE program goals.

Recommendations for Future Research

Future studies should assess the impact SAEs have on students' academic achievement. Mike and Greg both alluded that they feel SAEs assist in student achievement overall. However, they were unable to describe specific ways in which this occurred other than they helped students stay in school and learn content better for FFA events. But, what about the impact SAEs have on students' technical and non–technical skill development? Does SAE participation help students acquire certain skills better? Are students who are involved with SAEs more employable for entry–level jobs than those who do not? Future research should investigate this phenomenon.

This study focused on AC teachers' perceptions regarding the SAE program. However, future studies should assess students' perceptions of SAEs. What do students value (or devalue) about SAEs? What are their expectations of their respective SAE programs? Similar studies should be conducted with students' parents, employers, and school administrators in an effort to triangulate the value of SAEs. Do these individuals see the relevance in them? Do they believe SAE programs are affecting students' growth positively as it relates to preparing for life and a future career?

Lastly, this study should be replicated with traditionally certified teachers. A drawback of teacher preparation programs is that graduates usually have limited "real–life" experience. A strength of teacher preparation programs is that teachers generally have a solid pedagogical understanding (Robinson, 2010). A drawback of AC teachers is that they fail to have adequate pedagogical preparation (Darling–Hammond, 2000; Feistritzer & Haar, 2008; Lynch, 1996; Walsh & Jacobs, 2007). Yet, a strength of AC teachers is that they often have industry experience. Therefore, does one route to teacher certification have better implications for teaching SAEs than the other? The case could be made that AC teachers might be able to assist students with "placement"–type SAEs better since they have had previous agricultural industry experience.

Discussion/Implications

Although each teacher in the study emphasizes SAEs to their students currently, it is clear that not every student participates in this important program. Why is that? Are teachers not emphasizing enough variety when it comes to discussions with students about possible SAEs? Perhaps Oklahoma teachers are inadvertently valuing and promoting their own biases toward SAEs, i.e., livestock exhibitions (Robinson, Krysher, Haynes, & Edwards, 2010).

In general, teachers need to think larger when it comes to introducing SAEs to their students. Perhaps, they should focus students to the current needs of the 21st Century. The phenomenon of the "Green Wave" has swept across our country with rapid fury. Wind turbines, cellulosic fuels, and alternative energy are buzz words in which Americans are exposed constantly in today's mainstream media. Implications for educating students about these issues are eminent in secondary agricultural education programs (Blanton, Robinson, Edwards, & Huhnke, 2010). As such, students should be exposed to research/exploratory SAE programs in which these issues are analyzed more closely.

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