Priorities of School Superintendents for Hiring and Supervising School-Based Agricultural Education Teachers in Oklahoma

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Abstract

The hiring and supervision of teachers is a critical role within K-12 schools. Within school-based agricultural education (SBAE), administrators play a key role in the decision-making process, as they often have a stake in the approval of travel and funding essential for complete program success. Therefore, it is essential to consider the priorities of administrators when hiring and supervising SBAE teachers, because trained or not, these administrators are making impactful decisions ultimately affecting student achievement. This study was undergirded by the reciprocal effects model and aimed to determine the priorities of school superintendents related to hiring and supervising SBAE teachers in Oklahoma. This non-experimental, descriptive exploratory research study resulted in a 52.4% response rate. Superintendents are not concerned with the gender of SBAE teacher candidates but deem it important for potential candidates to hold a current Oklahoma agricultural education teaching credential. Regarding the evaluation and assessment of SBAE teachers, it was concluded superintendents still place the greatest value on classroom instruction when evaluating SBAE teachers, but also identify their performance outside the classroom as important to the evaluation process. Interestingly, superintendents did not see value in an SBAE teachers' ability to connect STEM concepts or core content areas within agricultural education curriculum. Areas of engagement at the local and state level were viewed more favorably than those on the national scale. It is recommended for SBAE teacher preparation faculty to continue developing positive relationships with school superintendents. Further exploration into superintendents' attitudes toward SBAE teacher candidates who hold additional credentials or industry certifications should be conducted.

Introduction

Effective teachers are the most critical predictor of student success, regardless of the discipline area (Eck et al., 2020; Stronge et al., 2011). Therefore, the hiring and supervision of teachers is a critical role within K-12 schools. Hiring a teacher is a multi-step, time-consuming process that includes screening materials to identify potential candidates, checking references, interviewing candidates, and making the hiring decision (Peterson, 2002). Similarly, teacher supervision is multi-faceted, including evaluating teachers, allocating resources, and developing essential skills (Sergiovanni & Starrat, 2002). Regardless of which of these pivotal tasks you deem more important in the broader scope of teacher success and retention, both tasks fall on the shoulders of administrators.

Within school-based agricultural education (SBAE), administrators play a key role in the decision-making process, as they often have a stake in the approval of travel and funding essential for complete program success (Talbert et al., 2007). Therefore, the relationship between an administrator and the teacher is a fundamental need and often begins during the hiring process, as the recommendation for employment of a teacher is a critical component (Sulaver, 2008). Within school administration, principals are often in the paramount position when it comes to these decisions (Hallinger, 1992). Uniquely in Oklahoma, the hiring of SBAE teachers

and head coaches (i.e., football, baseball, basketball, etc.) often falls within the scope of a school superintendent's duties (Personal Communication, 2022).

Regionally, the demand for SBAE teachers continues to increase, as nearly a 5% increase in SBAE programs has occurred over the last four years, adding an additional 262 SBAE teachers to the region (Foster et al., 2021). Similar trends have been seen in Oklahoma, while the number of certified teachers at Oklahoma State University has remained consistent (Foster et al., 2021). As new programs are added, teachers leave the profession, retire, or move schools, superintendents in Oklahoma are regularly having to hire SBAE teachers. Additionally, administrators have been identified as a pivotal component in the retention of career and technical education (CTE) teachers (Self, 2001).

Specifically, it is essential for administrators to recognize and support new teachers, even more so in CTE disciplines (Self, 2001) such as SBAE. Perhaps part of the issue leading to the increased attrition we see within SBAE can be linked back to the priorities of administrators as they hire, supervise, and support SBAE teachers. Zirkle and Jeffery (2017) identified a potential concern with the streamlined credentialling systems for administrators (i.e., assistant principals, principals, superintendents, and CTE directors), as many of them do not have direct experience with CTE programs. This becomes a growing concern considering the differing needs related to content delivery, program funding, industry credentials, travel, and other decision making for CTE programs as compared to traditional school content areas (Zirkle & Jeffery, 2017).

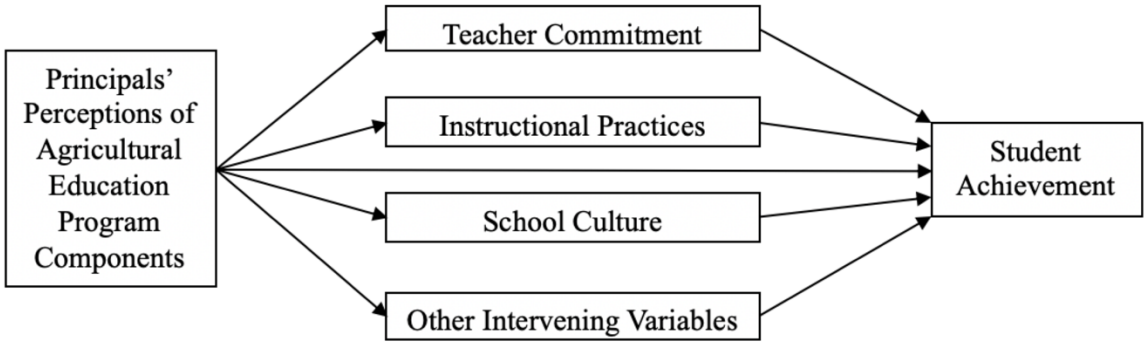
Considering the uniqueness of a comprehensive SBAE program (i.e., classroom/laboratory instruction, FFA advisement, and supervised agricultural experiences [SAE]), it is essential to consider the priorities of administrators when hiring and supervising SBAE teachers, because trained or not, these administrators are making impactful decisions ultimately affecting student achievement (Clark & Cole, 2015).

Theoretical/Conceptual Framework

This study was undergirded by Pitner's (1988) reciprocal effects model. The model suggests that an administrator has an indirect effect on student achievement through intervening variables (Pitner, 1988). The administrator can serve as a dependent variable through the impact the students, teachers, and school culture have on them as an individual. On the other side, the administrator can be the independent variable, influencing the students, teachers, and school culture (Leithwood et al., 1990). Teacher commitment, instructional practices, and school culture can further compound these intervening variables, furthering the impact on student achievement (Leithwood & Montgomery, 1982). Specifically, within SBAE, Doss and Rayfield (2021) depicted a model (see Figure 1) connecting Pitner's (1988) framework with the work of Leithwood and Montgomery (1982) specifically related to the indirect and direct impacts principals' perceptions of a complete SBAE program have on student achievement.

Figure 1

Direct and Indirect Secondary School Principal Perception Effects on Student Achievement



Note. From "The Importance of FFA and SAE Activities: A Comparison of Texas Principals' and Teachers' Perceptions," by W. Doss and J. Rayfield, 202, *Journal of Agricultural Education, 62*(4), 125–138. https://doi.org/10.5032/jae.2021.04125

Within the context of this study and the nature of the hiring and supervision process of SBAE teachers in Oklahoma, school superintendents also have direct and indirect effects on student achievement. These effects begin with the priorities associated with hiring an SBAE teacher and then continue to develop through the implemented evaluation processes. Additionally, the key variables (i.e., teacher commitment, instructional practices, school culture, and other intervening variables; see Figure 1) are positioned to be impacted by the superintendent's priorities for the SBAE program. For example, if a school has a culture of livestock exhibition and judging, and this culture aligns with the superintendent's priorities, then perhaps a teacher that is committed to livestock is hired and their instructional practice aligns with such, ultimately impacting student achievement within and beyond livestock.

Purpose and Research Objectives

This study aimed to determine the priorities of school superintendents related to hiring and supervising SBAE teachers in Oklahoma. Three research objectives guided this study:

1. Explain the priorities of school superintendents hiring SBAE teachers in Oklahoma,
2. Determine the evaluation methods used by school superintendents for supervising SBAE teachers in Oklahoma, and
3. Rank the priorities of school superintendents related to SBAE programs.

Methods and Procedures

This non-experimental descriptive, exploratory research study aimed to reach school superintendents across Oklahoma who had one or more SBAE teachers in their district (N = 367). To reach the target population, an existing email frame was utilized, of which 14 emails bounced back undeliverable, adjusting the accessible population to 353. An initial email requesting participation was sent followed by four reminder emails following the

recommendations of Dillman et al. (2014) to maximize response rate. In all, 185 complete survey questionnaire responses were returned, resulting in a 52.4% response rate.

The survey questionnaire implemented in this study was researcher developed and included four overarching sections. The first section aimed to determine the hiring priorities of superintendents in Oklahoma by asking them to rank a list of 13-items developed through a review of literature. The second section requested participants to rate four items on a five-point scale of agreement (i.e., 1 = strongly disagree and 5 = strongly agree) related to the evaluation strategies used for SBAE teachers as compared to core subject teachers. The third section had participants indicate their level of consideration given to classroom instruction, SAE supervision, FFA responsibilities, community/stakeholder involvement, and STEM integration/core content alignment. The final section prompted superintendents to rank 14-items related to complete SBAE program perceptions on a five-point scale of agreement (i.e., 1 = unimportant and 5 = important). In addition to the four overarching survey questionnaire sections, superintendents were asked six questions related to their personal and professional characteristics (i.e., age, gender, years as superintendent, school district size, number of SBAE teachers in district, and number of SBAE teachers hired as superintendent). Table 1 outlines the personal and professional characteristics of the participating superintendents.

Table 1

Oklahoma Superintendents Personal and Professional Characteristics (n = 185)

Characteristic		*f*	%
Age	36 to 40	6	3.2
	41 to 45	9	4.9
	46 to 50	25	13.5
	51 to 55	39	21.1
	56 to 60	31	16.8
	61 to 65	14	7.6
	66 to 70	3	1.6
	71 or older	3	1.6
	Prefer to not respond	55	29.7
Gender	Male	87	47.0
	Female	43	23.2
	Prefer to not respond	55	29.7
Years Serving as Superintendent	First Year	4	2.2
	2 to 5	47	25.4
	6 to 10	50	27.0
	11 to 15	32	17.3
	16 to 20	9	4.9
	21 to 25	5	2.7
	26 to 30	8	4.3

Characteristic		*f*	%
	Prefer to not respond	30	16.2
School District Size	C	8	4.3
	B	28	15.1
	1A	27	14.6
	2A	44	23.9
	3A	13	7.0
	4A	20	10.8
	5A	8	4.3
	6A	7	3.8
	Prefer to not respond	30	16.2
Number of SBAE Teachers in District	1	103	55.7
	2	40	21.6
	3	12	6.5
	Prefer to not respond	30	16.2
Number of SBAE Teachers Hired as Superintendent	0	34	18.4
	1	47	25.4
	2	28	15.1
	3	17	9.2
	4	17	9.2
	5 or more	12	6.5
	Prefer to not respond	30	16.2

Descriptive statistics were analyzed using SPSS Version 28. Specifically, the first research objective was analyzed using median and mode to establish a rank order of hiring priorities of superintendents with SBAE programs. The second research objective evaluated means and standard deviations of SBAE teaching evaluation practices. Additionally, mean score and percent agreement were analyzed for the sliding scale (i.e., 0 to 100) related to considerations given to the complete SBAE program (i.e., classroom/laboratory instruction, FFA, and SAE) during evaluations. Analysis for the final research objective established mean and standard deviation scores for 14-items associated with superintendent priorities within an SBAE program on a five-point scale of agreement (i.e., 1 = unimportant and 5 = important).

Although this study resulted in a 52.4% response rate, non-response error was still of concern, as the research team aimed to generalize to the population of superintendents in Oklahoma with SBAE programs (Fraenkel et al., 2019). Therefore, the research team compared early to late responses based off the recommendation of Lindner et al. (2001). Respondents were classified by responsive waves, specifically 140 participants were deemed early respondents, while the remaining 45 were late respondents (i.e., responded after the final reminder). The personal and professional characteristics of early and late respondents were compared, resulting in no differences. Additionally, the percentage of respondents were compared to Oklahoma data

related to school district size (i.e., C to 6A) and number of SBAE programs per district. The resulting comparisons were found comparative, further demonstrating the participants in this study as a representative sample of superintendents with SBAE programs in Oklahoma.

Findings

Research Objective 1: Explain the Priorities of School Superintendents Hiring SBAE Teachers in Oklahoma

To explain Oklahoma superintendent priorities when hiring SBAE teachers, participants were asked to rank 13 items from the greatest priority (1) to the least (13). The top priority was *teachers holding a Oklahoma agricultural education teaching credential*, while *gender* (i.e., male or female) was not considered a priority, as *is male* and *is female* both received the same median, resulting in a tie, with a rank of 12 and 13 (see Table 2). Rounding out the top five were *graduated from an agricultural education teacher preparation program, professionalism, has previous teaching experience*, and *has agricultural industry experience*.

Table 2

Ranked Priorities of Oklahoma Superintendents when Hiring School-Based Agricultural Education Teachers (n = 185)

Hiring Priority	*Rank*	*Median*	*Mode*
Holds an Oklahoma Agricultural Education Teaching Credential	1	1.0	1
Graduated from an Agricultural Education teacher preparation program	2	2.0	2
Professionalism	3	3.0	3
Has previous teaching experience	4	4.0	3
Has agricultural industry experience	5	5.0	4
Has livestock experience	6	6.0	5
Ability to integrate STEM/core content alignment	7	8.0	9
Has additional credentials (i.e., Certified to teach CASE curriculum or similar)	8	9.0	9
Holds an advanced degree (i.e., Masters or Doctoral degree)	9	9.0	10
Is from Oklahoma	10	9.0	11
Undergraduate GPA	11	10.0	10
Is male	12	12.0	12
Is female	13	12.0	13

Note. Median, and mode were used to develop the rank order.

Research Objective 2: Determine the Evaluation Methods Used by School Superintendents for Supervising SBAE Teachers in Oklahoma

The second research objective had two related questions to determine the strategies and considerations used when supervising SBAE teachers. The first question elicited superintendents' evaluation strategies for SBAE teachers as compared to core subject educators on a five-point scale of agreement. Over 90% of participants agreed or strongly agreed with the need to evaluate SBAE teachers outside the classroom, even though classroom instruction was considered important (M = 3.91) for evaluating all teachers. Participating superintendents seemed to have differing views on consistent evaluation across teachers, as *I evaluate all teachers the same* resulted in a mean of 3.38, with 26% disagree or strongly disagree and 50% agreeing or strongly agreeing, while the remaining 24% neither agreed nor disagreed. Table 3 provides means and standard deviations for each of the four-items related to evaluation strategies of SBAE teachers.

Table 3

Oklahoma Superintendents Evaluation Strategies for School-Based Agricultural Education Teachers (n = 185)

Item Description	*M*	*SD*
Observation outside classroom helps in agricultural education teacher evaluation	4.28	.68
Classroom instruction is key in evaluating all teachers	3.91	.90
Agricultural education teachers require different evaluation techniques	3.58	.97
I evaluate all teachers the same	3.38	1.06

Note. Five-point scale of agreement, 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree.

Additionally, Oklahoma superintendents were asked how much consideration is given to classroom instruction, SAE supervision, FFA responsibilities, community/stakeholder involvement, and STEM integration/core content alignment when evaluating SBAE teachers using a sliding scale from 0 to 100 for each item. The greatest consideration was reported to be given to classroom instruction, with a mean of 67.0 out of 100, with 63% of respondents indicating 70 or higher. FFA responsibilities resulted in a mean of 64.0, while SAE supervision received a 62.3. A mean of 59.6 was determined for community/stakeholder engagement and STEM integration/core content alignment was deemed to be least impactful when evaluating SBAE teachers with a mean of 42.0.

Research Objective 3: Rank the Priorities of School Superintendents Related to SBAE Programs

To address the final research objective, superintendents were asked to rank 14-items on a five-point scale of agreement (i.e., 1 = unimportant and 5 = important). Seven of the 14 items (see Table 4) were deemed to be of some importance (i.e., somewhat important or important) where

engagement was deemed most important by participating superintendents, as *community engagement* ($M = 4.78$) and *local FFA meetings* ($M = 4.68$) received the highest perceived value. The remaining seven items resulted in mean scores between 3.71 and 3.96, indicating neither an important nor unimportant perception. Additionally, state FFA convention ($M = 4.60$) was deemed more important than national FFA convention ($M = 3.72$).

Table 4

Oklahoma Superintendents Perceived Importance of School-Based Agricultural Education Programs (n = 185)

Item Description	*M*	*SD*
Community Engagement	4.78	.43
Local FFA Meeting	4.68	.53
State FFA Convention	4.60	.72
Having an FFA Banquet	4.52	.76
Promoting FFA Events/Success on social media	4.47	.68
Supervised Agricultural Experience (SAE) Participation	4.22	.71
Career Development Event (CDE) Participation	4.06	.76
Leadership Development Event (LDE) Participation	3.96	.81
Industry Certifications	3.90	.83
Agriscience Fair Participation	3.86	.82
Competing in National Chapter Award Competitions	3.78	.85
STEM Integration	3.75	.85
National FFA Convention	3.72	.93
Competing for State FFA Officer Positions	3.71	.94

Note. Five-point scale of agreement, 1 = unimportant, 2 = somewhat unimportant, 3 = no opinion, 4 = somewhat important, and 5 = important.

Conclusions, Discussion, and Recommendations

Through synthesis of the findings from research objective one, it was concluded that superintendents are not concerned with the gender of SBAE teacher candidates but deem it important for potential candidates to hold a current Oklahoma agricultural education teaching credential. With the ever-shifting landscape of teacher certification requirements in Oklahoma, it is encouraging to see school superintendents still place value in the traditional teacher certification pathway. Couple this with their preference to hire graduates from a traditional agricultural education teacher preparation program, important implications can be formulated by SBAE teacher preparation faculty in Oklahoma as the demand for certified SBAE teachers continues to rise (Foster et al., 2021). How can SBAE teacher preparation programs in Oklahoma better recruit and retain both high school and undergraduate students to the agricultural education major and see them through to graduation, certification, and job placement? More importantly, how can SBAE teacher preparation faculty better advocate and educate Oklahoma lawmakers about the importance of the traditional certification route and work towards eliminating barriers

to certification while maintaining the rigor and integrity of the process? This becomes increasingly important in Oklahoma, as the number of SBAE teachers grew to a record high for the start of the 2023 to 2024 school year, yet 43% of new hires did not hold a state teaching credential (i.e., emergency certified or on track to alternative certification) at the start of the school year (Personal Communication, August 23, 2023). Additionally, the willingness of Oklahoma superintendents to hire teachers from out-of-state is also promising given the steady increase in agricultural education undergraduates at Oklahoma State University from out of state.

Additional conclusions drawn from the first research objective were that superintendents value individuals who exhibit professionalism and have prior teaching and/or agricultural industry experience. It is important to note that superintendents value experience yet do not view additional credentials nor advanced degrees as a priority. Could this be because additional credentials and/or advanced degrees elevate potential SBAE graduates on the pay scale? Since superintendents also act as the chief financial officer for their school district, does the additional monetary commitment serve as a deterrent when evaluating potential candidates? This could have implications for SBAE teacher preparation programs exploring the potential of adding additional certification credentials (e.g., CASE certifications, industry credentials, or National Board Certification) to their program. Much of the value placed by be the superintendents aligns within the teacher commitment component of the conceptual model (Doss & Rayfield, 2021; Pitner, 1988), yet the lack of emphasis on advanced degrees or certifications could stifle the teacher's commitment and limit growth in instructional practice.

Regarding the evaluation and assessment of SBAE teachers, superintendents still place the greatest value on classroom instruction when evaluating SBAE teachers, but also identify their performance outside the classroom as important to the evaluation process. Considering that effective teachers are the most critical predictor of student success (Eck et al., 2020; Stronge et al., 2011), superintendents valuing classroom instruction is pivotal as these administrators have the opportunity to set the standard or expectation within the SBAE program, ultimately affecting student achievement (Clark & Cole, 2015). Agricultural education teachers are also evaluated differently than other schoolteachers making the development of positive professional relationships with administration even more important (Sulaver, 2008). Beyond classroom instruction, FFA advisement and responsibilities fell second on the list of priorities when evaluating SBAE teacher performance. Could this be linked to a desire for student engagement and success, or viewed as the primary way to showcase student and program success to the community and local stakeholders? Or could it be that superintendents view success in the FFA as a direct reflection of the SBAE teachers' ability to effectively teach in the classroom setting?

Interestingly, superintendents did not see value in an SBAE teachers' ability to connect STEM concepts or core content areas within agricultural education curriculum. Does this imply school superintendents do not perceive SBAE as a way to illuminate and strengthen STEM concepts and core curriculum areas through real-world application? Perhaps this relates to the nature of SBAE in Oklahoma which has had a predominant focus on livestock exhibition and evaluation, perhaps explaining why "has livestock experience" ranked sixth in priority. Administrators play an essential role in the support of new teachers, even more so in CTE disciplines (Self, 2001) such as SBAE. Perhaps this connects back to a lack of understanding of SBAE, as many of them do not have direct experience with CTE programs (Zirkle & Jeffery, 2017). Does the *elective*

mentality of Oklahoma SBAE programs impact the perceived value of STEM integration and core content connections, as Oklahoma is behind the curve when it comes to offering core credit or industry credentialling as a part of CTE courses. This further aligns with the school culture component of the conceptual model presented by Doss and Rayfield (2021; see Figure 1), undergirded by Pitner's (1988) reciprocal effects model and Leithwood & Montgomery (1982).

When looking at priority areas superintendents place on SBAE programs, the areas pertaining to community and/or student engagement were viewed as somewhat important/important by participating superintendents. Moreover, areas of engagement at the local and state level were viewed more favorably than those on the national scale. These findings align with the findings from research objective two where local FFA advisement and student engagement yielded higher perception scores. But, interestingly, *community engagement* ($M = 4.78$) held the highest perceived importance by superintendents yet yielded a mean of 59.6 when considered as a part of SBAE teacher evaluation. If community engagement ranks at the top of the priorities list for SBAE programs, then why does it not carry more weight in the evaluation process? Consistent with previous conclusions, *industry certifications* ($M = 3.90$) and *STEM integration* ($M = 3.75$) fell into the lower half of perceived importance on the priority list. This strengthens the concern of school superintendents not wishing to provide extra funding for additional credentialling nor do they perceive SBAE to support and enhance core content areas within the curriculum. Perhaps part of the issue leading to the increased attrition within SBAE (Eck & Edwards, 2019) can be linked back to the priorities of administrators as they hire, supervise, and support SBAE teachers. Future research should aim to compare the perceptions of administrators, SBAE teachers, and community members/stakeholders on the complete SBAE program.

Considering the priorities and methods related to hiring, supervising, and supporting SBAE teachers within this study, the connection between superintendents and SBAE teachers is evident, and the potential impact an administrator's decision has on student achievement through the decision-making process is apparent (Pitner, 1988). The priorities a superintendent perceives and places on an SBAE program directly connect back to the school culture and student perceptions of the SBAE program (Leithwood et al., 1990). The model presented by Doss and Rayfield (2021; see Figure 1) appropriately frames the findings and conclusions of this study. Thus, this framework should be considered when evaluating SBAE programs through the lens of administrators.

It is recommended for SBAE teacher preparation faculty to continue developing positive relationships with school superintendents. Pre-service SBAE teachers should be instructed on advocating for their program and establishing a program that meets community and stakeholder needs. Further exploration into superintendents' attitudes toward SBAE teacher candidates who hold additional credentials or industry certifications should be conducted, as CTE research has demonstrated the value of teacher credentialing and industry certification for students (Glennie et al., 2020). This research is limited to superintendents in Oklahoma with SBAE programs, which is valuable for the training and support of SBAE teachers in the state and could be transferable to other states who see similar connections between administrators and SBAE programs. Consequently, this study should be replicated to determine if these hiring priorities, evaluation methods, and SABE program priorities are state specific or something that should be generalized

on a larger scale. Also, future research should include identifying specific elements of community engagement school superintendents look for when evaluating SBAE teachers.

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