TASKS ASSOCIATED WITH TEACHING SCHOOL-BASED AGRICULTURAL EDUCATION: A MODIFIED DELPHI STUDY

By

RYAN W. BEST

Bachelor of Science in Agricultural Education

Tarleton State University

Stephenville, Texas

2014

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
May, 2023

TASKS ASSOCIATED WITH TEACHING

SCHOOL-BASED AGRICULTURAL EDUCATION:

A MODIFIED DELPHI STUDY

Thesis Approved:

J. Shane Robinson, Ph.D.

Thesis Adviser

Robert Terry, Jr., Ph.D.

M. Craig Edwards, Ph.D.

Ki Matlock Cole, Ph.D.

ACKNOWLEDGEMENTS

To my beautiful bride, Shayna, thank you for extending me grace, showing me unwavering support, and keeping the cows fed and our lives running while I finished my thesis. I love you more than words can express. Thank you for being my person and loving me even when I'm at my worst.

To my family, thank you for supporting me in my decision to come back to graduate school. Your love and care do not go unnoticed or unappreciated. MeMa, I finally wrote my book. I love you all.

To my thesis committee, I cannot express my gratitude enough for the work and effort you put on my behalf. My study would not have gotten off the ground without your help and guidance.

Dr. Robinson, thank you for many hours in your office discussing theory, SBAE, and life. I appreciate your mentorship tremendously. Thank you for being a man of character and conviction.

Name: RYAN W. BEST

Date of Degree: MAY, 2023

Title of Study: TASKS ASSOCIATED WITH TEACHING SCHOOL-BASED AGRICULTURAL EDUCATION: A MODIFIED DELPHI STUDY

Major Field: AGRICULTURAL EDUCATION AND LEADERSHIP

Abstract: School-based agricultural education (SBAE) teachers experience heavy workloads (Torres et al., 2008) and challenges (Boone & Boone, 2009) related to teaching SBAE. As such, SBAE teachers experience continual needs (Traini et al., 2021) and expectations that are ever changing (Eck et al., 2019). Such expectations can cause strain on teachers (Traini et al., 2021) and lead to high levels of stress and burnout (Croom, 2003). Although the tasks of teaching SBAE can be inferred from the above-mentioned needs, challenges, and characteristics, limited literature exists detailing the specific tasks SBAE teachers are expected to perform. Therefore, we sought to identify the specific tasks expected of SBAE teachers within the program (i.e., classroom and laboratory, FFA, and SAE), as well as the other professional responsibilities associated with teaching. Human Capital theory was used to frame the study, specifically task-specific human capital which asserts that ". . . some of the human capital an individual acquires on the job is specific to the tasks being performed . . ." (Gibbons & Waldman, 2004, p. 203). A modified, three-round Delphi method was used to meet the objectives of the study. The panelists consisted of doctoral students in agricultural education with at least three years of SBAE teaching experience. The expert panel consisted of 23 individuals meeting these criteria. The final list of tasks associated with teaching SBAE included 238 items achieving consensus in 47 themes across the four question areas (216 tasks reached the consensus of agreement threshold in Round 2, and an additional 22 tasks achieved consensus of agreement in Round 3). In total, 74 tasks populated classroom and laboratory instruction, 80 tasks populated FFA, 45 tasks populated SAE, and 39 tasks populated other professional responsibilities. In all, 110 tasks and six themes failed to reach consensus of agreement and were eliminated from the study. The beliefs the panel of experts hold regarding the tasks of SBAE teachers point to a single, overarching conclusion: there are too many expectations placed on SBAE teachers.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I

INTRODUCTION

Confidence in public schools is near an all-time low (Saad, 2022). As public education navigates increased political, socioeconomic, and Covid-19 pandemic-related issues (United States Department of Education, 2021), Americans' confidence in public education stood at 28% approval, only 2% higher than the lowest approval rating recorded since Gallup began conducting the poll in 1973 (Saad, 2022). Much of the decline in public opinion about schools can be attributed to Covid-19 pandemic-related factors such as school closures, health and safety policy, and availability of resources (Saad, 2022). This fallout has had a profound impact on the perception of public schools in the United States (Dorn et al., 2021). Although popular opinion of public schools has been adversely impacted by the pandemic, a more substantial consequence has occurred regarding student learning (Dorn et al., 2021). At the end of the 2020-2021 school year, students in the United States were an average of five months behind in math skills and four months behind in reading skills when compared to similar cohorts prior to the pandemic (Dorn et al., 2021). As a result, teacher workload has increased due to remediation efforts and the desire to help students achieve academically (Jones et al., 2022). This increased workload taxed teachers to the point many left their teaching positions, creating gaping vacancies in the teaching profession (Goldhaber & Theobald, 2022).

It is estimated more than 100,000 teaching positions go unfilled in the United States each year (Sutcher et al., 2019). Factors influencing the shortfall include availability of new teachers, salaries, working conditions, and attrition (Sutcher et al., 2019). According to the *Teacher Supply and Demand in the United States* report (Learning Policy Institute, 2019), attrition accounted for the loss of approximately 300,000 teachers per year. Working conditions are closely related to teacher attrition rates as well (Bascia & Rottmann, 2011; Suchter et al., 2019; Toropova et al., 2021). Examples of working conditions that influence teachers' decision to leave the profession include pupil-teacher ratio, competent and supportive leadership, and a school's testing and accountability environment (Sutcher et al., 2019).

Therefore, a specific cause for teachers leaving the profession is their overall level of dissatisfaction with their job (Toropova et al., 2021). There is no denying job satisfaction of teachers has declined in recent years (Skaalvik & Skaalvik, 2020). Teaching is a stressful profession with educators susceptible to burnout due to the overwhelming demands of their jobs (Chan, 2002; Hakanen et al., 2006; Skaalvik & Skaalvik, 2011, 2020). School working conditions such as administrative support, student behavior, school resources, autonomy, and teacher cooperation greatly influence the amount of satisfaction a teacher feels regarding their profession (Bascia & Rottmann, 2011; Toropova et al., 2021). In addition, factors such as student performance levels, demographics, and discipline have an adverse effect on teacher retention (Ingersoll, 2017; Sims, 2017). Moreover, the perceptions teachers have about their workload play an important role in their overall level of job satisfaction (Skaalvik & Skaalvik, 2016; Toropova et al., 2021). Toropova et al. (2021) found that "excessive workload was directly significantly related to emotional exhaustion and motivation to quit teaching" (p. 90).

According to the *2022 Teaching and Learning International Survey*, teachers in the United States spend an average of 46 hours per week on school-related tasks (United States Department of Education, 2022). Approximately 28 hours per week were spent teaching, seven

hours spent planning, five hours expended toward grading student work, and four hours per week are devoted to extracurricular activities (United States Department of Education, 2022). What is more, West (2014) reported teachers worked an average of 21.5 hours per week during summer months when school was not in session.

To further exacerbate expectations placed on teachers, recent research has shown the Covid-19 pandemic had a drastic impact on teacher workload and time devoted to teaching tasks (Educators for Excellence, 2020; Hamilton et al., 2020; Jones et al., 2022; Kraft et al., 2020). Jones et al. (2022) stated, "One recurring finding is that teachers reported working more hours since schools closed in spring 2020" (p. 4). These researchers found teachers spent significantly more time completing tasks associated with teaching following the pandemic compared to before with some states reporting an increase as high as 77% more time spent working than prior to Covid-19. "It is clear that the pandemic introduced major shifts in teachers' overall work hours and their time engaged in specific activities" (Jones et al., 2022, p. 9).

In addition, the study reported teacher *affect*, "the range of emotions individuals experience when engaging with their environment" (Jones et al., 2022, p. 2), was diminished during the pandemic. Teacher morale (Kurtz, 2020), professional identity (Reich et al., 2020), and sense of success (Kraft et al., 2021) were lessened by the pandemic (Jones et al., 2022). Jones and Youngs (2012) suggested teacher affect levels were closely linked with year-end levels of teacher burnout and influenced teacher retention. Although the study did not focus on the pandemic specifically, it may be that teacher affect level during the pandemic had a similar impact on teacher burnout and retention (Jones et al., 2022).

The combination of increased workload and diminished teacher affect points to the significance of considering the expectations placed on teachers in general. The roles of teachers have changed over time (Valli & Buese, 2007). One such reason for the change in teacher roles is

the emphasis of student achievement in public schools, particularly as measured by standardized tests (Valli & Buese, 2007). This focus has brought about additional work for teachers. Vallie and Buese (2007) stated, "Our research reveals that teachers' work has increased, intensified, and expanded in response to federal, state, and local policies aimed at raising student achievement" (p. 520). As educational policies shift, the expectations shift as well (Barlett, 2004). In this regard, the role of a general education teacher has changed drastically through role increase, role intensification, and role expansion (Ballet et al., 2006; O'Day, 2002; Valli & Buese, 2007). Bailey (2000) described the higher expectations placed on teaching by stating, "Teachers must devote increased attention to more classroom details as well as to more time spent outside the classroom learning, planning and . . . justifying their actions to others" (p. 117).

Teaching school-based agricultural education (SBAE) is no different in this regard. The challenges facing SBAE teachers echo those of other educators (Boone & Boone, 2009). Administrative support, student behavior, school resources, and professional relationships have long since played a role in the job satisfaction of SBAE teachers (Cano & Miller, 1992; Castillo & Cano, 1999; Grady & Burnett, 1985; Torres et al., 2008). Moreover, Hurrell et al. (1998) identified person-environment fit, workload, autonomy, and work pace as indicators of teacher job satisfaction. Although research has indicated SBAE teachers are generally satisfied with their job (Cano & Miller, 1992; Castillo & Cano, 1999; McKibben et al., 2022; Walker et al., 2004), there is no denying the roles they are expected to fill can feel heavy, burdensome, and difficult (Murray et al., 2011; Traini et al., 2020). As such, Terry and Briers (2010) described 21 general roles of SBAE teachers: traditional classroom teacher; laboratory instructor; field instructor; motivator; disciplinarian; adult educator; agricultural literacy consultant; FFA chapter advisor; coach of students in competitive activities; leadership development expert; supervisor of experiential learning activities; experiential learning specialist; program manager; accountant;

public relations agent; event organizer; volunteer coordinator; counselor; professional; lifelong learner; and well-balanced, total person.

Expectations placed on SBAE teachers due to these roles have a significant impact on them (Traini et al., 2021). Increased expectations placed on SBAE teachers have resulted in teachers struggling to manage the expectations of their jobs (Mundt & Connors, 1999; Myers et al., 2005). This is compounded by an increased workload which often leads to stress (Torres et al., 2009). Moreover, SBAE teachers may find it difficult to manage expectations related to their professions while balancing obligations in their personal lives (Murray et al., 2011; Sorensen & McKim, 2014; Sorensen et al., 2016). The overwhelming nature of SBAE and the resulting expectations placed on educators can lead to teachers choosing to leave the profession altogether (Lemons et al., 2015; Solomonson & Retallick, 2018).

Statement of the Problem

Expectations placed on SBAE teachers are wide and varied (Traini et al., 2021), as they are expected to fill a vast array of roles and responsibilities (Phipps et al., 2008; Talbert et al., 2014, Terry & Briers, 2010). Needs of teachers (DiBenedetto et al., 2018; Roberts et al., 2020), challenges faced by teachers (Boone & Boone, 2007, 2009), and characteristics of effective teachers (Eck et al., 2019; Roberts & Dyer, 2004a) provide insight into the nature of teaching SBAE and the expected roles of such teachers (Traini et al., 2021). The combination of professional needs, challenges, and expected characteristics creates a complex system for SBAE teachers to navigate (Haddad et al., 2022; Traini et al., 2021). Yet, SBAE teachers are expected to manage an ever-expanding list of skills, challenges, and characteristics associated with the profession (Traini et al., 2021). To better understand expectations placed on SBAE teachers, Traini et al. (2021) recommended the profession should compile a “flexible position description

of the agriculture teaching job detailing tasks that are expected as well as those that are not expected" (p. 179).

Research indicates *general* tasks associated with teaching SBAE, such as excessive paperwork, working overtime, and meeting deadlines, can be sources of stress for teachers (Torres et al., 2009). However, determining *specific* tasks required of SBAE teachers is a difficult undertaking. Although the tasks of teaching SBAE can be inferred from the above-mentioned professional needs, challenges, and characteristics, limited literature exists detailing the specific tasks SBAE teachers are expected to perform. Identifying a comprehensive list of such would offer insight into the daily demands of the profession and provide context and backgrounding for future research in the field.

Need for the Study

Research Priority 3 of the American Association for Agricultural Education (AAAE) National Research Agenda identified the need for research regarding recruiting and training effective agricultural educators (Stripling & Ricketts, 2016). Considering the impact of teacher workload on recruitment and retention of qualified SBAE teachers (Torres, 2008), as well as teacher stress (Theiman et al., 2012), burnout (Kitchel et al., 2012), satisfaction (Chenevey et al., 2008), and efficacy (McKim & Velez, 2016), would delineate the workload of SBAE teachers regarding the tasks they are expected to complete and have significant implications for the profession. Moreover, identification of the specific tasks expected of SBAE teachers could potentially impact teacher preparation programs and better inform aspiring SBAE teachers of expectations of the job, allowing them to determine whether it is the correct professional fit for them.

Purpose of the Study

The purpose of the study was to identify the tasks associated with the roles and responsibilities of SBAE teachers.

Research Objectives

Four objectives guided this study:

1. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction.
2. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding FFA advisement.
3. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding students' Supervised Agricultural Experiences (SAEs).
4. Determine the additional tasks associated with the professional roles and responsibilities of SBAE teachers aside from classroom and laboratory instruction, FFA, and SAEs.

Limitations of the Study

The following limitations of the study were recognized:

1. The doctoral students in agricultural education who participated in the study may not have been representative of all SBAE teachers throughout the country.
2. The individuals selected to participate were chosen based on their previous or current experience as SBAE teachers and their enrollment in a doctoral agricultural education program. However, the experiences of these teachers in SBAE may have been of varying levels of involvement and of differing foci.

3. The structure of SBAE emphasizes the needs of the local community; therefore, the tasks provided by SBAE teachers may reflect regionality or local priorities, and, therefore, not universal in prevalence.
4. The participants were identified by the various department heads of universities offering doctoral degrees in agricultural education. Therefore, the frame of the study was limited to only those names provided by the department heads.

Assumptions

Three assumptions were made regarding the study:

1. All participants were current or former SBAE teachers with a minimum of three years of teaching experience in SBAE.
2. All doctoral students in agricultural education were familiar with the tasks associated with SBAE instruction, FFA, and SAE and other tasks associated with being a public school teacher.
3. All the doctoral students in agricultural education provided a comprehensive list of tasks associated with teaching SBAE.

Definitions of Terms

Classroom/Laboratory Instruction: "Contextual, inquiry-based instruction and learning through an interactive classroom and laboratory" (National FFA Organization, 2023a, Figure 1).

Delphi Method: A three round data collection process involving both qualitative and quantitative data collection, "[T]he Delphi Method was developed to provide a structured mechanism to attain insights and perspectives from people with a specific expertise on a topic or issue in order to inform decision making about policy and practice" (Brady, 2016, p. 61).

Doctoral Degree-Seeking Students: Students enrolled in either a PhD or EdD program in agricultural education at public universities in the United States.

Experts: Study participants ". . . who are knowledgeable about current information and perceptions regarding the topic under investigation but are open-minded to the findings" (Stitt-Gohdes & Crews, 2004, pp. 60–61).

FFA: "FFA [formerly known as Future Farmers of America] is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education" (National FFA Organization, 2023b, para. 1).

FFA Advisor: SBAE teacher who "facilitate[s] the activities and events of the [local] FFA [chapter]" (Torres & Dormody, 1997, p. 11).

School-Based Agricultural Education (SBAE): "Agricultural education is a systematic program of instruction available to students desiring to learn about the science, business, and technology of plant and animal production and about the environmental and natural resources systems" (The National Council for Agricultural Education, 2012, para 1).

Supervised Agricultural Experience (SAE): "Supervised Agricultural Experience is a student-led, instructor-supervised, work-based learning experience that results in measurable outcomes within a predefined, agreed upon set of Agriculture, Food and Natural Resources (AFNR) technical standards and career ready practices aligned to [students'] career plan[s] of stud[ies]" (The National Council for Agricultural Education SAE for All Taskforce, 2017).

Task: "A body of work requiring mental and/or physical activity" (Garland, 1985, p. 346).

Teacher: "One that teaches, especially on whose occupation is to instruct" (Merriam-Webster, n.d.).

Chapter Summary

This chapter provided a limited overview of research related to public education in the United States, SBAE, and an introduction to the roles, responsibilities, and tasks associated with teaching SBAE. The statement of the problem was presented as well as the study's purpose and five research objectives. Assumptions and limitations of the study were identified, common terms were defined, and the need for the study was described. Chapter II will complement the research highlighted here by providing an overview of relevant literature as well as the theoretical framework supporting the study.

CHAPTER II

REVIEW OF LITERATURE

Chapter II offers an in-depth review of the literature regarding the topics relevant to the study. Specifically, this chapter contains the theoretical underpinnings of the study and relevant literature related to the five research objectives. The chapter is organized into five sections: the Career and Technical Education (CTE) System in the United States, SBAE in the United States, Structure of SBAE, Expectations of SBAE Teachers, and Theoretical Framework.

Purpose of the Study

The purpose of the study was to identify the tasks associated with the roles and responsibilities of SBAE teachers.

Research Objectives

Four objectives guided this study:

1. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction.
2. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding FFA advisement.
3. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding students' Supervised Agricultural Experiences (SAEs).

4. Determine the additional tasks associated with the professional roles and responsibilities of SBAE teachers aside from classroom and laboratory instruction, FFA, and SAEs.

The Career and Technical Education (CTE) System in the United States

SBAE is situated in the publics schools as part of the CTE system (Gordon, 2014). CTE consists of "organized education programs offering a sequence of courses directly related to the preparation of individuals in paid or unpaid employment and in current or emerging occupations requiring other than a baccalaureate or advanced degree" (Gordon, 2014, p. 457). A defining characteristic of CTE is the inclusion of competency-based, applied learning which contributes to students' reasoning ability, academic knowledge and vocabulary, and general employability because of enhanced problem-solving skills and work ethic development (Gordon, 2014). Modern CTE is comprised of 16 federally recognized career clusters: Agriculture, Food and Natural Resources (AFNR); Architecture and Construction; Arts, A/V Technology and Communications; Business Management and Administration; Education and Training; Finance; Government and Public Administration; Health Science; Hospitality and Tourism; Human Services; Information Technology; Law, Public Safety, Corrections and Security; Manufacturing; Marketing; Science, Technology, Engineering and Mathematics (STEM); and Transportation, Distribution and Logistics (Advance CTE, 2023). There are approximately 12.3 million CTE students nationwide with programs in all 50 states and three United States territories (Advance CTE, 2023).

CTE Beginnings

Heavily influenced by the philosophies of Jean-Jacques Rousseau and Johann Heinrich Pestalozzi, CTE emerged in the United States to address the need for vocational training in skilled trades (Gordon, 2014). This need led to the establishment of private trade schools, which could be categorized into three distinct types: 1) schools offering training only in trades, 2) schools offering both general education and training in trades, and 3) schools offering general education,

training in trades, and apprenticeship opportunities (Gordon, 2014). The implementation of trade skills learned in schools by students led to the use of the term *vocational education* to describe the formal training in skills trades occurring in schools (National Center for Education Statistics, 2023). At the beginning of the 20th century, vocational education became an intentional practice among public schools in the United States thanks in part to the establishment of formal programs through federal legislation and the inception of the land grant university system (Talbert et al., 2014; Phipps et al., 2008).

Land Grant Institutions

Land grant institutions played a pivotal role in the development of formal CTE (Gordon, 2014). Established by the Morrill Acts of 1862, 1890, and 1994 (Halvorson, 2015; Lawrence, 2022; National Archives, 2022), land grant institutions were developed to promote the study of agriculture and mechanical arts (Advance CTE, 2023). “Not only did the founding of these colleges enable higher education to be open to a broader public and improve agricultural techniques, but also the concept of integrated academics was first identified” (Gordon, 2014, p. 58). The integration of traditional studies with vocational education is a distinguishing feature of CTE (National Center for Education Statistics, 2023), and this curricular system was developed and implemented by land grant institutions throughout the country (Gordon, 2014), providing the framework for contemporary CTE programs featured in public schools today (Advance CTE, 2023).

CTE Legislation

The Smith-Hughes Act was passed in 1917 to provide federal funding for vocational education in secondary schools (Advance CTE, 2023). This legislation was instrumental in creating CTE programs in the areas of agriculture, homemaking, and trade and industrial education (Gordon, 2014). Following this initial piece of vocational education legislation, five

additional bills were signed into law from 1929 to 1956 increasing both the funding and scope of vocational education at the secondary level. These five consisted of the George-Reed Act of 1929, the George-Ellzey Act of 1934, the George-Deen Act of 1936, the George-Barden Act of 1946, and the George-Barden Amendments of 1956 (Advance CTE, 2023). Gordon (2014) maintained the Vocational Education Act of 1963 was the most significant piece of vocational education legislation since the Smith-Hughes Act of 1917. This law and its subsequent amendments in 1968 drastically expanded the approved uses of federal funds regarding vocational education and whom they could benefit (Gordon, 2014).

An additional milestone in CTE funding is the passage of the Carl D. Perkins Vocational Education Act (Advance CTE, 2023) in 1984. This act "changed the emphasis of federal funding in vocational education from primarily expansion to program improvement and at-risk populations" (Gordon, 2014, p. 113). The act allowed for the improvement of CTE programs by integrating career-focused curriculum and academics. In addition to serving at-risk populations, it opened the door for gender equity (Advance CTE, 2023; Gordon, 2014). This legislation has been reauthorized four times since its initial passage—Carl D. Perkins Vocational and Applied Technology Act of 1990, Carl D. Perkins Vocational and Technical Education Act 1998, Carl D. Perkins Career and Technical Education Act of 2006, and Strengthening Career and Technical Education for the 21st Century Act of 2018 (Advance CTE, 2023; Gordon, 2014; Perkins Collaborative Resource Network, 2022).

Career and Technical Student Organizations (CTSOs)

An important component of CTE is the incorporation of CTSOs as an integral part of CTE programs (Gordon, 2014; Phipps et al., 2008; Talbert et al., 2014). CTSOs "bring together students interested in careers in specific vocational fields, providing them with a range of individual, cooperative, and competitive activities designed to expand their leadership and job-

related skills" (Gordon, 2014, p. 273). The precedence for CTSOs was set by the National FFA organization (Phipps et al., 2008), and serves as the template for other CTSOs serving as leadership development platforms for students (Gordon, 2014). Public Law 81-740 established the federal charter the National FFA Organization in 1950 (Talbert et al., 2014). This established the "integral relationship of a vocational student organization to the instructional program and was the first time that the U.S. Office of Education was associated with vocational youth organizations" (Gordon, 2014, pp. 273–274). Consequently, this action provided the roadmap for the chartering of other CTSOs, recognizing them as invaluable components of the CTE learning experience (Career and Technical Student Organizations, 2023; Gordon, 2014). The inclusion of FFA as the CTSO for SBAE played a pivotal role in shaping and structuring SBAE in the United States (National FFA Organization, 2023c).

SBAE in the United States

SBAE is described as "a systematic program of instruction available to students desiring to learn about the science, business, and technology of plant and animal production and about the environmental and natural resources systems" (National Council for Agricultural Education, 2012, para. 1). Phipps et al. (2008) highlighted three purposes of SBAE: 1) prepare students for agricultural careers, 2) provide students opportunities for agricultural entrepreneurship or job creation, and 3) teach students agricultural literacy.

SBAE strives to educate students in AFNR systems and prepare them for successful careers in the field of agriculture (National Council for Agricultural Education, 2012). SBAE is underpinned by five philosophical approaches which cultivate a rich and robust program. These five consist of "practice and application, individualized instruction, career and leadership development, community-based programs, and exposure to the agricultural industry as a dynamic, high-tech field of vital importance to individuals and society at large" (Phipps et al., 2008, p. 21)

and are structured into three equal components: Classroom/Laboratory Instruction, FFA, and SAE (Phipps et al., 2008). These three components will be discussed individually in later sections.

Roberts and Ball (2009) described two conflicting views on the purpose of SBAE—teaching agriculture as content or using agriculture as the context through which learning occurs. Rooted in the opinions of John Dewey and David Snedden, the arguments for these views offer significant considerations regarding the function and purpose of SBAE (Roberts & Ball, 2009). From the perspective of agriculture as content, SBAE serves the function of preparing students for "useful employment" (p. 82) in agriculture established by the Smith-Hughes Act of 1917 (Roberts & Ball, 2009). Theoretically, this stance is undergirded by behaviorism in that SBAE's purpose is the acquisition of *tangible* knowledge and skills with the intent of using those specific skills to gain employment (Roberts & Ball, 2009). To this end, the SBAE teacher is expected to guide and direct students as the content area expert (Roberts & Ball, 2009). Conversely, agriculture as context suggests SBAE serves the function of providing the lens through which *transferrable* skills are attained and applied (Roberts & Ball, 2009). By comparison, constructivism serves as the foundation of this perspective and offers the framework for holistic knowledge acquisition in which learners create meaning for themselves from experiences (Roberts & Ball, 2009). As such, SBAE teachers are facilitators of learning rather than gatekeepers of technical content (Roberts & Ball, 2009).

In short, is it the job of SBAE to prepare students for technical jobs requiring specific skills? Or is it the job of SBAE to prepare students to think critically and apply knowledge beyond agricultural content? According to Roberts and Ball (2009), the answer is both. SBAE is offered both as a standalone content area as well as a context for learning other subject areas (Roberts & Ball, 2009); therefore, SBAE, and subsequently its teachers, is uniquely positioned to simultaneously teach technical content while making students college and career ready regardless of the profession in which they choose to take part (Roberts & Ball, 2009).

Like general CTE, SBAE's beginnings are rooted in the need for vocational training in the art of agriculture, particularly production agriculture (Phipps et al., 2008). To this end, SBAE's formal inception occurred at the turn of the 20th century, solidified by the passage of the Smith-Hughes Act of 1917 (National Council for Agricultural Education, 2012). Prior to this law, formal agricultural education was reserved for post-secondary students at land grant institutions; however, since the curriculum at these institutions integrated both vocational and traditional education, agricultural education courses often were not accessible until the final two years of a student's enrollment at university (Phipps et al., 2008). The resulting gap in knowledge and limited training in vocational agriculture created a need for secondary vocational agricultural training, thus resulting in the formal recognition of SBAE by the federal government through the Smith-Hughes Act (Gordon, 2014; National Council for Agricultural Education, 2012; Phipps et al., 2008).

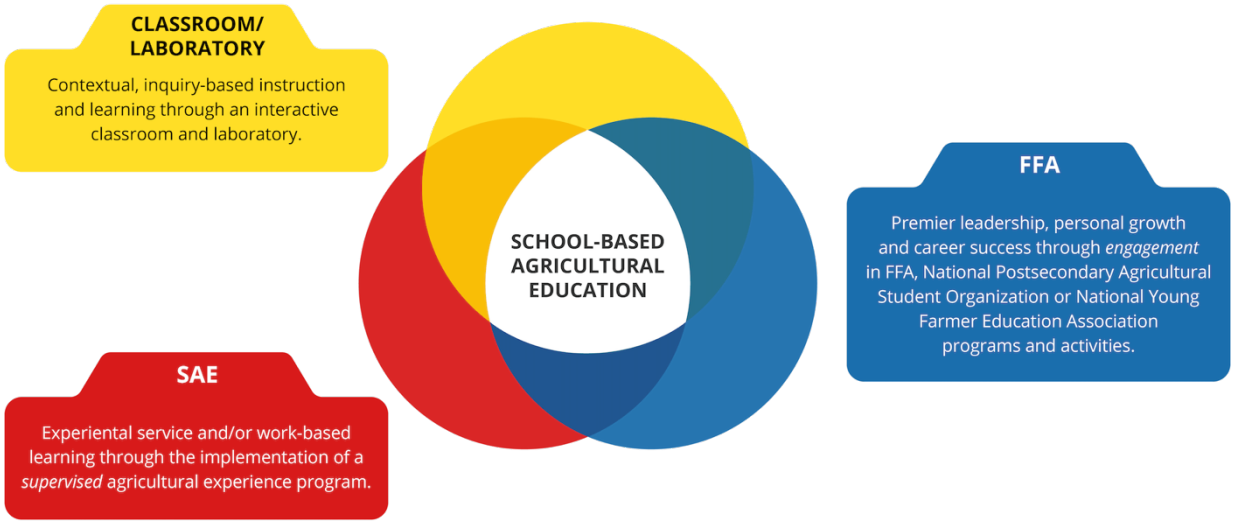
Approximately one million secondary students were enrolled in 8,367 SBAE programs taught by 13,349 SBAE teachers in the United States in 2021 (National Association of Agricultural Education, 2022). Although detailed statistics for SBAE enrollment are not available, Phipps et al. (2008) described the demographics of the National FFA Organization as offering a snapshot of those enrolled in SBAE programs. To this end, the National FFA Organization reported a membership of 850,823 students in 2022 of whom 50% were male, 43% were female, 77.4% were white, 15.6% were Latino, 5.5% were Black, and 1.5% were American Indian or Alaska Native (National FFA Organization, 2022a). Regarding SBAE teachers, Eck et al. (2020) reported 51.2% were female, 44.1% were male, and 56% were between 21 and 39 years of age. As for certification pathway, 75.4% of SBAE teachers were traditionally certified, 19.5% were alternatively certified, and 0.9% were emergency certified. SBAE teachers reported being employed by a program consisting of 41 to 200 students 58.3% of the time, and 81.8% of those programs have three or fewer teachers (Eck et al., 2020).

Structure of SBAE

"The predominant model for organizing instruction in agricultural education involves the interrelationships between three major concepts: classroom and laboratory instruction, supervised agricultural experience, and agricultural youth organization participation" (Croom, 2008, p. 110). Modern SBAE makes use of the Three-Component Model (TCM) of agricultural education (see Figure 1).

Figure 1

School-Based Agricultural Education Three-Component Model



Note. Reprinted from *The Three-Component Model of Agricultural Education*. (SAE for All, 2023).

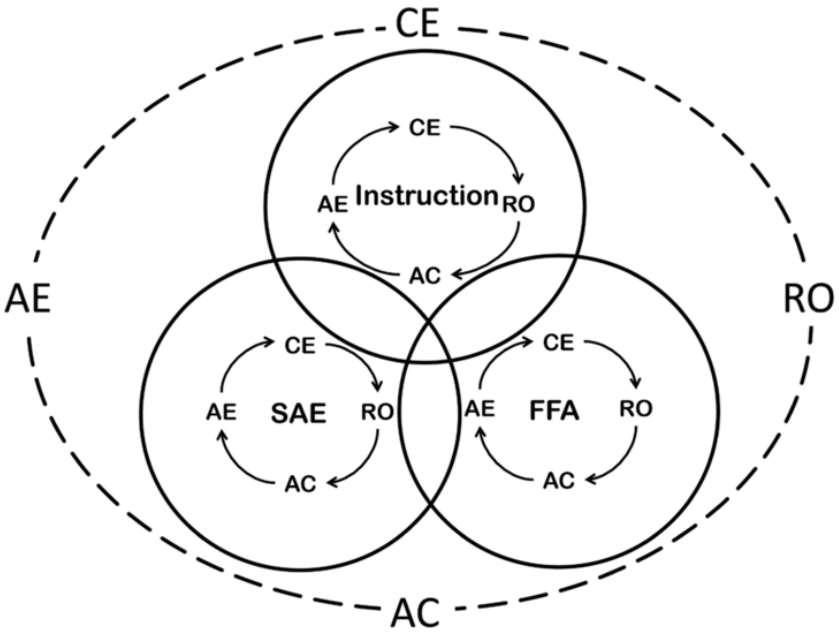
In a Venn diagram, the TCM incorporates contextual learning through the agricultural education classroom and laboratory, establishes work-based learning opportunities through SAE, and provides premier leadership, personal growth, and career success through engagement in FFA (National FFA Organization, 2023a). Together, these three components comprise a complete, balanced, and well-rounded SBAE program (National Council for Agricultural Education, 2012;

Phipps et al., 2008; Phipps & Osborne, 1988). An ideal SBAE program combines each component of the TCM in equal parts to create a meaningful learning experience for students, helping them gain valuable learning, leadership, personal responsibility, and life skills through the context of agricultural education (Phipps & Osborne, 1988).

Expanding on the TCM, Baker's et al. (2012) Comprehensive Model for Secondary Agricultural Education (see Figure 2) overlays experiential learning with the TCM to demonstrate the experiential nature of SBAE (Baker et al., 2012). Experiences are the linchpin in SBAE as they often provide the context through which agricultural content is learned (Baker et al., 2012; Roberts, 2006; Shoulders & Myers, 2013).

Figure 2

Comprehensive Model for Secondary Agricultural Education



Note. Reprinted from *Aligning Kolb's Experiential Learning Theory with a Comprehensive Agricultural Education Model*. (Baker et al., 2012).

To this effect, the Comprehensive Model for Secondary Agricultural Education provides a framework in which SBAE teachers shape student learning through a concrete experience, reflective observation, abstract conceptualization, and active experimentation (Baker et al., 2012; Kolb, 1984). Emphasis on processing the experience and guiding students through the entire model is critical to the creation of meaning and establishment of learning (Baker et al., 2012). Thus, much of student learning in SBAE through experiential learning hinges on the ability of teachers to actively process experiences with their students (Baker et al., 2012).

Classroom and Laboratory Instruction

Purpose

Classroom and laboratory instruction in SBAE refer to learning activities which promote the acquisition of knowledge, skills, and competencies "within the confines of learning facilities" (Croom, 2008, p. 110). Such learning activities are developed and taught by SBAE teachers to teach interdisciplinary skills within the context of agriculture (National FFA Organization, 2023a; Phipps et al., 2008; Talbert et al., 2014). SBAE is offered both as a content and context for learning other subject areas (Roberts & Ball, 2009). According to the National Council for Agricultural Education (2015), eight AFNR career pathways exist on the federal level to guide SBAE classroom and laboratory instruction (see Figure 3): Plant Systems; Power, Structural and Technical Systems; Agribusiness Systems; Animal Systems; Biotechnology Systems; Environmental Services Systems; Food Products and Processing; and Natural Resource Systems.

These pathways drive the development and delivery of content across all aspects of SBAE and provide a benchmark against which to measure student knowledge and progress (National Council for Agricultural Education, 2015). Additional pathways, such as agricultural communications, have been incorporated by individual states to address specific local needs (Oklahoma Career Tech, 2023).

Figure 3

Curriculum Framework of the National Agriculture, Food, and Natural Resources (AFNR) Content Standards

Note. Reprinted from *National AFNR Content Standards, Revised 2015*. (National Council for Agricultural Education, 2015).

Historically, SBAE in the United States has been "both 'hands-on' and 'minds-on' in intent, design, and delivery" (Parr & Edwards, 2004, p. 107). The use of inquiry-based and problem-solving approaches in classroom instruction provide students a rich learning environment in which skills are acquired through the context of agricultural application (Parr & Edwards, 2004; Phipps et al., 2008; Talbert et al., 2014). As such, in-depth planning and preparation are required on behalf of SBAE teachers to deliver meaningful and robust lessons (Talbert et al., 2014; Torres et al., 2008; Roberts & Kitchel, 2010). Torres et al. (2008) identified planning and instruction as key workload components of SBAE teachers. It was found that

student teachers, first year teachers, and experienced teachers spent 61%, 62%, and 47% of their time, respectively, on planning and instruction within the classroom and laboratory.

Facilities in which classroom and laboratory instruction occur include classrooms, agricultural mechanics laboratories, greenhouses, land laboratories, and food processing facilities (Twenter & Edwards, 2017). Additionally, formal science laboratories have risen to prominence in SBAE programs thanks in part to increased emphasis on cross disciplinary instruction (Curriculum for Agricultural Science Education, 2023). Wells et al. (2018) posited teachers are expected to complete a wide range of tasks and roles in their positions, which includes teaching agricultural content. They suggested one such environment in which teachers accomplish this is the laboratory setting (Wells et al., 2018). Along with these laboratory learning spaces come expectations for how teachers use and interact with them (Wells et al., 2018). Such expectations include managing the learning space, employing project-based instruction, and caring for the facilities (Wells et al., 2018). SBAE concepts learned through classroom and laboratory instruction are actively applied through FFA and SAE activities.

FFA

Purpose

FFA, formerly known as Future Farmers of America, is a "dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education" (National FFA Organization, 2023b, para. 1). FFA is structured into three levels: local chapters, state associations, and the National FFA Organization which offers students opportunities for success and recognition at each level (National FFA Organization, 2023b). FFA serves as an intracurricular student organization intended to promote the application of skills acquired through classroom and laboratory instruction and SAE (Hughes & Barrick, 1993). The organization provides opportunities for students to demonstrate their skills

through career and leadership development events, agriscience fair, proficiency and star awards, degrees, and chapter-based award programs (National FFA Organization, 2023b).

History

The Future Farmers of America (FFA) was founded in 1928 during the American Royal Stock Show in Kansas City, MO (Phipps et al., 2008). In attendance at the first meeting were 33 students from 18 states who were interested in forming a student organization meant to enhance the skills learned in vocational agriculture classrooms (National FFA Organization, 2023c; Phipps et al., 2008; Talbert et al., 2014). Since that time, FFA has undergone significant changes and incredible growth. In 1950, Public Law 81-740 established a federal charter for the National FFA, recognizing FFA as an integral part of vocational agricultural education (Phipps et al., 2008). In 1965, the organization was merged with the New Farmers of America (NFA) which represented African American students in agriculture, and in 1969, the organization expanded by allowing women to join as members (National FFA Organization, 2023c). A significant change to the organization occurred in 1988 when Future Farmers of America officially changed its name to the National FFA Organization to reflect the growing scope of agriculture in the United States (Phipps et al., 2008). Throughout its existence, FFA has expanded its membership significantly. Currently, the National FFA Organization is the largest CTSO in the country with 850,823 members in all 50 states, Puerto Rico, and the United States Virgin Islands (National FFA Organization, 2022a).

Public Law 81-740

Public Law 81-740, which federally chartered the National FFA Organization in 1950, established federal recognition for the agricultural education CTSO and provided articles of incorporation for the organization (National FFA Organization, 2018). In 1998, the charter underwent technical revisions, and in 2018, the charter was reopened to address the

organization's governance and affiliation with the United States Department of Education (USDE) (National FFA Organization, 2018).

Career Development Events (CDEs) and Leadership Development Events (LDEs)

FFA provides opportunities for students through CDEs and LDEs which challenge students to "develop critical thinking skills and effective decision-making skills, foster teamwork and promote communication while recognizing the value of ethical competition and individual achievement" (National FFA Organization, 2023d, para. 1). CDEs provide students the opportunity to apply technical skills and competencies learned through SBAE instruction in a competitive format whereas LDEs provide students the opportunity to develop and implement leadership and interpersonal skills through competitions (National FFA Organization, 2023d).

There are twenty-six CDEs and LDEs recognized at the national level, each comprised of skills, competencies, and knowledge pertaining to the eight AFNR pathways (National FFA Organization, 2023d). Students are recognized for achievement at the individual and team level with awards and scholarships presented to prevailing students (National FFA Organization, 2023d). CDEs and LDEs, also known as contests or judging events, were intended to reinforce the content taught in vocational agricultural courses with student experiences at home, school, and in the real world through the context of agriculture (Croom, 2008; Jones & Edwards, 2019). Jones and Edwards (2019) identified contests and judging events as an opportunity for students to "develop their abilities to assess and evaluate differences and make reasoned decisions" (p. 112). Also linked to skill development, contests were used to teach students the value of hard work and how to solve complex problems (Jones & Edwards, 2019).

Convention and Conferences

Additional opportunities are provided to students by attending conventions and conferences. The National FFA Convention & Expo "is the largest student gathering in the

nation" (National FFA Organization, 2022b, p. 64) and offers a wide variety of educational events and opportunities for students such as competitions, leadership workshops, convention sessions, National Day of Service, and career success tours, among others (National FFA Organization, 2022b). Moreover, leadership and career conferences are available to students in the form of the Member Leadership Series, Washington Leadership Conference, Next Gen Conferences, and New Century Farmer Conference (National FFA Organization, 2022b). Both conventions and conferences offer students opportunities for student recognition in the form of degrees, awards, and scholarships (National FFA Organization, 2022b). Jones and Edwards (2019) described that in the context of early vocational agriculture, formal gatherings through junior farmer associations and young farmer clubs provided young people with the opportunity for "social engagement for rural youth" (p. 109), and "to accomplish this social objective, these organizations conducted cooperative events such as . . . leadership conferences and activities . . . to develop leadership skills" (p. 109). As such, FFA has continued to offer such activities for its members in the form of conventions and conferences (National FFA Organization, 2022b).

Supervised Agricultural Experiences (SAEs)

Purpose

SAEs have been described as "all the practical agricultural activities of educational value conducted by students outside of class and laboratory instruction or on school-released time for which systematic instruction and supervision are provided by their teachers, parents, employers, or others" (Phipps & Osbourne, 1988, p. 313). SAE is a work-based learning tool intended to prepare students for agriculturally related careers (Robinson & Haynes, 2011). This component of the TCM consists of learning opportunities in which students apply practical knowledge through the implementation of an agriculturally related work-based project (Phipps et al, 2008; Talbert et al., 2014). SAEs have historically been the most underserved component of the TCM (Camp et

al., 2000; Croom, 2008; Lewis et al., 2012). Torres et al. (2008) found that experienced teachers spent only 3% of their time observing student SAEs.

History

The history of SAEs is rich and deeply held in the origins of vocational education (Smith & Rayfield, 2016). The roots of the formal SAE can be traced back to Rufus Stimson's farming project which was intended to offer students educational experiences through practical, on-farm application of skills and knowledge (Lewis et al., 2012; Smith & Rayfield, 2016). The success of Stimson's project method is well-documented (Hyslop-Margison, 2000; Knoll, 1997; Lewis et al., 2012; Moore, 1988; Smith & Rayfield, 2016) and has had profound impacts on the development of modern SAEs (Smith & Rayfield, 2016). Upon Stimson's appointment as head of Smith's Agricultural College in 1908 (Moore, 1988), his project method was quickly implemented within the school (Smith & Rayfield, 2016). Stimson's work at Smith's Agricultural College gained the attention of Massachusetts Commissioner of Education, Dr. David Snedden, and Charles Prosser, the Deputy Commissioner for Vocational Education at the time (Moore, 1988; Smith & Rayfield, 2016). Soon, the three men would work to develop common language surrounding home-based projects and their importance to vocational education (Smith & Rayfield, 2016). This language was outlined in Prosser's (1912) sixteen theorems of vocational education and served as the bedrock for the inclusion of work-based projects in vocational education curriculum through the signing of the Smith-Hughes Act of 1917 (Moore, 1988; Smith & Rayfield, 2016; Wirth, 1972).

A significant shift in the application of home-based projects occurred in 1963 with the passage of the Vocational Education Act (Smith & Rayfield, 2016). This legislation expanded the Smith-Hughes Act of 1917 to include occupations beyond that of just production agriculture and, as a result, also expanded the description of farm projects to include "field, shop, laboratory, cooperative work, apprenticeship or other occupational experience" (Smith & Rayfield, 2016, p.

153). Additionally, the Vocational Education Act of 1963 allowed teachers to expand their curriculum and teach agricultural skills beyond those of farming (Smith & Rayfield, 2016). As a result, increased participation occurred in home projects, and the development of modern SAEs was underway (Smith & Rayfield, 2016).

Modern SAEs

Recent efforts on behalf of the National Council for Agricultural Education and the National FFA Organization have led to the implementation of SAE for All, a national initiative to rethink the implementation of SAEs within SBAE (SAE for All, 2023). This initiative has led to the development of foundational and immersion SAEs which provide the opportunity for students to explore agricultural careers and topics (foundational) and choose a work-based learning project to implement (immersion) (SAE for All, 2023). Figure 4 shows the SAE for All Student Roadmap. Foundational and immersion SAEs are categorized by skill level: grades 6 through 9 are considered awareness SAEs, grades 9 through 11 are considered intermediate SAEs, and grades 11 through 12 are considered advanced SAEs.

Moreover, as students transition from foundational to immersion SAEs, the skills and competencies students are expected to master and demonstrate also increase, culminating in the selection of one of the five immersion SAE categories: placement/internship, ownership/entrepreneurship, research, school-based, and service-learning (SAE for All, 2023). Placement/internship SAEs involve students being employed or interning with an agricultural business. Ownership/entrepreneurship SAEs involve students developing or owning their own agricultural enterprise. Research SAEs involve students conducting agriculturally related research in the areas of experimentation, analysis, or invention. School-based SAEs involve students leading business enterprises which are operating using school facilities and resources. Service-

learning SAEs involve students planning and conducting service projects intended to benefit their school or community.

Figure 4

SAE For All Student Roadmap

Note. Reprinted from *SAE for All Teacher Handbook* (SAE for All, 2023)

Expectations of SBAE Teachers

"The stress, heavy workload, and constant pressure to be better has resulted in a profession that literally devours its young and forces them to look elsewhere for professional and personal satisfaction" (Osborne, 1992, p. 3). Since this statement was published in the Agricultural Education Magazine in 1992, SBAE teacher workload (Torres et al., 2008), challenges (Boone & Boone, 2007, 2009; Myers et al., 2005), and needs (DiBenedetto et al., 2018) have continued to compound (Traini et al., 2021). Moreover, the professional characteristics required of SBAE teachers continue to change and refine (Eck et al., 2019; Roberts & Dyer, 2004a), potentially leading to greater strain on teachers (Traini et al., 2021). The pressure

on SBAE teachers in the form of extended hours to coordinate a comprehensive SBAE program (Straquadine, 1990) and the physical, emotional, and intellectual demands of the profession (Cano, 1990) can lead to burnout (Croom, 2003). These factors, along with perceived work-life balance (Sorensen & McKim, 2014), can play a significant role in SBAE teachers' intention to continue teaching (Solomonson et al, 2018; Tippens et al., 2013).

SBAE Teacher Workload

One potential reason for teachers to leave the profession and potential teachers to choose not to enter the profession is the workload required of SBAE teachers: "Due to the complex roles and program responsibilities, a generally accepted notion is that agriculture teachers have greater workloads and work longer hours than typical secondary education teachers" (Torres et al., 2008). Torres et al. (2009) reported SBAE teachers work between 46 and 65 hours per week. In comparison, general secondary teachers spend approximately 46 hours per week on average on school-related activities (United States Department of Education, 2022). Torres et al. (2008) defined workload as "the challenges individuals face by the different work demands" (p. 76) and measured it by "weighing the intensity of the work demands in completing the tasks and roles against one's own mental coping abilities" (p. 76). The authors highlighted that SBAE teacher roles, tasks, and responsibilities contribute to workload. Examples cited in the study include facilitating learning, developing the SBAE program, partnering with parents, and developing strong classroom and laboratory instruction, SAEs, and an active FFA chapter. Through evaluation of distribution of workload tasks, roles, and responsibilities among student teachers, first-year teachers, and experienced teachers, the authors found that time was not distributed equally across tasks, roles, and responsibilities among participants. It was identified that time spent in planning, instruction, laboratory, and administrative duties was consistent among participants and was greater than time spent in other areas for student teachers and first-year teachers (Torres et al., 2008). Similarly, Torres and Ulmer (2007) found student teachers spent

most of their time teaching (25.43%), planning (26.19%), and on teaching-related activities (35.51%), such as entering grades and evaluating student work. Student teachers spent approximately 8.47% of their time in observation and 6.4% of their time on administrative-related activities (Torres & Ulmer, 2007).

Sorensen et al. (2016) found the workload among SBAE teachers as one of the many contributing factors to teacher burnout and stress as well as work-life conflict. As such, the various roles in which teachers serve both in and out of the classroom can be demanding, consuming the already limited time and resources available to SBAE teachers (Murray et al., 2011; Sorensen et al., 2017; Torres et al., 2008). One approach to limiting the workload of teachers and potentially reducing stress and burnout is to engage the local community through the use of volunteers (Sherman & Sorensen, 2020). The benefits of engaging the local community include decreased teacher workload (Sherman & Sorensen, 2020), increased student success (Sanders, 2001), positive developmental outcomes for youth (DuBois & Neville, 1997; Grossman & Tierney, 1998; LoSciuto et al., 1996), and improved attendance, grades, test scores, and graduation rates (Brent, 2000; Epstein, 2001; Henderson & Mapp, 2002; Rankin, 2016). However, managing volunteers and community engagement opportunities places more expectations on SBAE teachers (Sherman & Sorensen, 2020). Challenges regarding volunteer use include school background check policies and identification of potential volunteers (Sherman & Sorensen, 2020).

SBAE Teacher Retention

SBAE in the United States is growing (Smith et al., 2022). In 2021, the National Agricultural Education Supply and Demand Study (NSD) identified 8,367 SBAE programs, 220 of which were identified as new programs, and 13,349 SBAE teachers in the United States (Smith et al., 2022). Despite this growth, the United States is experiencing a shortage of qualified SBAE

teachers (Smith et al., 2022). In 2021 alone, 30 SBAE programs closed, and 60 SBAE teaching positions were lost (Smith et al., 2021). Common reasons for the loss of positions include teacher attrition (Clark et al., 2014) and SBAE program closure (Smith et al., 2021). This trend is not new. Since 1917 and the passage of the Smith-Hughes Act, the profession has consistently battled with a shortage of qualified teachers (Eck & Edwards, 2019). In fact, the National FFA Organization (2022c) has identified a shortage of qualified SBAE teachers as the profession's greatest challenge. The NSD identified 674 SBAE teachers who left the profession, 378 of whom left for other professions (Smith et al., 2021). It is well-documented that the highest attrition rate among SBAE teachers occurs within the first three years of entering the teaching profession (Eck & Edwards, 2019). Additionally, potential SBAE teachers who choose not to enter the profession pose a challenge to filling open or vacated positions. Among post-secondary graduates seeking a degree in SBAE, only 56.4% sought to enter the teaching profession after graduation between the years of 1965 and 2017 (Eck & Edwards, 2019).

To that end, SBAE retention has become a crucial discussion amongst those in the profession. Solomonson et al. (2019) stated ". . . [general education] teacher attrition costs approach $2.2 billion in the U.S. alone annually" (p. 115). Therefore, it is imperative SBAE retains the teachers in which it invests significant time and resources (Solomonson et al., 2019). In their study evaluating the reasons teachers leave the profession, these authors identified unrealized expectations and pressure to do more outside of the classroom, inability to say no, and the lack of time available to complete activities as important factors (Solomonson et al., 2019). Conversely, Clark et al. (2014) sought to identify reasons teachers remain in the profession. Their findings indicated "supportive schools, students, parents, administrators, and family" (p. 52) were contributing factors. Additionally, the adoption of *teacher* as a central identy of those in the profession enabled them to remain resilient in the profession (Clark et al., 2014).

Teacher workload was anecdotally connected to teacher retention in McMillion's (1974) article in the Agricultural Education Magazine where he maintained a nationwide shortage of SBAE teachers was linked to the workload of teachers in comprehensive SBAE programs:

> It is not a realistic expectation that one teacher can operate programs in production agriculture, cooperative education, young farmer education, adult farmer education, FFA, and work for a master's degree all in one school term; yet, the new teacher goes to the job feeling that all of these are expected. (McMillion, 1974, p. 171)

Although McMillion promoted a reduction in SBAE teacher job descriptions and responsibilities in the 1974 editorial, job demands of SBAE teachers have steadily increased throughout the years (Phipps et al., 2008; Talbert et al., 2014; Terry & Briers, 2010).

SBAE Teacher Professional Needs

The professional needs of SBAE teachers also have grown and evolved (DiBenedetto et al., 2018; Roberts et al., 2020; Roberts & Dyer, 2004b). Through a synthesis of literature reviews regarding SBAE teacher needs assessments from 1983 to 2015, DiBenedetto et al. (2018) found the needs of SBAE teachers have changed with new categories and competencies emerging over time. Such needs as program management, public relations, administration, SAE development, managing student behavior, and technology remained consistent across all three decades considered in the study; however, needs such as funding, local advisory committees, 21st century skills, and special needs students more recently rose to prominence, indicating a shift in the demands of SBAE teachers (DiBenedetto et al., 2018). The authors suggested a change in focus of content area among SBAE teachers is potentially responsible for the change in needs over time. This along with the expansion of the list of needs over time provides a basis for the argument that the expectations of SBAE teachers are expanding and becoming increasingly diverse (DiBenedetto et al., 2018).

Just as SBAE teacher needs have changed over time, so have the specific needs of teachers in different career stages. Roberts et al. (2020) found teachers possess different needs during three distinct stages in their teaching career: early-career (0 to 5 years of teaching experience), mid-career (6 to 15 years of teaching experience), and career teachers (16 or more years of teaching experience). Their findings indicate early-career teachers identified a need for technical agricultural skills due to their limited agricultural background while mid-career and career teachers demonstrated a better grasp of these topics and did not indicate they were a need of SBAE teachers. Additionally, mid-career teachers were increasingly frustrated with "contextual forces that complicated their job duties" (Roberts et al., 2020, p. 137) and identified coping with these as needs of SBAE teachers. On the other hand, career teachers also identified coping as a desired need in the profession, but their focus of coping was "personal, contextual, and process changes that were affecting their careers" (Roberts et al., 2020, p. 137). The needs of teachers are often "nuanced and varied," and they cannot be accommodated by a "one size fits all" approach (Roberts et al., 2020, p. 137). Instead, SBAE teacher needs change over the course of their career indicating the expectations of the profession also evolve as their career progresses (Roberts et al., 2020).

Not only do teacher needs change during various phases of their careers, but the workload and expectations change as well. Lambert et al. (2011) found early-career teachers "accept a heavy workload as part of the job," (p. 59) and work well over 40 hours per week. Participants of their study indicated multi-tasking was an expectation due to a perceived lack of time to accomplish work. It was suggested that workload and time management were causes of stress among SBAE teachers which could lead to burnout (Lambert et al., 2011). Similarly, career teachers struggled to manage their time; however, their mismanagement was a product of ever-increasing expectations rather than lack of experience ". . . while time and the use of time is an evolving process as one progresses in years of teaching, the workload increases to fill up

available time" (Lambert et al., 2011, p. 60). The evolution of expectations throughout an SBAE teacher's career creates additional needs which must be addressed.

An additional consideration regarding needs of SBAE teachers includes the nature of teacher certification. Traditionally certified teachers are those who obtained a teaching license in a traditional manner, i.e., four-year degree with a teacher entrance exam, (Cannon et al., 2022; DiBenedetto et al., 2018; Robinson & Edwards, 2012; Robinson & Haynes, 2011). Alternatively certified teachers are those who pursue "alternative certification routes [which] are designed for individuals who have not completed a baccalaureate degree in education" (Ruhland & Bremer, 2002, p. 2). Not only have the needs of traditionally certified SBAE teachers changed, but the increase in alternatively certified teachers has also resulted in changes to the professional needs of teachers in the profession as well (Roberts & Dyer, 2004b). Though traditionally certified teachers reported having greater self-perceived in-service needs, both traditionally and alternatively certified teachers identified professional development as the greatest need of SBAE teachers. Additionally, the study identified program planning and management, instruction and curriculum, technical agriculture, and FFA and SAE supervision as needs of teachers (Roberts & Dyer, 2004b). The authors also posited several components of the professional development construct include items related to teacher stress and time management, indicating both traditionally and alternatively certified teachers desire support in these areas, and they may have an impact on teacher attrition or burnout. In fact, Robinson and Edwards (2012) found that traditionally certified teachers were more likely to remain in the profession in comparison to alternatively certified teachers, with population comparison of 59% and 17% remaining in the profession, respectively. However, when comparing self-efficacy among traditionally and alternatively certified teachers, it was determined both certification types increased their level of efficacy in student engagement, instructional practices, and classroom management (Robinson & Edwards, 2012). Interestingly, Roberts and Dyer (2004b) found alternatively certified teachers

had the lowest felt need for in-service in instruction and curriculum. This reinforces the notion that alternatively certified teachers possess unique needs, which bolster the overall needs of SBAE teachers (Roberts & Dyer, 2004b).

SBAE Teacher Challenges

In addition to increasing professional needs, SBAE teachers face a multitude of challenges (Boone & Boone, 2007, 2009; Myers et al., 2005). Boone and Boone (2009) found perceived challenges faced by teachers play a role in the retention of SBAE teachers. They identified 18 key problems faced by SBAE teachers including financial rewards, time management, paperwork, and balancing school and home. In particular, beginning teachers frequently reported salary as a strong problem for teachers in the field. Both beginning and current teachers identified time management, paperwork, and work life balance as a challenge facing SBAE teachers (Boone & Boone, 2009). What is more, an earlier study determined 24 categories of challenges of SBAE teachers with administrative support, discipline, class preparations, time management, paperwork, and facilities and equipment identified as key problems facing SBAE teachers (Boone & Boone, 2007). The results of these two studies indicate various self-reported challenges facing SBAE teachers related to teacher workload in the form of the roles, responsibilities, or tasks expected of teachers (Boone & Boone, 2007, 2009).

This notion is supported by Myers et al. (2005) who posited that understanding the problems facing SBAE teachers may aid in improving the retention rate of beginning teachers. The researchers identified 11 problems faced by new SBAE teachers in Florida: organizing an alumni chapter, organizing an advisory committee, planning FFA activities, and managing student discipline, recruiting alumni members, making special education accommodations, managing stress, balancing work and personal life, lack of preparation, time management, and developing a balanced program (Myers et al., 2005). These problems offer insight into the

perceived challenges facing beginning SBAE teachers regarding total program management and demonstrate the breadth of expectations of teachers in the profession (Myers et al., 2005).

Characteristics of Effective SBAE Teachers

The expectations associated with effective SBAE teachers have increased as well (Eck et al., 2019; Eck et al., 2021; Roberts & Dyer, 2004a). Roberts and Dyer (2004a) identified 40 characteristics of effective teachers including caring for students, planning for instruction, evaluating student achievement, being honest, possessing knowledge of FFA activities, communicating, and managing laboratories. Eck et al. (2019) expanded on the list by conducting a national study. Their findings revealed 58 characteristics within eight themes which describe effective SBAE teachers. The themes included instruction, FFA, SAE, program planning, balance, diversity and inclusion, professionalism, and personal dispositions. These two studies further demonstrate the demands and expectations placed on SBAE teachers.

Theoretical Framework

The theoretical framework for this study was Human Capital (HC) theory. HC evaluates the acquisition of knowledge, skills, training, experiences, and education by individuals (Becker, 1964; Little, 2003; Shultz, 1971; Smith, 2010; Smylie, 1996). An important aspect of HC involves the explanation of employability in terms of the investment an individual makes in themselves and the attractiveness of that skillset to a prospective employer (Becker, 1964); therefore, “as people increase their human capital, they become more employable . . .” (Robinson & Baker, 2013, p. 152). To this end, Smith (2010) found that individuals tend to acquire specialized skills as they move toward work they prefer, giving rise to “sector-specific” (p. 42) skills which compliment natural talent and occupational abilities. Moreover, Heckman (2000) maintained individuals’ job performances were enhanced by the acquisition and development of such skills. Increased job performance as a result of enhanced human capital is associated with

improved results for employers (Lepak & Snell, 1999). Similarly, HC can also be used to explain teachers and their value within their schools (Smylie, 1996).

In addition, HC can be used to describe job-specific tasks and the value place on them (Autor & Handel, 2013). Autor et al. (2003) found jobs can be classified by the main tasks expected to be completed by workers, and the value of the skills required to perform those tasks can be assessed. However, it is difficult to measure and concretely connect these tasks and skills to HC (Autor & Handel, 2013). As such, Autor and Handel (2013) proposed individuals choose tasks based on their perceived value to the job at hand, and these tasks vary based on the specific demands of the job, stating, ". . . job tasks differ among workers within an occupation" (Autor & Handel, 2013, p. 62).

Gibbons and Waldman (2004) also found tasks to be central to HC, coining the term "task-specific human capital" (p. 203). This type of HC indicates that ". . . some of the human capital an individual acquires on the job is specific to the tasks being performed . . ." (Gibbons & Waldman, 2004, p. 203). Like other types of HC, namely occupation and industry, task-specific HC is dependent on the nature of the work being done, allowing for the skills gained to be easily transferred from one job to another (Gibbons & Waldman, 2004). The authors maintained this reinforces the notion that task-specific HC is widely valued within industries and offers enhanced employability among workers.

HC describes the value an employer places on the unique skills of individuals with regard to the specific expectations of a job (Lepak & Snell, 1999). Despite this, it is difficult to assess which areas of HC are most valued by schools based on specific requirements of the job of teaching (Robinson & Baker, 2013). There is a lack of understanding regarding the skills required of teachers: "There is some agreement on what teachers should know but no consensus on how to . . . ensure that they have mastered essential skills or knowledge" (Hess, 2000, p. 169). If there is

a lack of consensus regarding the types of skills required of teachers, is it possible there is a lack of agreement regarding the specific tasks required of teachers as well? Eck et al. (2019) stated, ". . . literature regarding the specific human capital needed by secondary agricultural education teachers '. . . is lacking'" (p. 3).

HC acquisition is linked to proficiency in performing tasks (Gibbons & Waldman, 2004). Task-specific HC implies there is value in the skills associated with completing job-specific tasks (Gibbons & Waldman, 2004). Thus, tasks are central to job performance and skill acquisition (Autor et al., 2003; Autor & Handel, 2013). As such, tasks are central to the theoretical framework of the study. Garland (1985) defined task as "a body of work requiring mental and/or physical activity" (p. 346). In formal settings, tasks are often an individual's roles and responsibilities and can either be "self-selected or assigned by a superior or co-worker" (Garland, 1985, p. 346). Lewin (1951) posited that tasks create individual tension; therefore, resulting in cognitive or physical activity. Although the tasks associated with teaching SBAE can be inferred from the professional needs, challenges, and characteristics described in above sections, limited literature exists detailing the specific tasks associated with teaching SBAE. Identifying a comprehensive list of tasks will offer insight into the daily demands of SBAE teachers and provide contextualization for future research in the field.

Summary

Chapter II provided an overview of the literature base regarding the CTE System in the United States, SBAE in the United States, the structure of SBAE including classroom and laboratory instruction, FFA, and SAE, the expectations placed on SBAE teachers in the form of workload, professional needs, challenges facing teachers, and characteristics of effective teachers, and the use of Human Capital theory as the theoretical framework (Becker, 1964; Little, 2003; Shultz, 1971; Smith, 2010; Smylie, 1996). Although general tasks of SBAE teachers can be

inferred from the expectations described in this chapter, there is a need to establish a comprehensive list of specific tasks related to teaching SBAE.

CHAPTER III

METHODOLOGY

Chapter 3 explains the methods used to conduct the study, including criteria for selection of the Delphi panelists, research design, development of the instrument, and data analysis. The OSU Institutional Review Board approved the research and data collection methods necessary for conducting the study.

Purpose of the Study

The purpose of the study was to identify the tasks associated with the roles and responsibilities of SBAE teachers.

Research Objectives

Four objectives guided this study:

1. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction.
2. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding FFA advisement.
3. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding students' Supervised Agricultural Experiences (SAEs).

4. Determine the additional tasks associated with the professional roles and responsibilities of SBAE teachers aside from classroom and laboratory instruction, FFA, and SAEs.

Institutional Review Board

Federal regulation and Oklahoma State University institutional policy require all research studies involving human subjects be reviewed and approved carefully prior to initiation. The Oklahoma State University Institutional Review Board (IRB) ensures compliance with these procedures through a comprehensive process guided by ethical principles for research involving human subjects. This study was reviewed and approved by the IRB in accordance with these rules, and permission was granted to conduct the study on September 7, 2022. The IRB identifier for this study was IRB-22-347, and a copy of the approval is presented as Appendix A. Informed consent for all participants also was obtained per IRB requirements (see Appendix B).

Research Design

The Delphi method for building consensus was used to meet the study's objectives. Skulmoski et al. (2007) described the Delphi method as "an iterative process used to collect and distill the judgments of experts using a series of questionnaires interspersed with feedback" (p. 2). The Delphi method is considered a multiple-round approach to collecting data (Hsu & Sandford, 2007). Although it can involve numerous rounds to build consensus, "three iterations are often sufficient to collect the needed information and to reach a consensus in most cases" (Hsu & Sandford, 2007, p. 2), especially when a lack of empirical evidence exists on a particular topic (Barrios et al., 2021; Hsu & Sandford, 2007).

Consensus is a key component of the Delphi method and relies on anonymity, controlled feedback, and statistical response of the group studied (Dalkey, 1969; Linstone & Turoff, 1975; Rowe & Wright, 1999). Anonymity reduces the likelihood of one single, dominant voice influencing other panelists (Barrios et al., 2021), controlled feedback permits panelists to re-

evaluate their responses based on information provided by the researcher in each round (Linstone & Turoff, 1975), and statistical response allows for objective decision making between the various rounds regarding consensus of agreement (Dalkey, 1969). This is important because responses provided by panelists can change from one round to the next, especially when merging the panelists' opinions. Therefore, "the Delphi method is well suited as a consensus-building technique" (Barrios et al., 2021, p. 1).

The Delphi method is rooted in the work of Norman Dalkey and Olaf Helmer and originated during the late 1950s in the context of a U.S. military project for the RAND Corporation (Dalkey & Helmer, 1963). A need existed to develop a process for forecasting future events by combining controlled-opinion feedback with multiple questionnaires. Therefore, the Delphi method has been adapted to assist in transforming individual opinions into group consensus through multi-stage, carefully facilitated survey research techniques (Hasson et al., 2000). Even more appealing is the fact the Delphi method can be modified to address the needs of a specific study making it an appropriate, versatile, and high utility method in social science research (Adler & Ziglio, 1996).

Stitt-Gohdes and Crews (2004) stressed that selection of the panel of experts is among the most crucial aspects of the Delphi method. Study participants serving as experts should be those ". . . who are knowledgeable about current information and perceptions regarding the topic under investigation but are open-minded to the findings" (Stitt-Gohdes & Crews, 2004, pp. 60–61). A key to a successful expert panel selection is to rely on informed opinion rather than random selection (Stitt-Gohdes & Crews, 2004; Wicklein, 1993). Therefore, "Delphi subjects should be highly trained and competent within the specialized area of knowledge related to the target issue" (Hsu & Sandford, 2007, p. 3). Further, qualification criteria should be established prior to the selection of the panelists based on the population of interest and needs of the study (Hsu & Sandford, 2007). Criteria such as professional affiliations, common backgrounds, and prior

experiences are appropriate when considering and selecting a panel of experts (Stitt-Ghodes & Crews, 2004).

The Delphi method is no stranger to agricultural education research (Martin & Frick, 1998). Specifically, the Delphi method has been used for curriculum development (Camp & Sutphin, 1991; Chizari & Taylor, 1991; Frick, 1993; Frick et al., 1991; Harder et al., 2010; Saucier et al., 2012; Sutphin & Camp, 1990), evaluations and perceptions of SBAE (Blezek & Dillon, 1991; McCampbell & Stewart, 1992; Myers & Thompson, 2009; Simon et al., 2005; Tavernier & Hartley, 1994; Warner & Washburn, 2009), and determining research needs (Branan & Rohs, 1991; Buriak & Shinn, 1989, 1993; Rayfield & Croom, 2010) in agricultural education. Moreover, the Delphi Method also has been used to evaluate entry-level technical skills obtained by students through SAEs (Ramsey & Edwards, 2011, 2012), technical skills in animal science (Slusher et al., 2011), competencies of pre-service teachers (Conner & Roberts, 2013), characteristics of SBAE teachers (Easterly & Myers, 2017; Eck et al., 2019), and quality indicators of SAE and FFA (Jenkins & Kitchel, 2009), to name a few purposes for which the method was used.

Instrumentation

Linstone and Turoff (1975) described two versions of the modern Delphi method: the Delphi Exercise and the Delphi Conference. The Delphi Exercise consists of panelists answering questions on paper and returning their response to the research team for analysis for each round of the respective study. The Delphi Conference allows for electronic facilitation of each round of the study and enables researchers to gather data more quickly from the panelists (Linstone & Turoff, 1975). To expedite the process of gathering information and ensure ease of analysis, the Delphi Conference was used to conduct the current study. As such, the Tailored Design Method (TDM) was followed to reduce researcher bias and optimize response rates for our multiple rounds of

web-based instruments (Dillman et al., 2014). In addition, Dillman et al. (2014) suggested to "personalize all contacts, to the extent possible" (pp. 332–333). Following these protocols increases response rates and reduces error when using electronic instruments (Dillman et al., 2014).

Von der Gracht (2012) suggested the Delphi method can employ as many rounds as necessary to achieve consensus of agreement among panelists. Consensus in the context of the Delphi method is defined as a "pre-defined level of agreement" (Von der Gracht, 2012, p. 1527). A Delphi study typically ends once consensus of agreement is reached (Barrios et al., 2021; Von der Gracht, 2012). For this study, a three-round, modified Delphi method, as suggested by Hsu and Sandford (2007), was used to obtain expert opinion regarding the tasks associated with the roles and responsibilities of teaching SBAE. Throughout the three rounds, consensus among panelists regarding the identified tasks was refined, and a list of tasks was developed based on the respondents' consensus of agreement.

Validity and Reliability

Validity is "the development of sound evidence to demonstrate that the test interpretation matches its proposed use" (Creswell & Guetterman, 2019, p. 158). Content validity offers one way to determine whether the instrument measures what it is intended to measure (Creswell & Guetterman, 2019). Gay et al. (2006) suggested a group of content experts can determine the validity of the instrument's content. As such, the instruments used in this study were evaluated by a group of eight experts considered knowledgeable of social science research and SBAE.

These experts had more than 98 years of combined teaching experience in higher education and 52 years of teaching experience in SBAE. At the time of their review, six of the content experts served as teacher educators in agricultural education, and one was a statistician who specialized in survey research and instrument design. The panel of experts consisted of four

professors, one associate professor, two assistant professors, and one graduate student who was a former SBAE teacher and seeking an advanced degree in agricultural education at Oklahoma State University. In addition, five of the eight reviewers had used the Delphi method extensively in their own research. As such, these individuals were deemed knowledgeable of the subject area and worthy of serving as experts. These content experts reviewed the instrument for face and content validity (Gay et al., 2006). Their feedback was collected and slight modifications to the instrument were made regarding clarity, length, and the use of acronyms. For example, two of the four open-ended questions were revised for length, one item was revised regarding use of the acronym SAE, and another was revised to increase its clarity. The resulting instrument was considered valid for use in the study.

Similar to validity, establishing sufficient reliability is a vital imperative to address in instrument development. “Reliability means that scores from an instrument should be nearly the same or stable on repeated administrations of the instrument” (Creswell & Guetterman, 2019, p. 627). Privitera (2017) described reliability as the measure of internal consistency of an instrument which allows the researcher to determine the relationship between instrument items. This process allows the researcher to be confident the data collected would be consistent among participants if administered again, and it provides an indication of the consistency of the instrument (Creswell & Guetterman, 2019). Reliability in Delphi studies is dependent on maintaining a certain threshold of participants throughout the duration of the study. Dalkey et al. (1972) indicated 11 responses yielded a reliability coefficient of .70, and 13 responses are needed to establish a reliability coefficient of .90 within Delphi studies. Therefore, we sought to maintain a minimum of 13 experts who would consistently respond to each of our three rounds of data collection.

Population and Sample

The study's population of interest was agricultural education doctoral students enrolled in public universities in the United States during the fall semester of 2022. The frame for the study consisted of doctoral students in agricultural education identified by department heads of agricultural education academic units across the United States. We chose this population due to their unique perspective of SBAE and higher education in agricultural education. As recent, former, or current SBAE teachers, this population was identified as an appropriate group of potential Delphi panelists due to their knowledge of and competence in SBAE as well as their desire to pursue a terminal professional degree in the field. Their knowledge and understanding regarding the philosophy of SBAE through higher education coursework and responsibilities coupled with their SBAE teaching experience qualified them as unique experts in their field. Potential panelists were deemed qualified to participate in the study based on the following criteria:

1. Potential panelists were currently enrolled in a doctoral program (PhD or EdD) in agricultural education with aspirations of moving into the professoriate or advanced leadership positions.
2. Potential panelists were former or current SBAE teachers with a minimum of three years of SBAE teaching experience.
3. Potential panelists were "highly trained and competent within the specialized area of knowledge" (Hsu & Sandford, 2007, p. 3) regarding SBAE.

In addition, panelists' presumed expertise and experience regarding SBAE and teacher preparation were considered desirable characteristics. These criteria were selected due to representing competence in the profession, similar backgrounds, and prior teaching experience in

SBAE and were in accordance with recommendations from Hsu and Sandford (2007) and Stitt-Gohdes and Crews (2004).

In total, 22 universities were identified as offering a doctoral program in agricultural education – 19 as reported by AAAE in 2018 and three additional institutions implementing programs after 2018 (see Appendix C). An electronic message was sent to department heads of these programs on September 13, 2022, requesting the names and email addresses of agricultural education doctoral students enrolled in their programs. Thirteen universities (59.09%) responded, identifying a total of 40 doctoral students as potential Delphi panelists meeting the criteria for the study. Subsequent electronic messages were sent to panelists each round with a link to respective instruments requesting their participation in the study. In all, 23 (57.50%) of the initial 40 potential panelists responded to Round 1. Therefore, the 23 respondents were considered the panel of experts for the study. Twenty-two (95.65%) expert panelists responded to Round 2, and 20 (86.96%) expert panelists responded to Round 3. Because the response rates exceeded 13 participants per round, and because each round was comprised of the same participants who chose to be consistent in their responses to the three separate instruments, the study's results are assumed to be reliable (Dalkey et al., 1972).

Procedure

Round 1

The procedure began by developing a sample frame representative of the population of interest. Once the frame was determined, an initial electronic message was sent to the 40 identified potential panelists on September 29, 2022, describing the study and inviting them to participate (see Appendix D). A Qualtrics Survey link to the Round 1 Delphi instrument was included in the email. The message followed the TDM (Dillman et al., 2014) describing the

purpose and usefulness of the study and included the researcher's contact information, institutional logo, and described the limited response time of the instrument.

The Round 1 Delphi instrument sought to describe the panelists through the inclusion of 13 questions related to their personal and professional characteristics (see Appendix E):

Age: Participants were asked to identify their age in years. Responses were limited to numerical values.

Current teaching status: Participants were asked to identify whether they were currently teaching SBAE. Responses were limited to *Yes* or *No*.

Ethnicity: Participants were asked to identify their ethnicity with options consisting of *Hispanic or Latino*, *Not Hispanic or Latino*, or *I choose not to respond*.

Sex: Participants were asked to identify their sex with options consisting of *Male*, *Female*, or *I prefer not to respond*.

Most recent year teaching SBAE: Participants were asked to identify the year in which they most recently taught SBAE. Responses were limited to numerical values.

Number of SBAE teachers: Participants were asked to identify the number of SBAE teachers, including themselves, who taught in their most recent school's SBAE program. Responses were limited to numerical values.

Population of community: Participants were asked to identify the population of the community in which they most recently taught SBAE. Responses were limited to numerical values.

Population of school: Participants were asked to identify how many students were enrolled in the most recent school in which they taught SBAE. Responses were limited to numerical values.

Race: Participants were asked to identify their race with options consisting of *White*, *Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander*, or *Other*.

Size of SBAE program: Participants were asked to identify how many students were enrolled in the most recent SBAE program in which they taught. Responses were limited to numerical values.

State in which participants last taught: Participants were asked to identify the state in which they most recently taught SBAE. Responses were typed into a text box.

Teacher certification pathway: Participants were asked to identify their teacher certification pathway with options consisting of *Traditionally certified, Alternatively certified,* or *Emergency certified*.

Years of SBAE teaching experience: Participants were asked to identify how many years, including the current year (if applicable), they taught SBAE. Responses were limited to numerical values.

In addition to the personal and professional characteristic questions, the Round 1 instrument included the following four open-ended questions (see Appendix E):

1. What tasks are associated with the roles and responsibilities of a SBAE teacher regarding classroom and laboratory instruction in a typical year?
2. What tasks are associated with the roles and responsibilities of a SBAE teacher regarding FFA advisement in a typical year?

3. What tasks are associated with the roles and responsibilities of a SBAE teacher regarding supervised agricultural experiences (SAEs) in a typical year?
4. What additional tasks are associated with the roles and responsibilities of a SBAE teacher in a typical year aside from classroom/laboratory instruction, FFA, and SAE?

Panelists were asked to type as many responses as they deemed appropriate for each of these questions. Per the recommendation of Dillman et al. (2014), after initial responses were received (n = 18), a follow-up email was sent to the remaining panelists on October 4, 2022, to increase the response rate (see Appendix F). This reminder resulted in five additional responses for a total of 23 responses for the Round 1 instrument.

Original tasks identified by panelists in Round 1 were compiled and analyzed using the constant comparison procedure which is "an inductive data analysis procedure of generating and connecting categories by comparing incidents in the data to other incidents, incidents to categories, and categories to other categories" (Creswell & Guetterman, 2019, p. 445). Raw data from respondents were compared and categorized according to indicators (Glaser, 1978) and grouped into codes using an Excel spreadsheet. Codes were then compared to each other and combined into categories or themes. These emerging themes were used to group data in later rounds of the Delphi study. The constant comparison procedure, as employed by this study, "eliminates redundancy and develops evidence for categories" (Creswell & Guetterman, 2019, p. 446). Therefore, duplicated tasks were removed, and the resulting unduplicated tasks were used in Round 2 of the study.

Round 2

Round 2 of the Delphi study sought to establish consensus of agreement among panelists (Barrios et al., 2021). An electronic message was sent on November 22, 2022, to the 23 panelists responding to Round 1 with a Qualtrics Survey link to the Round 2 instrument (see Appendix G). Tasks identified in Round 1 were presented to panelists to assess their perceived level of agreement for each task (see Appendix H). Panelists were asked to indicate their level of agreement on a four-point agreement scale *(1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree)*. In addition, panelists were allowed the opportunity to provide additional tasks not included in the list of unduplicated tasks. After initial responses were received (n = 13), a follow-up electronic message was sent to the remaining panelists on November 29, 2022, per the recommendation of Dillman et al. (2014), to increase the response rate (see Appendix I). This reminder message resulted in nine additional responses for a total of 22 responses for the Round 2 instrument.

A level of agreement should be established *a priori* to mitigate potential researcher bias (Diamond et al., 2014). An 80.00% level of agreement was selected to reach consensus, indicating tasks receiving a score of 3 *(Agree)* or 4 *(Strongly Agree)* by 80.00% of panelists were retained as tasks achieving consensus of agreement (Diamond et al., 2014). Tasks achieving 51.00% to 79.99% agreement were retained for use in Round 3. Tasks achieving less than 51.00% agreement among panelists were considered to have not reached consensus of agreement and were removed from the study.

Round 3

Round 3 of the study sought to refine consensus of agreement among panelists (Brady, 2015). An electronic message was sent on December 12, 2022, to the 22 panelists responding to Round 2 of the study with a Qualtrics Survey link to the Round 3 instrument (see Appendix J).

Tasks identified in Round 2 achieving a level of agreement from 51.00% to 79.99% were again presented to panelists to continue developing consensus of agreement for each task (Buriak & Shinn, 1989) (see Appendix K). Panelists were asked to indicate whether they agreed the task should be included by selecting either 2 for *Yes* or 1 for *No*. In addition, panelists were asked to provide rationale for their choice. After initial responses were received (n = 16), a follow-up electronic message was sent to the remaining panelists on December 20, 2022 (see Appendix L). This reminder resulted in an additional four responses for a total of 20 responses for the Round 3 instrument.

The 80.00% level of agreement identified *a priori* was also used for Round 3 analysis. Tasks receiving this level of agreement were considered to have reached consensus of agreement among panelists and were included in the final list of tasks associated with teaching SBAE. Tasks achieving a level of agreement of less than 80.00% failed to reach consensus of agreement and were removed from the study. Tasks achieving the 80.00% level of agreement in Round 2 and Round 3 were combined to form a final list of tasks.

Data Analysis

Data were analyzed using Qualtrics and the Statistical Package for Social Sciences (SPSS) Version 28 software. The selected personal and professional characteristics of panelists were analyzed through Qualtrics using modes of central tendency, including frequencies and percentages (Buriak & Shinn, 1989). Data from Rounds 2 and 3 were analyzed using the frequency distribution valid percentage approach (Buriak & Shinn, 1989). This approach allowed us to determine consensus of agreement for tasks and assisted in determining which items would be retained or removed from the study. Descriptive statistics, i.e., mean scores, standard deviations, frequencies, and percentages, were calculated for all tasks in Rounds 2 and 3.

CHAPTER IV

FINDINGS

Chapter IV presents the findings of the study by describing the personal and professional characteristics of Delphi panelists as well as the tasks associated with the roles and responsibilities of teaching school-based agricultural education (SBAE). The Delphi approach guided data collection, and items were analyzed to determine consensus of agreement among the study's panelists.

Purpose of the Study

The purpose of the study was to identify the tasks associated with the roles and responsibilities of SBAE teachers.

Research Objectives

Four objectives guided this study:

1. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction.
2. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding FFA advisement.
3. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding students' Supervised Agricultural Experiences (SAEs).

4. Determine the additional tasks associated with the professional roles and responsibilities of SBAE teachers aside from classroom and laboratory instruction, FFA, and SAEs.

Description of the Delphi Panel of Experts

The study consisted of a panel of experts identified by Agricultural Education program leaders at public universities in the United States. Panelists were determined to be experts if they were enrolled in an agricultural education doctoral program and possessed at least three years of SBAE teaching experience. A total of 40 doctoral students were identified as potential panelists from 13 universities. Of the 40 potential panelists, 23 (57.50%) responded to the request to participate in the study. Table 1 displays the personal and professional characteristics of the Delphi panelists.

The panel consisted of experts having taught in 16 different states in SBAE programs ranging from 45 to 700 students enrolled with approximately one-half of the respondents teaching 150 or fewer students. Nine (39.13%) panelists were male, and 14 (60.87%) were female. Twenty-one panelists (91.30%) were white, and 22 (95.65%) were not Hispanic or Latino. Five (22.00%) were currently teaching SBAE, and 21 (91.30%) had taught SBAE in the past four years. The average number of years of experience teaching SBAE was 8.39 years (range of 3 to 21 years). More than 95% ($f = 22$) were traditionally certified. Sixteen respondents (69.56%) were from 25 to 35 years of age. Thirteen panelists (56.52%) taught in communities with a population of fewer than 10,000 people (see Table 1).

Table 1

Selected Personal and Professional Characteristics of Delphi Panel of Experts (N = 23)

Characteristic	*f*	%
Age		
25 to 30	7	30.43
31 to 35	9	39.13
36 to 40	3	13.04

41 to 45	3	13.04
46 to 50	1	4.35
Currently teaching		
Yes	5	21.74
No	18	78.26
Ethnicity		
Not Hispanic or Latino	22	95.65
Hispanic or Latino	1	4.35
Most recently taught community size regarding population		
Less than 10,000	13	56.52
10,001 to 50,000	6	26.09
50,001 to 100,000	2	8.70
Greater than 100,000	2	8.70
Most recently taught SBAE program size regarding student enrollment		
50 or fewer	2	8.70
51 to 100	4	17.39
101 to 150	6	26.09
151 to 200	5	21.74
201 to 250	0	0.00
251 to 300	2	8.70
301 to 350	1	4.35
351 to 400	0	0.00
401 to 450	1	4.35
451 to 500	0	0.00
501 or more	2	8.70
Most recently taught school size regarding student population		
500 or fewer	11	47.83
501 to 1000	5	21.74
1001 to 1500	1	4.35
1501 to 2000	4	17.39
2001 to 2500	0	0.00
2501 to 3000	0	0.00
3001 to 3500	1	4.35
3501 or more	1	4.35
Most recent year in which SBAE was taught		
2022	8	34.78
2021	6	26.09
2020	2	8.70
2019	3	13.04
2018	2	8.70
2017	0	0.00
2016	1	4.35
2015	0	0.00

2014	1	4.35
Number of SBAE teachers in most recent program		
1	10	43.48
2	6	26.09
3	4	17.39
4	1	4.35
5	0	0.00
6	0	0.00
7	1	4.35
8	1	4.35
Race		
White	21	91.30
Black or African American	1	4.35
Other	1	4.35
Sex		
Male	9	39.13
Female	14	60.87
Prefer not to answer	0	0.00
State last taught		
Texas	4	17.39
Florida	2	8.70
Louisiana	2	8.70
Minnesota	2	8.70
Missouri	2	8.70
Arizona	1	4.35
California	1	4.35
Illinois	1	4.35
Iowa	1	4.35
Kentucky	1	4.35
Nebraska	1	4.35
North Carolina	1	4.35
Ohio	1	4.35
Oklahoma	1	4.35
South Dakota	1	4.35
Wisconsin	1	4.35
Teacher certification pathway		
Traditionally certified	22	95.65
Alternatively certified	1	4.35
Years of total SBAE teaching experience		
3 to 5	9	39.13
6 to 8	6	26.09
9 to 11	3	13.04
12 to 14	2	8.70

15 to 17	1	4.35
18 to 20	1	4.35
21 or more	1	4.35

Findings for Objective One

Tasks Associated with the Roles and Responsibilities of SBAE Teachers Regarding Classroom and Laboratory Instruction

Round 1

Panelists identified 265 original tasks associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction in a typical year. Duplicated tasks were removed, and 84 tasks classified into 14 themes remained for consideration in Round 2. Table 2 includes the tasks identified in Round 1 of the Delphi study. Themes identified in Round 1 included Authentic Skill Development (*f* = 9), Classroom Management (*f* = 3), Clerical Work (*f* = 8), Inclusive Teaching (*f* = 8), Instructional Design (*f* = 6), Lesson Preparation (*f* = 9), Lifelong Learning (*f* = 6), Relationships and Rapport (*f* = 9), School Safety (*f* = 4), Student Evaluation (*f* = 2), Student Motivation (*f* = 2), Teaching and Instruction (*f* = 7), Teaching and Learning Resources (*f* = 10), and Teaching and Learning Supplies (*f* = 2).

In corresponding order to the above-mentioned themes, the most common tasks for each included: Assist students in obtaining industry-based certification (IBC) (*f* = 5, 1.89%), Manage the learning environment (*f* = 20, 7.55%), Manage classroom budget (*f* = 6, 2.26%), Follow student individualized educational plan (IEP)/504 modifications (*f* = 4, 1.51%), Develop instructional curriculum (*f* = 9, 3.40%), Prepare daily lesson plans (*f* = 14, 5.28%), Attend professional development (*f* = 6, 2.26%), Communicate with students' parents/guardians (*f* = 6, 2.26%), Follow safety/security protocol (*f* = 2, 0.75%), Grade student work (*f* = 14, 5.28%),

Motivate students to learn (*f* = 3, 1.13%), Teach students across all AFNR pathways (*f* = 14, 5.28%), Manage teaching and learning facilities (*f* = 7, 2.64%), and Obtain classroom and laboratory supplies (*f* = 11, 4.15%).

Table 2

Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Classroom and Laboratory Instruction in a typical year?" (N = 23)

Tasks	*f*	%
Authentic Skill Development		
Assist students in obtaining industry-based certification (IBC)	5	1.89
Obtain industry-based certification (IBC) for teachers	2	0.75
Provide content area expertise	2	0.75
Provide academic service-learning opportunities	1	0.38
Provide hands-on learning experiences	1	0.38
Provide inquiry-based learning opportunities for all courses	1	0.38
Stay current with industry trends	1	0.38
Teach laboratory skills	1	0.38
Teach students practical skills	1	0.38
Classroom Management		
Manage the learning environment	20	7.55
Provide clear instruction	1	0.38
Vary instruction	1	0.38
Clerical Work		
Manage classroom budget	6	2.26
Write grants	4	1.51
Complete required school-wide paperwork	3	1.13
Secure funding for the learning environment	3	1.13
Enter student grades	2	0.75
Manage student record books	1	0.38
Submit instructional lesson plans	1	0.38
Use learning management system (LMS) competently	1	0.38
Inclusive Teaching		
Follow student individualized educational plan (IEP)/504 modifications	4	1.51
Create an inclusive learning environment	3	1.13
Attend individualized educational plan (IEP)/504 meetings	2	0.75
Create culturally competent students	2	0.75
Ensure equitable student access to resources	2	0.75

Scaffold content to meet individual students' needs	2	0.75
Engage students from non-agricultural backgrounds	1	0.38
Establish a community/safe space in the classroom	1	0.38
Instructional Design		
Develop instructional curriculum	9	3.40
Create a curriculum map across AFNR pathways	7	2.64
Align curriculum to appropriate standards	3	1.13
Apply curriculum concepts to real-world situations/scenarios	1	0.38
Develop instructional visual aids	1	0.38
Modify existing curriculum	1	0.38
Lesson Preparation		
Prepare daily lesson plans	14	5.28
Organize teaching materials/resources	11	4.15
Prepare for field trips	5	1.89
Prepare for guest speakers	3	1.13
Align lessons with AFNR standards	2	0.75
Manage time	2	0.75
Prepare facilities for instruction	2	0.75
Prepare lesson plans for substitute teachers	2	0.75
Practice labs ahead of time	1	0.38
Lifelong Learning		
Attend professional development	6	2.26
Implement feedback from administrative evaluations	3	1.13
Collaborate with other agricultural education teachers in Professional Learning Communities (PLC)	1	0.38
Coordinate with all school staff to facilitate learning	1	0.38
Develop leadership abilities	1	0.38
Relationships and Rapport		
Communicate with students' parents/guardians	6	2.26
Build relationships with students	2	0.75
Build relationships with the community	2	0.75
Communicate with advisory council	2	0.75
Coordinate community volunteers	2	0.75
Promote program	2	0.75
Serve as mentor for students	2	0.75
Communicate with administrators	1	0.38
Communicate with students	1	0.38
School Safety		
Follow safety/security protocol	2	0.75
Manage laboratory safety	2	0.75
Model safety	1	0.38
Serve as an armed school guardian to provide campus security	1	0.38
Student Evaluation		

Grade student work (i.e., summative evaluations, outcome assessments, and standardized tests)	14	5.28
Assess student learning (i.e., formative assessments, feedback, and check for understanding)	10	3.77
Student Motivation		
Motivate students to learn	3	1.13
Recruit students to program	1	0.38
Teaching and Instruction		
Teach students across all AFNR pathways	14	5.28
Serve as the agricultural content expert	3	1.13
Supervise students in the laboratory	3	1.13
Adapt content for hybrid instruction	1	0.38
Follow school instructional policies	1	0.38
Serve on various committees	1	0.38
Take students on educational field trips	1	0.38
Teaching and Learning Resources		
Manage teaching and learning facilities (i.e., classroom, shop, greenhouse, land lab, and project facility)	7	2.64
Maintain school project center (i.e., land lab, school farm, and ag barn)	4	1.51
Conduct annual inventory of equipment/supplies	2	0.75
Maintain school equipment	2	0.75
Manage greenhouse	2	0.75
Repair school equipment	2	0.75
Handle laboratory equipment	1	0.38
Landscape school grounds	1	0.38
Manage animals housed at school facilities	1	0.38
Purchase laboratory equipment	1	0.38
Teaching and Learning Supplies		
Obtain classroom/laboratory supplies	11	4.15
Maintain classroom/laboratory supplies inventory	2	0.75
Total	265	100.00

Note. *f* indicates the number of original statements provided by panelists which were reduced to a single, unduplicated task; % indicates the task's percentage out of total tasks identified in Round 1 of the study.

Round 2

The same set of panelists reached consensus of agreement (i.e., 80.00% or greater) on a scale of 1 (*Strongly Disagree*) to 4 (*Strongly Agree*) for 72 of 84 tasks (85.70%) associated with teaching SBAE in the area of classroom and laboratory instruction in a typical year. Table 3

includes the mean (*M*) and standard deviation (*SD*) of item responses (with a lower value indicating more perceived disagreement and a higher value indicating a more perceived agreement) and the percent of agreement for tasks associated with teaching SBAE in the area of classroom and laboratory instruction. Percent of agreement is defined as the percentage of panelists selecting 3 (*Agree*) or 4 (*Strongly Agree*) in response to the item. Of the tasks achieving consensus of agreement, 45 reached 100.00% agreement among panelists. Examples of tasks with the highest mean score per theme included: Provide hands-on learning experiences (*M* = 3.95, *SD* = 0.21), Manage the learning environment (*M* = 3.86, *SD* = 0.35), Enter student grades (*M* = 3.59, *SD* = 0.50), Create an inclusive learning environment (*M* = 3.64, *SD* = 0.49), Apply curriculum concepts to real-world situations/scenarios (*M* = 3.91, *SD* = 0.29), Manage time (*M* = 3.86, *SD* = 0.35), Attend professional development (*M* = 3.68, *SD* = 0.57), Build relationships with students (*M* = 3.95, *SD* = 0.21), Follow safety/security protocol (*M* = 3.86, *SD* = 0.35), Assess student learning (*M* = 3.86, *SD* = 0.35), Motivate students to learn (*M* = 3.82, *SD* = 0.40), and Recruit students to program (*M* = 3.82, *SD* = 0.40), Supervise students in the laboratory (*M* = 3.77, *SD* = 0.43), Handle laboratory equipment (*M* = 3.59, *SD* = 0.50) and Purchase laboratory equipment (*M* = 3.59, *SD* = 0.50), and Maintain classroom/laboratory (*M* = 3.55, *SD* = 0.51). Panelists also provided additional tasks not included in those presented for agreement (see Appendix M).

Table 3

Consensus of Agreement for Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Classroom and laboratory Instruction in a typical year?" (N = 22)

Task	*M*	*SD*	% Agreement
Authentic Skill Development			
Provide hands-on learning experiences	3.95	0.21	100.00
Teach students practical skills	3.91	0.29	100.00
Teach laboratory skills	3.77	0.43	100.00
Stay current with industry trends	3.68	0.48	100.00
Provide content area expertise	3.64	0.49	100.00

Provide inquiry-based learning opportunities for all courses	3.59	0.50	100.00
Provide academic service-learning opportunities	3.23	0.69	86.36
Assist students in obtaining industry-based certification (IBC)	3.18	0.66	86.36
Obtain industry-based certification (IBC) for teachers	2.68	0.84	63.64[a]
Classroom Management			
Manage the learning environment	3.86	0.35	100.00
Provide clear instruction	3.82	0.40	100.00
Vary instruction	3.59	0.50	100.00
Clerical Work			
Enter student grades	3.59	0.50	100.00
Complete required school-wide paperwork	3.45	0.60	95.45
Use learning management system (LMS) competently	3.36	0.58	95.45
Manage classroom budget	3.50	0.67	90.91
Manage student record books	3.27	0.70	86.36
Submit instructional lesson plans	2.91	0.81	81.82
Write grants	3.05	0.79	72.73[a]
Secure funding for the learning environment	2.91	1.02	63.64[a]
Inclusive Teaching			
Create an inclusive learning environment	3.82	0.40	100.00
Scaffold content to meet individual students' needs	3.82	0.40	100.00
Follow student individualized educational plan (IEP)/504 modifications	3.77	0.43	100.00
Engage students from non-agricultural backgrounds	3.77	0.43	100.00
Create culturally competent students	3.68	0.48	100.00
Ensure equitable student access to resources	3.68	0.48	100.00
Establish a community/safe space in the classroom	3.68	0.48	100.00
Attend individualized educational plan (IEP)/504 meetings	3.64	0.49	100.00
Instructional Design			
Apply curriculum concepts to real-world situations/scenarios	3.91	0.29	100.00
Modify existing curriculum	3.68	0.48	100.00
Align curriculum to appropriate standards	3.41	0.50	100.00
Develop instructional visual aids	3.36	0.58	95.45
Develop instructional curriculum	3.32	0.57	95.45
Create a curriculum map across AFNR pathways	3.00	0.69	77.27[a]
Lesson Preparation			

Manage time	3.86	0.35	100.00
Prepare facilities for instruction	3.73	0.46	100.00
Organize teaching materials/resources	3.59	0.50	100.00
Prepare for guest speakers	3.59	0.50	100.00
Prepare lesson plans for substitute teachers	3.59	0.50	100.00
Align lessons with AFNR standards	3.50	0.51	100.00
Prepare for field trips	3.59	0.60	95.45
Practice labs ahead of time	3.23	0.69	86.36
Prepare daily lesson plans	3.36	0.79	81.82
Lifelong Learning			
Attend professional development	3.68	0.57	95.45
Collaborate with other agricultural education teachers in Professional Learning Communities (PLC)	3.59	0.59	95.45
Implement feedback from administrative evaluations	3.27	0.63	90.91
Develop leadership abilities	3.50	0.74	86.36
Coordinate with all school staff to facilitate learning	2.91	0.75	77.27[a]
Relationships and Rapport			
Build relationships with students	3.95	0.21	100.00
Communicate with students	3.86	0.35	100.00
Promote program	3.73	0.46	100.00
Serve as mentor for students	3.73	0.46	100.00
Build relationships with the community	3.59	0.50	100.00
Communicate with administrators	3.59	0.50	100.00
Communicate with students' parents/guardians	3.59	0.50	100.00
Communicate with advisory council	3.36	0.58	95.45
Coordinate community volunteers	3.23	0.61	90.91
School Safety			
Follow safety/security protocol	3.86	0.35	100.00
Model safety	3.82	0.40	100.00
Manage laboratory safety	3.77	0.43	100.00
Serve as an armed school guardian to provide campus security	1.68	0.89	18.18[b]
Student Evaluation			
Assess student learning (i.e., formative assessments, feedback, and check for understanding)	3.86	0.35	100.00
Grade student work (i.e., summative evaluations, outcome assessments, and standardized tests)	3.64	0.58	95.45
Student Motivation			
Motivate students to learn	3.82	0.40	100.00

Recruit students to program	3.82	0.40	100.00
Teaching and Instruction			
Supervise students in the laboratory	3.77	0.43	100.00
Follow school instructional policies	3.50	0.51	100.00
Take students on educational field trips	3.41	0.59	95.45
Teach students across all AFNR pathways	3.32	0.78	95.45
Serve as the agricultural content expert	3.18	0.59	90.91
Serve on various committees	2.77	0.81	63.64[a]
Adapt content for hybrid instruction	2.64	0.90	54.55[a]
Teaching and Learning Resources			
Handle laboratory equipment	3.59	0.50	100.00
Purchase laboratory equipment	3.59	0.50	100.00
Manage teaching and learning facilities (i.e., classroom, shop, greenhouse, land lab, and project facility)	3.82	0.50	95.45
Conduct annual inventory of equipment/supplies	3.55	0.60	95.45
Manage greenhouse	3.41	0.80	90.91
Maintain school equipment	2.95	0.84	81.82
Manage animals housed at school facilities	3.32	1.04	77.27[a]
Maintain school project center (i.e., land lab, school farm, and ag barn)	3.27	1.16	72.73[a]
Repair school equipment	2.41	0.91	50.00[b]
Landscape school grounds	1.86	0.89	22.73[b]
Teaching and Learning Supplies			
Maintain classroom/laboratory supplies inventory	3.55	0.51	100.00
Obtain classroom/laboratory supplies	3.41	0.59	95.45

Note. Responses utilized a 4-point scale 1 (*Strongly Disagree*) to 4 (*Strongly Agree*). Smaller mean (M) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes 51.00% to 79.99% consensus of agreement; [b]Denotes less than 51.00% consensus of agreement.

Nine statements reached a level of agreement from Round 2 between 51.00% and 79.99%, advancing to Round 3 for consideration by the panelists. Round 3 utilized a dichotomous response for agreement (i.e., *Yes* or *No*). Three tasks failed to reach at least 51.00% agreement; therefore, they were eliminated from the study.

Round 3

Of the nine tasks achieving between 51.00% and 79.99% agreement in Round 2, panelists reached consensus of agreement (80.00% of panelists or greater selecting *Yes*) for two items (see Table 4): Adapt content for hybrid instruction (M = 1.80, SD = 0.41), and Serve on various committees (M = 1.80, SD = 0.41). Both of these tasks comprised the Teaching and Instruction theme. Seven tasks failed to reach consensus of agreement and were eliminated from the study. In the area of Authentic Skill Development, Obtain industry-based certification (IBC) for teachers (M = 1.55, SD = 0.51) reached 55.00% agreement and was eliminated from the study. Two tasks were eliminated for Clerical Work: Secure funding for the learning environment (M = 1.75, SD = 0.44), and Write grants (M = 1.70, SD = 0.47). One task was eliminated from the area of Instructional Design: Create curriculum map across AFNR pathways (M = 1.75, SD = 0.44). One task was eliminated from Lifelong Learning: Coordinate with all school staff to facilitate learning (M = 1.75, SD = 0.44), and two tasks were eliminated from Teaching and Learning Resources: Maintain school project center (M = 1.70, SD = 0.47), and Manage animals housed at school facilities (M = 1.70, SD = 0.47). Table 4 displays the consensus of agreement for tasks carried forward from Round 2. Panelists also provided their rationale for selecting *No* for certain tasks (see Appendix N).

Table 4

Final Consensus of Agreement for Tasks Receiving between 51.00% to 79.99% Agreement in Round Two by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Classroom and laboratory Instruction in a typical year?" (N = 20)

Tasks	*M*	*SD*	% Agreement
Authentic Skill Development			
Obtain industry-based certification (IBC) for teachers	1.55	0.51	55.00[a]
Clerical Work			
Secure funding for the learning environment	1.75	0.44	75.00[a]
Write grants	1.70	0.47	70.00[a]

Instructional Design			
Create a curriculum map across AFNR pathways	1.75	0.44	75.00[a]
Lifelong Learning			
Coordinate with all school staff to facilitate learning	1.75	0.44	75.00[a]
Teaching and Instruction			
Adapt content for hybrid instruction	1.80	0.41	80.00
Serve on various committees	1.80	0.41	80.00
Teaching and Learning Resources			
Maintain school project center (i.e., land lab, school farm, and ag barn)	1.70	0.47	70.00[a]
Manage animals housed at school facilities	1.70	0.47	70.00[a]

Note. Mean scores in Round 3 based on responses to *Yes* (2) or *No* (1) questions. Smaller mean (*M*) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes consensus of agreement less than 80.00%

Final Analysis

Tasks achieving at least an 80.00% consensus of agreement in both Round 2 (72 of 84 tasks) and Round 3 (2 of 9 tasks) were compiled into a final list of tasks associated with teaching SBAE in classroom and laboratory instruction. In total, 74 tasks in 14 themes, as determined by the authors, reached consensus of agreement. Table 5 displays the final list of tasks associated with teaching SBAE in classroom and laboratory instruction. Authentic Skill Development had 88.89% (*f* = 8) of tasks in the theme reach consensus. Classroom Management had 100.00% (*f* = 3) of tasks in the theme reach consensus. Clerical Work had 75.00% (*f* = 6) of tasks in the theme reach consensus. Inclusive Teaching had 100.00% (*f* = 8) of tasks in the theme reach consensus. Instructional Design had 83.33% (*f* = 5) of tasks in the theme reach consensus. Lesson Preparation had 100.00% (*f* = 9) of tasks in the theme reach consensus. Lifelong Learning had 66.67% (*f* = 4) of tasks in the theme reach consensus. Relationships and Rapport had 100.00% (*f* = 9) of tasks in the theme reach consensus. School Safety had 75.00% (*f* = 3) of tasks in the theme reach consensus. Student Evaluation had 100.00% (*f* = 2) of tasks in the theme reach consensus. Student Motivation had 100.00% (*f* = 2) of tasks in the theme reach consensus. Teaching and Instruction had 100.00% (*f* = 7) of tasks in the theme reach consensus. Teaching

and Learning Resources had 60.00% (*f* = 6) of tasks in the theme reach consensus. Teaching and Learning Supplies had 100.00% (*f* = 2) of tasks in the theme reach consensus (see Table 5).

Table 5

Final Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Classroom and laboratory Instruction in a typical year?"

Tasks
Authentic Skill Development
Assist students in obtaining industry-based certification (IBC)
Provide academic service-learning opportunities
Provide content area expertise
Provide hands-on learning experiences
Provide inquiry-based learning opportunities for all courses
Stay current with industry trends
Teach laboratory skills
Teach students practical skills
Classroom Management
Manage the learning environment
Provide clear instruction
Vary instruction
Clerical Work
Complete required school-wide paperwork
Enter student grades
Manage classroom budget
Manage student record books
Submit instructional lesson plans
Use learning management system (LMS) competently
Inclusive Teaching
Attend individualized educational plan (IEP)/504 meetings
Create an inclusive learning environment
Create culturally competent students
Engage students from non-agricultural backgrounds
Ensure equitable student access to resources
Establish a community/safe space in the classroom
Follow student individualized educational plan (IEP)/504 modifications
Scaffold content to meet individual students' needs
Instructional Design
Align curriculum to appropriate standards
Apply curriculum concepts to real-world situations/scenarios

- Develop instructional curriculum
- Develop instructional visual aids
- Modify existing curriculum

Lesson Preparation
- Align lessons with AFNR standards
- Manage time
- Organize teaching materials/resources
- Practice labs ahead of time
- Prepare daily lesson plans
- Prepare facilities for instruction
- Prepare for field trips
- Prepare for guest speakers
- Prepare lesson plans for substitute teachers

Lifelong Learning
- Attend professional development
- Collaborate with other agricultural education teachers in Professional Learning Communities (PLC)
- Develop leadership abilities
- Implement feedback from administrative evaluations

Relationships and Rapport
- Build relationships with students
- Build relationships with the community
- Communicate with administrators
- Communicate with advisory council
- Communicate with students
- Communicate with students' parents/guardians
- Coordinate community volunteers
- Promote program
- Serve as mentor for students

School Safety
- Follow safety/security protocol
- Manage laboratory safety
- Model safety

Student Evaluation
- Assess student learning (i.e., formative assessments, feedback, and check for understanding)
- Grade student work (i.e., summative evaluations, outcome assessments, and standardized tests)

Student Motivation
- Motivate students to learn
- Recruit students to program

Teaching and Instruction
- Adapt content for hybrid instruction

Follow school instructional policies
Serve as the agricultural content expert
Serve on various committees
Supervise students in the laboratory
Take students on educational field trips
Teach students across all AFNR pathways
Teaching and Learning Resources
Conduct annual inventory of equipment/supplies
Handle laboratory equipment
Maintain school equipment
Manage greenhouse
Manage teaching and learning facilities (i.e., classroom, shop, greenhouse, land lab, and project facility)
Purchase laboratory equipment
Teaching and Learning Supplies
Maintain classroom/laboratory supplies inventory
Obtain classroom/laboratory supplies

Findings for Objective Two

Tasks Associated with the Roles and Responsibilities of SBAE Teachers Regarding FFA Advisement

Round 1

Panelists identified 296 original tasks associated with the roles and responsibilities of a SBAE teacher regarding FFA advisement in a typical year. Duplicated tasks were removed, and 99 tasks in 13 themes remained for consideration in Round 2. Table 6 identifies the tasks related to FFA advisement in a typical year identified in Round 1 of the Delphi study. Themes identified in Round 1 included Advisor Expectations ($f = 6$), Awards and Applications ($f = 9$), Chapter Advisement ($f = 27$), Clerical Work ($f = 19$), Community Engagement ($f = 11$), Competitive Student Events ($f = 6$), Fundraising ($f = 2$), Hospitality ($f = 1$), Student Conventions, Conferences, and Camps ($f = 5$), Student Recognition ($f = 3$), Student Relations ($f = 3$), Student Transportation ($f = 2$), and Supervised Agricultural Experiences ($f = 5$).

In corresponding order to the above-mentioned themes, the most common tasks for each included: Serve on various FFA committees (*f* = 2, 0.68%), Assist students in developing proficiency award applications (*f* = 8, 2.70%), Develop chapter Program of Activities (*f* = 15, 5.07%), Plan chapter trips (*f* = 9, 3.04%), Manage alumni relations (*f* = 5, 1.69%), Prepare students for Career and Leadership Development Events (*f* = 28, 9.46%), Raise funds for FFA chapter (*f* = 14, 4.73%), Cook food for FFA events (*f* = 2, 0.68%), Plan trip to FFA convention (*f* = 4, 1.35%), Plan FFA chapter banquet (*f* = 8, 2.70%), Serve as mentor for FFA chapter members (*f* = 1, 0.34%), Transport students to FFA events (*f* = 9, 3.04%), and Assist students in keeping records (*f* = 3, 1.01%).

Table 6

Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding FFA advisement in a typical year?" (N = 23)

Tasks	*f*	%
Advisor Expectations		
Serve on various FFA committees	2	0.68
Host FFA contests	1	0.34
Judge FFA contests	1	0.34
Participate in professional organizations (i.e., NAAE and state agricultural education teacher associations)	1	0.34
Attend state FFA degree review	1	0.34
Attend professional development	1	0.34
Awards and Applications		
Assist students in developing proficiency award applications	8	2.70
Assist students in developing state degree applications	3	1.01
Assist students in developing American degree applications	2	0.68
Assist students in developing chapter degree applications	1	0.34
Assist students in developing National Chapter award applications	1	0.34
Assist students in developing star award applications	1	0.34
Edit student award applications	1	0.34
Motivate students to apply for awards	1	0.34
Assist students in applying for scholarships	1	0.34
Chapter Advisement		
Develop chapter Program of Activities	15	5.07

Provide leadership training for chapter officers	10	3.38
Organize chapter meetings	6	2.03
Plan FFA events	6	2.03
Oversee the election of FFA chapter officer team	5	1.69
Manage FFA officer team	5	1.69
Plan chapter officer retreat	3	1.01
Serve as FFA advisor	3	1.01
Promote FFA Chapter	2	0.68
Provide leadership training for chapter members	2	0.68
Recruit future FFA members	2	0.68
Manage FFA official dress materials	2	0.68
Organize FFA officer meetings	2	0.68
Resolve conflicts between FFA members	2	0.68
Delegate chapter tasks to members	2	0.68
Conduct annual review of FFA chapter	2	0.68
Serve as FFA advisor above chapter level	2	0.68
Manage service projects	1	0.34
Manage student-teacher relationships regarding missing classwork	1	0.34
Attend chapter meetings	1	0.34
Provide retention activities for FFA members	1	0.34
Assist FFA officer team with meetings	1	0.34
Coordinate chapter chaos	1	0.34
Motivate students to participate in FFA activities	1	0.34
Budget for chapter Program of Activities	1	0.34
Provide agricultural literacy events	1	0.34
Teach FFA unit to all freshmen	1	0.34
Clerical Work		
Plan chapter trips (i.e., field trips, competitions, camps, conferences)	9	3.04
Register students for events/contests	8	2.70
Complete the chapter roster along with dues/fees	6	2.03
Book lodging for chapter events	4	1.35
Purchase supplies/materials for chapter events and activities	4	1.35
Complete required school-wide paperwork (i.e., travel requests, POs, and annual reports)	4	1.35
Secure transportation for organizational events	2	0.68
Write letters of recommendation	2	0.68
Establish a charter for the FFA chapter	1	0.34
Develop chapter newsletter	1	0.34
Monitor student grades for eligibility to leave school	1	0.34
Work with program report forms	1	0.34
Complete nominations for livestock exhibition	1	0.34

Complete entries for livestock exhibition	1	0.34
Recruit volunteers to work FFA events	1	0.34
Plan meetings	1	0.34
Gain school/administration support/approval	1	0.34
Submit student contest materials (i.e., ag issues portfolio, statements of originality, and agriscience fair reports)	1	0.34
Complete state/national mandated paperwork	1	0.34
Community Engagement		
Manage alumni relations	5	1.69
Volunteer for community service activities	4	1.35
Engage with local community	3	1.01
Foster connections in local community	2	0.68
Communicate with students' parents/guardians	2	0.68
Advertise FFA activities to the community	2	0.68
Establish program culture in school/community	1	0.34
Serve as booster club liaison	1	0.34
Communicate with FFA alumni/supporters	1	0.34
Delegate program management to alumni	1	0.34
Plan fall community gatherings	1	0.34
Competitive Student Events		
Prepare students for Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	28	9.46
Identify volunteers to prepare students for Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	3	1.01
Attend Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	3	1.01
Set up materials for Career and Leadership Development Event (i.e., CDEs, LDEs, Speaking, and Agriscience) practices	1	0.34
Select members to participate in Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	1	0.34
Assess Career and Leadership Development Event (i.e., CDEs, LDEs, Speaking, and Agriscience) skill development	1	0.34
Fundraising		
Raise funds for FFA chapter	14	4.73
Manage funds for FFA chapter	8	2.70
Hospitality		
Cook food for FFA events	2	0.68
Student Conventions, Conferences, and Camps		
Plan trip to FFA convention (i.e., district, area, state, and national)	4	1.35
Attend FFA convention (i.e., district, area, state, and national)	4	1.35

Attend FFA student conferences (i.e., WLC, COLT, MFE, ALD, and New Century Farmer)	4	1.35
Attend FFA camp (i.e., district, area, state, and national)	3	1.01
Attend agricultural education teacher meetings (i.e., district, area, state, and national)	3	1.01
Student Recognition		
Plan FFA chapter banquet	8	2.70
Facilitate award recognition for FFA success	3	1.01
Plan FFA degree ceremonies	2	0.68
Student Relations		
Serve as mentor for FFA chapter members	1	0.34
Serve as parent for FFA chapter members	1	0.34
Serve as counselor for FFA chapter members	1	0.34
Student Transportation		
Transport students to FFA events	9	3.04
Supervise students on away FFA trips	2	0.68
Supervised Agricultural Experiences		
Assist students in keeping records	3	1.01
Supervise students at livestock shows	3	1.01
Visit student SAE projects	2	0.68
Manage students' livestock projects	1	0.34
Apply for National FFA Service-Learning Grants	1	0.34
Total	296	100.00

Note. *f* indicates the number of original statements provided by panelists which were reduced to a single, unduplicated task; % indicates the task's percentage out of total tasks identified in Round 1 of the study.

Round 2

Panelists reached consensus of agreement, i.e., 80.00% or greater responding 3 (*Agree*) or 4 (*Strongly Agree*) for 70 of the 99 tasks (77.8%) associated with teaching SBAE in FFA. Table 7 includes the *M* and *SD* of item responses and level of agreement for tasks associated with teaching SBAE in FFA. Of the tasks achieving consensus of agreement, 29 reached 100.00% agreement among panelists. Examples of tasks with the highest mean score per theme included: Attend professional development ($M = 3.68$, $SD = 0.48$), Assist students in developing state degree applications ($M = 3.59$, $SD = 0.50$), Attend chapter meetings ($M = 3.64$, $SD = 0.49$), Register students for events/contests ($M = 3.73$, $SD = 0.46$), Establish program culture in school/community ($M = 3.73$, $SD = 0.46$), Prepare students for Career and Leadership

Development Events (*M* = 3.73, *SD* = 0.46), Manage funds for FFA chapter (*M* = 3.64, *SD* = 0.49), Cook food for FFA events (*M* = 2.45, *SD* = 1.01), Attend agricultural education teacher meetings (*M* = 3.73, *SD* = 0.46), Facilitate award recognition for FFA success (*M* = 3.41, *SD* = 0.59), Serve as mentor for FFA chapter members (*M* = 3.59, *SD* = 0.50), Supervise students on away FFA trips (*M* = 3.68, *SD* = 0.48), Assist students in keeping records (*M* = 3.55, *SD* = 0.51). Panelists also provided additional tasks not included in those presented for agreement (see Appendix M).

Table 7

Consensus of Agreement for Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding FFA advisement in a typical year?" (N = 22)

Tasks	*M*	*SD*	% Agreement
Advisor Expectations			
Attend professional development	3.68	0.48	100.00
Participate in professional organizations (i.e., NAAE and state agricultural education teacher associations)	3.55	0.60	95.45
Attend state FFA degree review	3.27	0.77	81.82
Serve on various FFA committees	3.05	0.84	77.27[a]
Host FFA contests	2.68	1.04	63.64[a]
Judge FFA contests	2.50	1.06	54.55[a]
Awards and Applications			
Assist students in developing state degree applications	3.59	0.50	100.00
Assist students in applying for scholarships	3.59	0.59	95.45
Motivate students to apply for awards	3.59	0.73	95.45
Assist students in developing American degree applications	3.55	0.60	95.45
Assist students in developing chapter degree applications	3.45	0.74	95.45
Assist students in developing proficiency award applications	3.45	0.80	90.91
Edit student award applications	3.23	0.75	90.91
Assist students in developing National Chapter award applications	3.27	0.94	86.36
Assist students in developing star award applications	3.18	0.85	81.82

Chapter Advisement			
Attend chapter meetings	3.64	0.49	100.00
Manage FFA officer team	3.59	0.50	100.00
Motivate students to participate in FFA activities	3.59	0.50	100.00
Serve as FFA advisor	3.59	0.50	100.00
Assist FFA officer team with meetings	3.50	0.51	100.00
Plan chapter officer retreat	3.50	0.51	100.00
Promote FFA Chapter	3.50	0.51	100.00
Recruit future FFA members	3.45	0.51	100.00
Provide leadership training for chapter officers	3.59	0.59	95.45
Oversee the election of FFA chapter officer team	3.45	0.60	95.45
Provide leadership training for chapter members	3.41	0.67	90.91
Conduct annual review of FFA chapter	3.23	0.75	90.91
Provide retention activities for FFA members	3.23	0.75	90.91
Delegate chapter tasks to members	3.41	0.73	86.36
Budget for chapter Program of Activities	3.32	0.72	86.36
Manage FFA official dress materials	3.27	0.70	86.36
Resolve conflicts between FFA members	3.14	0.64	86.36
Organize FFA officer meetings	3.14	0.71	81.82
Teach FFA unit to all freshmen	3.23	1.11	77.27[a]
Plan FFA events	3.00	0.82	77.27[a]
Manage service projects	2.95	0.84	72.73[a]
Develop chapter Program of Activities	2.91	0.81	72.73[a]
Manage student-teacher relationships regarding missing classwork	2.86	0.89	72.73[a]
Organize chapter meetings	2.86	0.89	72.73[a]
Coordinate chapter chaos	2.86	1.21	68.18[a]
Provide agricultural literacy events	2.86	1.04	68.18[a]
Serve as FFA advisor above chapter level	2.50	0.91	50.00[b]
Clerical Work			
Register students for events/contests	3.73	0.46	100.00
Book lodging for chapter events	3.68	0.48	100.00
Plan chapter trips (i.e., field trips, competitions, camps, and conferences)	3.68	0.48	100.00
Complete required school-wide paperwork (i.e., travel requests, POs, and annual reports)	3.64	0.49	100.00
Complete state/national mandated paperwork	3.64	0.49	100.00
Gain school/administration support/approval	3.64	0.49	100.00
Write letters of recommendation	3.50	0.51	100.00
Complete the chapter roster along with dues/fees	3.64	0.58	95.45
Secure transportation for organizational events	3.59	0.59	95.45
Purchase supplies/materials for chapter events and activities	3.55	0.60	95.45

Submit student contest materials (i.e., ag issues portfolio, statements of originality, and agriscience fair reports)	3.41	0.67	90.91
Monitor student grades for eligibility to leave school	3.32	0.72	86.36
Recruit volunteers to work FFA events	3.18	0.66	86.36
Work with program report forms	3.18	0.85	81.82
Plan meetings	2.91	0.81	81.82
Establish a charter for the FFA chapter	3.00	0.82	77.27[a]
Complete entries for livestock exhibition	2.55	1.10	54.55[a]
Complete nominations for livestock exhibition	2.36	1.09	45.45[b]
Develop chapter newsletter	2.27	0.63	27.27[b]
Community Engagement			
Establish program culture in school/community	3.73	0.46	100.00
Engage with local community	3.64	0.49	100.00
Communicate with students' parents/guardians	3.50	0.51	100.00
Communicate with FFA alumni/supporters	3.45	0.51	100.00
Foster connections in local community	3.64	0.58	95.45
Advertise FFA activities to the community	3.36	0.58	95.45
Manage alumni relations	3.18	0.91	77.27[a]
Volunteer for community service activities	2.86	0.77	72.73[a]
Serve as booster club liaison	2.73	0.88	63.64[a]
Delegate program management to alumni	2.55	1.01	54.55[a]
Plan fall community gatherings	2.45	0.91	45.45[b]
Competitive Student Events			
Prepare students for Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	3.73	0.46	100.00
Set up materials for Career and Leadership Development Event (i.e., CDEs, LDEs, Speaking, and Agriscience) practices	3.59	0.50	100.00
Attend Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	3.64	0.58	95.45
Assess Career and Leadership Development Event (i.e., CDEs, LDEs, Speaking, and Agriscience) skill development	3.55	0.60	95.45
Identify volunteers to prepare students for Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	3.32	0.72	86.36
Select members to participate in Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)	3.32	0.89	81.82
Fundraising			
Manage funds for FFA chapter	3.64	0.49	100.00

Raise funds for FFA chapter	3.36	0.73	86.36
Hospitality			
Cook food for FFA events	2.45	1.01	54.55[a]
Student Conventions, Conferences, and Camps			
Attend agricultural education teacher meetings (i.e., district, area, state, and national)	3.73	0.46	100.00
Plan trip to FFA convention (i.e., district, area, state, and national)	3.64	0.49	100.00
Attend FFA convention (i.e., district, area, state, and national)	3.55	0.74	95.45
Attend FFA camp (i.e., district, area, state, and national)	3.18	0.96	81.82
Attend FFA student conferences (i.e., WLC, COLT, MFE, ALD, and New Century Farmer)	2.95	1.00	77.27[a]
Student Recognition			
Facilitate award recognition for FFA success	3.41	0.59	95.45
Plan FFA chapter banquet	3.27	0.70	86.36
Plan FFA degree ceremonies	3.14	0.89	77.27[a]
Student Relations			
Serve as mentor for FFA chapter members	3.59	0.50	100.00
Serve as counselor for FFA chapter members	3.09	0.92	72.73[a]
Serve as parent for FFA chapter members	2.41	1.10	50.00[b]
Student Transportation			
Supervise students on away FFA trips	3.68	0.48	100.00
Transport students to FFA events	3.45	0.80	90.91
Supervised Agricultural Experiences			
Assist students in keeping records	3.55	0.51	100.00
Visit student SAE projects	3.36	0.85	86.36
Apply for National FFA Service-Learning Grants	2.91	0.87	68.18[a]
Supervise students at livestock shows	2.64	1.14	59.09[a]
Manage students' livestock projects	2.41	1.14	54.55[a]

Note. Responses utilized a 4-point scale 1 (*Strongly Disagree*) to 4 (*Strongly Agree*). Smaller mean (*M*) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes 51.00% to 79.99% consensus of agreement; [b]Denotes less than 51.00% consensus of agreement.

Twenty-four statements reached a level of agreement between 51.00% and 79.99%, advancing to Round 3 for consideration by the panelists. Five tasks failed to reach at least 51.00% agreement; therefore, they were eliminated from the study.

Round 3

Table 8 identifies the *M* and *SD* of responses and consensus of agreement for the 24 tasks carried forward from Round 2. Of the 24 tasks achieving between 51.00% and 79.99% agreement in Round 2, panelists reached consensus of agreement (80.00% or greater responding *Yes*) for ten additional tasks across four themes: Advisor Expectations (*f* = 1), Chapter Advisement (*f* = 6), Community Engagement (*f* = 2), and Student Recognition (*f* = 1). Fourteen tasks failed to reach consensus of agreement and were eliminated from the study. Examples of tasks failing to reach consensus included: Judge FFA contests (*M* = 1.65, *SD* = 0.49), Develop chapter Program of Activities (*M* = 1.75, *SD* = 0.44), Establish a charter for the FFA chapter (*M* = 1.75, *SD* = 0.44), Volunteer for community service activities (*M* = 1.75, *SD* = 0.44), Cook food for FFA events (*M* = 1.40, *SD* = 0.50), Attend FFA student conferences (*M* = 1.75, *SD* = 0.44), Serve as counselor for FFA chapter members (*M* = 1.65, *SD* = 0.49), and Apply for National FFA Service-Learning Grants (*M* = 1.65, *SD* = 0.49). Panelists also provided their rationale for selecting *No* for certain tasks (see Appendix N).

Table 8

Final Consensus of Agreement for Tasks Receiving between 51.00% to 79.99% Agreement in Round Two by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding FFA advisement in a typical year?" (N = 20)

Tasks	*M*	*SD*	% Agreement
Advisor Expectations			
Serve on various FFA committees	1.80	0.41	80.00
Judge FFA contests	1.65	0.49	65.00[a]
Host FFA contests	1.55	0.51	55.00[a]
Chapter Advisement			
Manage student-teacher relationships regarding missing classwork	1.90	0.31	90.00
Provide agricultural literacy events	1.90	0.31	90.00
Manage service projects	1.85	0.37	85.00
Teach FFA unit to all freshmen	1.85	0.37	85.00
Organize chapter meetings	1.80	0.41	80.00

Plan FFA events	1.80	0.41	80.00
Coordinate chapter chaos	1.75	0.44	75.00[a]
Develop chapter Program of Activities	1.75	0.44	75.00[a]
Clerical Work			
Establish a charter for the FFA chapter	1.75	0.44	75.00[a]
Complete entries for livestock exhibition	1.50	0.51	50.00[a]
Community Engagement			
Manage alumni relations	1.85	0.37	85.00
Serve as booster club liaison	1.80	0.41	80.00
Volunteer for community service activities	1.75	0.44	75.00[a]
Delegate program management to alumni	1.50	0.51	50.00[a]
Hospitality			
Cook food for FFA events	1.40	0.50	40.00[a]
Student Conventions, Conferences, and Camps			
Attend FFA student conferences (i.e., WLC, COLT, MFE, ALD, and New Century Farmer)	1.75	0.44	75.00[a]
Student Recognition			
Plan FFA degree ceremonies	1.85	0.37	85.00
Student Relations			
Serve as counselor for FFA chapter members	1.65	0.49	65.00[a]
Supervised Agricultural Experiences			
Apply for National FFA Service-Learning Grants	1.65	0.49	65.00[a]
Supervise students at livestock shows	1.50	0.51	50.00[a]
Manage students' livestock projects	1.40	0.50	40.00[a]

Note. Mean scores in Round 3 based on responses to *Yes* (2) or *No* (1) questions. Smaller mean (*M*) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes consensus of agreement less than 80.00%

Final Analysis

Tasks achieving at least an 80.00% consensus of agreement in both Round 2 (70 tasks) and Round 3 (10 tasks) were compiled into a final list of tasks associated with teaching SBAE in the area of FFA. In total, 80 tasks in 12 themes, determined by the authors, reached consensus of agreement. Table 9 includes the final list of tasks associated with teaching SBAE in the area of FFA advisement in a typical year. Advisor Expectations had 57.14% ($f = 4$) of tasks in the theme reach consensus. Awards and Applications had 100.00% ($f = 9$) of tasks in the theme reach consensus. Chapter Advisement had 88.89% ($f = 24$) of tasks in the theme reach consensus.

Clerical Work had 78.95% (f = 15) of tasks in the theme reach consensus. Community Engagement had 72.72% (f = 8) of tasks in the theme reach consensus. Competitive Student Events had 85.71% (f = 6) of tasks in the theme reach consensus. Fundraising had 100.00% (f = 2) of tasks in the theme reach consensus. Hospitality had 0.00% (f = 0) of tasks in the theme reach consensus. Student Conventions, Conferences, and Camps had 80.00% (f = 4) of tasks in the theme reach consensus. Student Recognition had 100.00% (f = 3) of tasks in the theme reach consensus. Student Relations had 33.33% (f = 1) of tasks in the theme reach consensus. Student Transportation had 100.00% (f = 2) of tasks in the theme reach consensus. Supervised Agricultural Experiences had 40.00% (f = 2) of tasks in the theme reach consensus.

Table 9

Final Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding FFA advisement in a typical year?"

Tasks
Advisor Expectations
Attend professional development
Attend state FFA degree review
Participate in professional organizations (i.e., NAAE and state agricultural education teacher associations)
Serve on various FFA committees
Awards and Applications
Assist students in applying for scholarships
Assist students in developing American degree applications
Assist students in developing chapter degree applications
Assist students in developing National Chapter award applications
Assist students in developing proficiency award applications
Assist students in developing star award applications
Assist students in developing state degree applications
Edit student award applications
Motivate students to apply for awards
Chapter Advisement
Assist FFA officer team with meetings
Attend chapter meetings
Budget for chapter Program of Activities
Conduct annual review of FFA chapter

- Delegate chapter tasks to members
- Manage FFA officer team
- Manage FFA official dress materials
- Manage service projects
- Manage student-teacher relationships regarding missing classwork
- Motivate students to participate in FFA activities
- Organize chapter meetings
- Organize FFA officer meetings
- Oversee the election of FFA chapter officer team
- Plan chapter officer retreat
- Plan FFA events
- Promote FFA Chapter
- Provide agricultural literacy events
- Provide leadership training for chapter members
- Provide leadership training for chapter officers
- Provide retention activities for FFA members
- Recruit future FFA members
- Resolve conflicts between FFA members
- Serve as FFA advisor
- Teach FFA unit to all freshmen

Clerical Work

- Book lodging for chapter events
- Complete required school-wide paperwork (i.e., travel requests, POs, and annual reports)
- Complete state/national mandated paperwork
- Complete the chapter roster along with dues/fees
- Gain school/administration support/approval
- Monitor student grades for eligibility to leave school
- Plan chapter trips (i.e., field trips, competitions, camps, and conferences)
- Plan meetings
- Purchase supplies/materials for chapter events and activities
- Recruit volunteers to work FFA events
- Register students for events/contests
- Secure transportation for organizational events
- Submit student contest materials (i.e., ag issues portfolio, statements of originality, and agriscience fair reports)
- Work with program report forms
- Write letters of recommendation

Community Engagement

- Advertise FFA activities to the community
- Communicate with FFA alumni/supporters
- Communicate with students' parents/guardians
- Engage with local community

- Establish program culture in school/community
- Foster connections in local community
- Manage alumni relations
- Serve as booster club liaison

Competitive Student Events

- Assess Career and Leadership Development Event (i.e., CDEs, LDEs, Speaking, and Agriscience) skill development
- Attend Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)
- Identify volunteers to prepare students for Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)
- Prepare students for Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)
- Select members to participate in Career and Leadership Development Events (i.e., CDEs, LDEs, Speaking, and Agriscience)
- Set up materials for Career and Leadership Development Event (i.e., CDEs, LDEs, Speaking, and Agriscience) practices

Fundraising

- Manage funds for FFA chapter
- Raise funds for FFA chapter

Student Conventions, Conferences, and Camps

- Attend agricultural education teacher meetings (i.e., district, area, state, and national)
- Attend FFA camp (i.e., district, area, state, and national)
- Attend FFA convention (i.e., district, area, state, and national)
- Plan trip to FFA convention (i.e., district, area, state, and national)

Student Recognition

- Facilitate award recognition for FFA success
- Plan FFA chapter banquet
- Plan FFA degree ceremonies

Student Relations

- Serve as mentor for FFA chapter members

Student Transportation

- Supervise students on away FFA trips
- Transport students to FFA events

Supervised Agricultural Experiences

- Assist students in keeping records
- Visit student SAE projects

Findings for Objective Three

Tasks Associated with the Roles and Responsibilities of SBAE Teachers Regarding Students' SAEs

Round 1

Panelists identified 168 original tasks associated with the roles and responsibilities of a SBAE teacher regarding SAE in a typical year. Once duplicated tasks were removed, 80 tasks in 12 themes remained for consideration in Round 2. Table 10 displays the tasks related to SAE identified in Round 1 of the Delphi study. Themes identified in Round 1 included Committee Service (f = 2), Community Development (f = 3), Data Management (f = 5), Grants and Funding (f = 5), Hospitality (f = 1), Relationships and Rapport (f = 2), SAE Development (f = 9), SAE Instruction (f = 6), SAE Supervision (f = 33), Student Career Preparation (f = 3), Student Success (f = 6), and Teaching and Learning Resources (f = 5).

In corresponding order to the above-mentioned themes, the most common tasks for each included: Serve on county livestock validation committee, and Serve on advisory committee (f = 1, 0.60%), Provide community development for work-based learning placements, Connect students to community members, and Provide experiential learning opportunities to students and parents/stakeholders (f = 1, 0.60%), Manage a record book system (f = 11, 6.55%), Connect students to available funding for SAE projects (f = 2, 1.19%), Serve as cook for SAE events (f = 1, 0.60%), Work to develop trust with family/student (f = 2, 1.19%), Assist students in obtaining SAE job placements, and Assist all students in developing an SAE (f = 4, 2.38%), Teach students record keeping skills (f = 4, 2.38%), Conduct SAE student project visits off campus, and Supervise student SAE projects (f = 11, 6.55%), Expose students to possible careers (f = 2, 1.19%), Assist students with award applications (f = 8, 4.76%), and Manage school project center (f = 4, 2.38%).

Table 10

Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Supervised Agricultural Experiences (SAE) in a typical year?" (N = 23)

Tasks	*f*	%
Committee Service		
Serve on county livestock validation committee	1	0.60
Serve on advisory committee (above individual school level)	1	0.60
Community Development		
Provide community development for work-based learning placements	1	0.60
Connect students to community members	1	0.60
Provide experiential learning opportunities to students and parents/stakeholders	1	0.60
Data Management		
Manage a record book system	11	6.55
Evaluate student record books	6	3.57
Train students how to use a record book system	4	2.38
Attend record book training for teachers	1	0.60
Track SAE data	1	0.60
Grants and Funding		
Connect students to available funding for SAE projects	2	1.19
Manage student funds for projects	1	0.60
Manage barn funds	1	0.60
Develop SAE grants	1	0.60
Budget money for maintaining school-based projects (livestock and plants)	1	0.60
Hospitality		
Serve as cook for SAE events	1	0.60
Relationships and Rapport		
Work to develop trust with family/student	2	1.19
Serve as mentor for students	1	0.60
SAE Development		
Assist students in obtaining SAE job placements	4	2.38
Assist all students in developing an SAE	4	2.38
Assist students/parents/guardians in identifying an SAE	3	1.79
Ensure the completion of foundational SAEs	2	1.19
Assist all students in planning an SAE	1	0.60
Ensure each student has a viable SAE project	1	0.60
Challenge students to start an SAE project	1	0.60
Facilitate parent nights to introduce SAE opportunities, expectations, and fair rules and deadlines	1	0.60

Guide students' reflection on personal and career goals to develop SAE plans	1	0.60
SAE Instruction		
Teach students record keeping skills	4	2.38
Teach students about SAEs	3	1.79
Provide hands on opportunities for students	2	1.19
Facilitate every student's SAE presentation as part of a class	1	0.60
Establish SAE expectations in class	1	0.60
Create cohesive connections between SAEs, classroom instruction, and FFA	1	0.60
SAE Supervision		
Conduct SAE student project visits off campus	11	6.55
Supervise student SAE projects (i.e., advising, coaching, managing)	11	6.55
Serve as the animal health and nutrition expert for student projects	6	3.57
Transport students and their livestock projects to shows/fairs	5	2.98
Facilitate students' purchase of livestock projects	4	2.38
Assess student SAE projects regularly (project development and progress)	3	1.79
Assist students with creating SAE presentations/showcase	2	1.19
Facilitate all plant science entrepreneurship SAE projects	2	1.19
Coach student showmanship	2	1.19
Conduct SAE student project visits on campus	1	0.60
Work with students, parents, and supervisors to establish clear expectations	1	0.60
Ensure safe student working conditions	1	0.60
Document time/place traveled to supervise student SAE projects	1	0.60
Remind students of SAE deadlines	1	0.60
Provide technical support for student SAE projects	1	0.60
Facilitate all plant science placement SAE projects	1	0.60
Facilitate all agriscience fair projects	1	0.60
Provide assistance with non-livestock SAEs	1	0.60
Select animals for students' livestock projects	1	0.60
Facilitate all animal science placement SAE projects	1	0.60
Facilitate all animal science entrepreneurship SAE projects	1	0.60
Manage entries for livestock shows	1	0.60
Book hotels for livestock shows	1	0.60
Check in livestock at shows	1	0.60
Assist students with livestock preparation at shows	1	0.60
Provide weight and feed management for student livestock projects	1	0.60
Advise students regarding best grooming practices for livestock projects	1	0.60

Supervise students at livestock shows	1	0.60
Serve as livestock show coordinator	1	0.60
Make feed store runs	1	0.60
Manage camaraderie among feeders	1	0.60
Supervise the growth and development of all livestock projects	1	0.60
Manage clear and consistent communication for all livestock show projects	1	0.60
Student Career Preparation		
Expose students to possible careers	2	1.19
Take students on college trips	1	0.60
Help students connect SAEs to their future goals	1	0.60
Student Success		
Assist students with award applications (i.e., proficiency and degree)	8	4.76
Review student award applications	3	1.79
Assist students with SAE contests	2	1.19
Assist students with proficiency planning	1	0.60
Provide opportunities for student success in SAEs	1	0.60
Facilitate award recognition for SAEs	1	0.60
Teaching and Learning Resources		
Manage school project center (i.e., land lab, school farm, and ag barn)	4	2.38
Provide a location for school-based enterprise projects	2	1.19
Maintain school project center (i.e., land lab, school farm, and ag barn)	2	1.19
Maintain school SAE equipment	1	0.60
Maintain school vehicle	1	0.60
Total	168	100.00

Note. *f* indicates the number of original statements provided by panelists which were reduced to a single, unduplicated task; % indicates the task's percentage out of total tasks identified in Round 1 of the study.

Round 2

Panelists reached consensus of agreement, i.e., 80.00% or greater selecting 3 (*Agree*) or 4 (*Strongly Agree*) for 39 or 80 tasks (48.8%) associated with teaching SBAE in the area of SAE. Table 11 includes the *M* and *SD* of item responses and level of agreement for tasks associated with teaching SBAE in the area of SAE. Of the tasks achieving consensus of agreement, 13 reached 100% agreement among panelists. Examples of tasks with the highest mean score per theme included: Serve on advisory committee above individual school level (*M* = 2.41, *SD* =

1.14), Connect students to community members (*M* = 3.36, *SD* = 0.85), Train students how to use a record book system (*M* = 3.50, *SD* = 0.67), Connect students to available funding for SAE projects (*M* = 3.27, *SD* = 0.70), Serve as cook for SAE events (*M* = 1.95, *SD* = 1.09), Serve as mentor for students (*M* = 3.68, *SD* = 0.48), Work to develop trust with family/student (*M* = 3.68, *SD* = 0.48), Assist all students in planning an SAE (*M* = 3.50, *SD* = 0.51), Provide hands on opportunities for students (*M* = 3.77, *SD* = 0.43), Supervise student SAE projects (*M* = 3.64, *SD* = 0.49), Expose students to possible careers (*M* = 3.77, *SD* = 0.43), Assist students with award applications (*M* = 3.64, *SD* = 0.49), and Manage school project center (*M* = 3.18, *SD* = 0.80). Panelists also provided additional tasks not included in those presented for agreement (see Appendix M).

Table 11

Consensus of Agreement for Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Supervised Agricultural Experiences (SAE) in a typical year?" (N = 22)

Tasks	*M*	*SD*	% Agreement
Committee Service			
Serve on advisory committee above individual school level	2.41	1.14	54.55[a]
Serve on county livestock validation committee	2.09	1.11	36.36[b]
Community Development			
Connect students to community members	3.36	0.85	86.36
Provide experiential learning opportunities to students and parents/stakeholders	3.18	0.80	86.36
Provide community development for work-based learning placements	2.95	0.95	72.73[a]
Data Management			
Train students how to use a record book system	3.50	0.67	90.91
Evaluate student record books	3.41	0.80	90.91
Track SAE data	3.36	0.95	86.36
Attend record book training for teachers	3.32	1.00	81.82
Manage a record book system	3.14	0.89	77.27[a]
Grants and Funding			
Connect students to available funding for SAE projects	3.27	0.70	86.36

Budget money for maintaining school-based projects (i.e., livestock and plants)	2.95	1.17	68.18[a]
Manage barn funds	2.64	1.14	59.09[a]
Develop SAE grants	2.59	1.05	54.55[a]
Manage student funds for projects	1.86	0.99	22.73[b]
Hospitality			
Serve as cook for SAE events	1.95	1.09	36.36[b]
Relationships and Rapport			
Serve as mentor for students	3.68	0.48	100.00
Work to develop trust with family/student	3.68	0.48	100.00
SAE Development			
Assist all students in planning an SAE	3.50	0.51	100.00
Challenge students to start an SAE project	3.45	0.51	100.00
Assist all students in developing an SAE	3.50	0.60	95.45
Assist students/parents/guardians in identifying an SAE	3.45	0.60	95.45
Ensure each student has a viable SAE project	3.23	0.61	90.91
Ensure the completion of foundational SAEs	3.23	0.61	90.91
Guide students' reflection on personal and career goals to develop SAE plans	3.18	0.85	81.82
Assist students in obtaining SAE job placements	2.91	0.75	77.27[a]
Facilitate parent nights to introduce SAE opportunities, expectations, and fair rules and deadlines	2.55	1.06	50.00[b]
SAE Instruction			
Provide hands on opportunities for students	3.77	0.43	100.00
Teach students about SAEs	3.68	0.48	100.00
Teach students record keeping skills	3.59	0.50	100.00
Create cohesive connections between SAEs, classroom instruction, and FFA	3.55	0.60	95.45
Establish SAE expectations in class	3.36	0.85	86.36
Facilitate every student's SAE presentation as part of a class	2.77	0.97	59.09[a]
SAE Supervision			
Supervise student SAE projects (i.e., advising, coaching, and managing)	3.64	0.49	100.00
Work with students, parents, and supervisors to establish clear expectations	3.59	0.50	100.00
Assess student SAE projects regularly (i.e., project development and progress)	3.55	0.51	100.00
Ensure safe student working conditions	3.36	0.58	95.45
Provide technical support for student SAE projects	3.41	0.67	90.91
Conduct SAE student project visits on campus	3.36	0.73	86.36
Remind students of SAE deadlines	3.36	0.73	86.36

Document time/place traveled to supervise student SAE projects	3.32	0.78	81.82
Conduct SAE student project visits off campus	3.27	0.77	81.82
Provide assistance with non-livestock SAEs	3.18	0.85	81.82
Assist students with creating SAE presentations/showcase	2.82	0.85	63.64[a]
Manage clear and consistent communication for all livestock show projects	2.68	1.21	63.64[a]
Advise students regarding best grooming practices for livestock projects	2.59	1.14	63.64[a]
Coach student showmanship	2.73	1.03	59.09[a]
Supervise students at livestock shows	2.73	1.28	59.09[a]
Supervise the growth and development of all livestock projects	2.50	1.19	59.09[a]
Assist students with livestock preparation at shows	2.32	1.13	54.55[a]
Manage entries for livestock shows	2.41	1.18	50.00[b]
Provide weight and feed management for student livestock projects	2.32	1.09	50.00[b]
Check in livestock at shows	2.27	1.20	50.00[b]
Facilitate all agriscience fair projects	2.27	1.20	50.00[b]
Transport students and their livestock projects to shows/fairs	2.18	1.05	45.45[b]
Serve as livestock show coordinator	2.09	0.97	40.91[b]
Facilitate all plant science entrepreneurship SAE projects	2.55	0.96	36.36[b]
Facilitate all plant science placement SAE projects	2.36	1.00	36.36[b]
Manage camaraderie among feeders	2.00	0.98	36.36[b]
Serve as the animal health and nutrition expert for student projects	2.18	1.10	31.82[b]
Facilitate students' purchase of livestock projects	2.14	1.04	31.82[b]
Facilitate all animal science placement SAE projects	2.09	1.15	31.82[b]
Select animals for students' livestock projects	2.09	1.07	31.82[b]
Facilitate all animal science entrepreneurship SAE projects	2.05	1.13	27.27[b]
Book hotels for livestock shows	1.95	1.09	27.27[b]
Make feed store runs	1.77	1.07	18.18[b]
Student Career Preparation			
Expose students to possible careers	3.77	0.43	100.00
Help students connect SAEs to their future goals	3.59	0.67	90.91
Take students on college trips	3.27	0.94	77.27[a]
Student Success			
Assist students with award applications (i.e., proficiency and degree)	3.64	0.49	100.00
Assist students with proficiency planning	3.45	0.51	100.00

Review student award applications	3.50	0.60	95.45
Provide opportunities for student success in SAEs	3.50	0.67	90.91
Facilitate award recognition for SAEs	3.32	0.65	90.91
Assist students with SAE contests	2.82	1.05	72.73[a]
Teaching and Learning Resources			
Manage school project center (i.e., land lab, school farm, and ag barn)	3.18	0.80	86.36
Maintain school SAE equipment	3.09	0.87	77.27[a]
Maintain school project center (i.e., land lab, school farm, and ag barn)	3.00	0.93	77.27[a]
Provide a location for school-based enterprise projects	2.50	1.06	54.55[a]
Maintain school vehicle	2.18	0.96	36.36[b]

Note. Responses utilized a 4-point scale 1 (*Strongly Disagree*) to 4 (*Strongly Agree*). Smaller mean (M) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes 51.00% to 79.99% consensus of agreement; [b]Denotes less than 51.00% consensus of agreement.

Twenty statements reached a level of agreement between 51.00% and 79.99%, advancing to Round 3 for consideration by the panelists. Twenty-one tasks failed to reach at least 51.00% agreement; therefore, they were eliminated from the study.

Round 3

Table 12 displays the consensus of agreement for tasks carried forward from Round 2. Of the 20 tasks achieving between 51.00% and 79.99% agreement in Round 2, panelists reached consensus of agreement (80.00% or greater selecting *Yes*) for six tasks, one in each of the following themes: Community Development, Data Management, Grants and Funding, SAE Development, Student Success, and Teaching and Learning Resources. Fourteen tasks failed to reach consensus of agreement and were eliminated from the study. Examples of tasks failing to reach consensus included: Serve on advisory committee above individual school level (M = 1.45, SD = 0.51), Manage barn funds (M = 1.65, SD = 0.49), Facilitate every student's SAE presentation as part of a class (M = 1.60, SD = 0.50), Assist students with creating SAE presentations/showcase (M = 1.70, SD = 0.47), Take students on college trips (M = 1.75, SD =

0.44), and Maintain school project center (M = 1.75, SD = 0.44). Panelists also provided their rationale for selecting *No* for certain tasks (see Appendix N).

Table 12

Final Consensus of Agreement for Tasks Receiving between 51.00% to 79.99% Agreement in Round Two by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Supervised Agricultural Experiences (SAE) in a typical year?" (N = 20)

Tasks	*M*	*SD*	% Agreement
Committee Service			
Serve on advisory committee above individual school level	1.45	0.51	45.00[a]
Community Development			
Provide community development for work-based learning placements	1.80	0.41	80.00
Data Management			
Manage a record book system	1.90	0.31	90.00
Grants and Funding			
Budget money for maintaining school-based projects (i.e., livestock and plants)	1.80	0.41	80.00
Manage barn funds	1.65	0.49	65.00[a]
Develop SAE grants	1.60	0.50	60.00[a]
SAE Development			
Assist students in obtaining SAE job placements	1.85	0.37	85.00
SAE Instruction			
Facilitate every student's SAE presentation as part of a class	1.60	0.50	60.00[a]
SAE Supervision			
Assist students with creating SAE presentations/showcase	1.70	0.47	70.00[a]
Supervise the growth and development of all livestock projects	1.65	0.49	65.00[a]
Advise students regarding best grooming practices for livestock projects	1.55	0.51	55.00[a]
Coach student showmanship	1.55	0.51	55.00[a]
Manage clear and consistent communication for all livestock show projects	1.55	0.51	55.00[a]
Assist students with livestock preparation at shows	1.50	0.51	50.00[a]
Supervise students at livestock shows	1.50	0.51	50.00[a]
Student Career Preparation			

Take students on college trips	1.75	0.44	75.00[a]
Student Success			
Assist students with SAE contests	1.85	0.37	85.00
Teaching and Learning Resources			
Maintain school SAE equipment	1.90	0.31	90.00
Maintain school project center (i.e., land lab, school farm, and ag barn)	1.75	0.44	75.00[a]
Provide a location for school-based enterprise projects	1.75	0.44	75.00[a]

Note. Mean scores in Round 3 based on responses to *Yes* (2) or *No* (1) questions. Smaller mean (*M*) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes consensus of agreement less than 80.00%

Final Analysis

Tasks achieving at least an 80.00% consensus of agreement in both Round 2 (39 tasks) and Round 3 (6 tasks) were compiled into a final list of tasks associated with teaching SBAE in the area of FFA. In total, 45 tasks in 10 themes, as determined by authors, reached consensus of agreement. Table 13 identifies the final list of tasks associated with teaching SBAE in the area of FFA. Committee Service had 0.00% (*f* = 0) of tasks in the theme reach consensus. Community Development had 100.00% (*f* = 3) of tasks in the theme reach consensus. Data Management had 100.00% (*f* = 5) of tasks in the theme reach consensus. Grants and Funding had 40.00% (*f* = 2) of tasks in the theme reach consensus. Hospitality had 0.00% (*f* = 0) of tasks in the theme reach consensus. Relationships and Rapport had 100.00% (*f* = 2) of tasks in the theme reach consensus. SAE Development had 88.89% (*f* = 8) of tasks in the theme reach consensus. SAE Instruction had 83.33% (*f* = 5) of tasks in the theme reach consensus. SAE Supervision had 30.30% (*f* = 10) of tasks in the theme reach consensus. Student Career Preparation had 66.66% (*f* = 2) of tasks in the theme reach consensus. Student Success had 100.00% (*f* = 6) of tasks in the theme reach consensus. Teaching and Learning Resources had 40.00% (*f* = 2) of tasks in the theme reach consensus (see Table 13).

Table 13

Final Tasks Identified by Delphi Panelists in Response to the Question, "What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding Supervised Agricultural Experiences (SAE) in a typical year?"

Tasks
Community Development
Connect students to community members
Provide community development for work-based learning placements
Provide experiential learning opportunities to students and parents/stakeholders
Data Management
Attend record book training for teachers
Evaluate student record books
Manage a record book system
Track SAE data
Train students how to use a record book system
Grants and Funding
Budget money for maintaining school-based projects (i.e., livestock and plants)
Connect students to available funding for SAE projects
Relationships and Rapport
Serve as mentor for students
Work to develop trust with family/student
SAE Development
Assist all students in developing an SAE
Assist all students in planning an SAE
Assist students in obtaining SAE job placements
Assist students/parents/guardians in identifying an SAE
Challenge students to start an SAE project
Ensure each student has a viable SAE project
Ensure the completion of foundational SAEs
Guide students' reflection on personal and career goals to develop SAE plans
SAE Instruction
Create cohesive connections between SAEs, classroom instruction, and FFA
Establish SAE expectations in class
Provide hands on opportunities for students
Teach students about SAEs
Teach students record keeping skills
SAE Supervision
Assess student SAE projects regularly (i.e., project development and progress)
Conduct SAE student project visits off campus
Conduct SAE student project visits on campus
Document time/place traveled to supervise student SAE projects

Ensure safe student working conditions
Provide assistance with non-livestock SAEs
Provide technical support for student SAE projects
Remind students of SAE deadlines
Supervise student SAE projects (i.e., advising, coaching, and managing)
Work with students, parents, and supervisors to establish clear expectations
Student Career Preparation
Expose students to possible careers
Help students connect SAEs to their future goals
Student Success
Assist students with award applications (i.e., proficiency and degree)
Assist students with proficiency planning
Assist students with SAE contests
Facilitate award recognition for SAEs
Provide opportunities for student success in SAEs
Review student award applications
Teaching and Learning Resources
Maintain school SAE equipment
Manage school project center (i.e., land lab, school farm, and ag barn)

Findings for Objective Four

Additional Tasks Associated with Professional Roles and Responsibilities of SBAE Teachers Aside from Classroom and Laboratory Instruction, FFA, and SAE

Round 1

Panelists identified 136 original tasks associated with the roles and responsibilities of a SBAE teacher in a typical year aside from classroom and laboratory instruction, FFA, and SAE. Duplicated tasks were removed, and 85 tasks in 15 themes remained for consideration in Round 2. Table 14 displays the tasks related to other professional responsibilities identified in Round 1 of the Delphi study. Themes identified in Round 1 included Clerical Work ($f = 9$), Colleague Relations ($f = 1$), Committee Service ($f = 6$), Community Relations ($f = 6$), Facilities Management ($f = 4$), Grants and Funding ($f = 6$), Local School Expectations ($f = 26$), Professional Development ($f = 5$), Professionalism ($f = 5$), Student Competitive Events ($f = 5$), Student Recruitment ($f = 1$),

Student Relations (*f* = 4), Student Transportation (*f* = 2), Teacher Mentorship (*f* = 2), and Volunteerism (*f* = 3).

In corresponding order to the above-mentioned themes, the most common tasks for each included: Write student letters of recommendation (*f* = 2, 1.47%), Collaborate with fellow school staff (*f* = 5, 3.68%), Serve on school-wide committees (*f* = 2, 1.47%), Integrate local community into the program (*f* = 3, 2.21%), Manage school facilities (*f* = 1, 0.74%), Apply for grants (*f* = 3, 2.21%), Perform regular school-wide duties (*f* = 5, 3.68%), Attend school-wide professional development (*f* = 10, 7.35%), Participate in professional organizations (*f* = 2, 1.47%), Assist with regional and state level CDE/LDE competitions (*f* = 2, 1.47%), Recruit students to your program (*f* = 2, 1.47%), Serve as counselor/life coach for students (*f* = 3, 2.21%), Serve as a school bus/van driver (*f* = 2, 1.47%), Mentor early-career agricultural education teachers (*f* = 2, 1.47%), and Serve on county fair board (*f* = 1, 0.74%).

Table 14

Tasks Identified by Delphi Panelists in Response to the Question, "What additional tasks are associated with the roles and responsibilities of a school-based agricultural education teacher in a typical year aside from classroom and laboratory instruction, FFA, and SAEs?" (N = 23)

Tasks	*f*	%
Clerical Work		
Write student letters of recommendation	2	1.47
Gain program approval with Department of Education	1	0.74
Submit Perkins reports	1	0.74
Manage the total program budget	1	0.74
Take inventory	1	0.74
Submit state reports	1	0.74
Order FFA t-shirts	1	0.74
Complete grade verification reports	1	0.74
Complete attendance verification reports	1	0.74
Colleague Relations		
Collaborate with fellow school staff	5	3.68
Committee Service		
Serve on school-wide committees (i.e., School Improvement Team)	2	1.47

Serve as member of state livestock committee	1	0.74
Serve as member of state fair education committee	1	0.74
Serve as member of agricultural education teacher associations committee for professional development	1	0.74
Serve as Committee Chair for Positive Behavior Interventions and Supports (PBIS)	1	0.74
Serve on agricultural education committees (i.e., State FFA Board of Directors, NAAE committees, and Curriculum revision)	1	0.74
Community Relations		
Integrate local community into the program	3	2.21
Coordinate alumni	2	1.47
Manage parents	2	1.47
Develop public relations	1	0.74
Work with booster clubs	1	0.74
Participate in the local community (i.e., civic organizations)	1	0.74
Facilities Management		
Manage school facilities	1	0.74
Repair school equipment	1	0.74
Landscape school grounds	1	0.74
Manage animals	1	0.74
Grants and Funding		
Apply for grants	3	2.21
Assist with fundraising	2	1.47
Conduct grant reporting	1	0.74
Conduct grant budgeting	1	0.74
Conduct grant spending	1	0.74
Organize the County Buyer's Gala	1	0.74
Local School Expectations		
Perform regular school-wide duties (i.e., gate, lunch, and hall)	5	3.68
Attend school-wide events	5	3.68
Attend faculty/staff meetings	3	2.21
Attend school board meetings	3	2.21
Cover other teachers' classes as needed	2	1.47
Serve as test facilitators/proctors for standardized testing	2	1.47
Serve as a class sponsor/advisor	2	1.47
Serve as prom/homecoming chaperone	2	1.47
Support students in their extracurricular activities	2	1.47
Attend Individualized Education Plan (IEP)/504 meetings	1	0.74
Attend Professional Learning Community (PLC) meetings	1	0.74
Serve as lead teacher for agricultural education department	1	0.74
Analyze school-wide discipline data	1	0.74

Develop data-informed recommendations to change/manage behaviors	1	0.74
Improve teachers' practice of Positive Behavior Interventions and Supports (PBIS)	1	0.74
Facilitate school-wide culture building events and activities	1	0.74
Develop County curriculum mapping resources	1	0.74
Align semester exams to State standards for Ag courses	1	0.74
Collaborate with other teachers to compile educational resources	1	0.74
Chaperone trips for other CTE teachers	1	0.74
Serve as the community/school agricultural expert	1	0.74
Serve as an organizational coach	1	0.74
Construct mums for homecoming	1	0.74
Oversee fair displays	1	0.74
Serve as Hunter Safety Course Instructor	1	0.74
Manage time	1	0.74
Professional Development		
Attend school-wide professional development	10	7.35
Attend state-wide agricultural education professional development	3	2.21
Lead professional development workshops	2	1.47
Maintain professional development plan	1	0.74
Document professional development to maintain licensure	1	0.74
Professionalism		
Participate in professional organizations (i.e., NAAE and state agricultural education teacher associations)	2	1.47
Demonstrate professionalism at work	2	1.47
Serve as a leader in professional organizations (i.e., NAAE and state agricultural education teacher associations)	1	0.74
Demonstrate professionalism in the community	1	0.74
Assist with teacher professional activities	1	0.74
Student Competitive Events		
Assist with regional and state level CDE/LDE competitions	2	1.47
Serve as National FFA SAE proficiency room host	2	1.47
Lead summer livestock clinic for students	1	0.74
Lead summer agriculture tour for students	1	0.74
Proctor contest for students at state fair	1	0.74
Student Recruitment		
Recruit students to your program	2	1.47
Student Relations		
Serve as counselor/life coach for students	3	2.21
Be like a mom/dad for some students	1	0.74
Develop rapport with students	1	0.74
Assist students with college scholarship/admission paperwork	1	0.74
Student Transportation		

Serve as a school bus/van driver	2	1.47
Transport students to state FFA convention	1	0.74
Teacher Mentorship		
Mentor early-career agricultural education teachers	2	1.47
Serve as cooperating teacher for university student teacher	2	1.47
Volunteerism		
Serve on county fair board	1	0.74
Serve as a livestock show volunteer	1	0.74
Volunteer with community agricultural groups (i.e., fair board, at the fair, with Farm Bureau, and with local farmers)	1	0.74
Total	136	100.00

Note. *f* indicates the number of original statements provided by panelists which were reduced to a single, unduplicated task; % indicates the task's percentage out of total tasks identified in Round 1 of the study.

Round 2

Panelists reached consensus of agreement (80.00% or greater) for 35 or 85 tasks (41.2%) associated with other professional responsibilities of teaching SBAE in a typical year aside from classroom and laboratory, FFA, and SAE. Table 15 includes the *M* and *SD* of item responses and level of agreement for tasks associated with teaching SBAE in other professional responsibilities. Of the tasks achieving consensus of agreement, 15 reached 100.00% agreement among panelists. Examples of tasks with the highest mean score per theme included: Complete attendance verification reports, Complete grade verification reports, and Take inventory ($M = 3.50$, $SD = 0.51$), Collaborate with fellow school staff ($M = 3.55$, $SD = 0.51$), Serve on agricultural education committees ($M = 2.77$, $SD = 1.07$), Integrate local community into the program ($M = 3.64$, $SD = 0.49$), Manage school facilities ($M = 2.77$, $SD = 0.97$), Assist with fundraising ($M = 3.50$, $SD = 0.60$), Manage time ($M = 3.68$, $SD = 0.48$), Attend state-wide agricultural education professional development ($M = 3.68$, $SD = 0.48$), Demonstrate professionalism at work, and Demonstrate professionalism in the community ($M = 3.86$, $SD = 0.35$), Assist with regional and state level CDE/LDE competitions ($M = 3.41$, $SD = 0.85$), Recruit students to your program ($M = 3.77$, $SD = 0.43$), Develop rapport with students ($M = 3.77$, $SD = 0.43$), Transport students to state FFA convention ($M = 3.23$, $SD = 0.87$), Mentor early-career agricultural education teachers ($M = 3.45$,

SD = 0.80), and Volunteer with community agricultural groups (*M* = 2.50, *SD* = 1.06). Panelists also provided additional tasks not included in those presented for agreement (see Appendix M).

Table 15

Consensus of Agreement for Tasks Identified by Delphi Panelists in Response to the Question, "What additional tasks are associated with the roles and responsibilities of a school-based agricultural education teacher in a typical year aside from classroom and laboratory instruction, FFA, and SAE?" (N = 22)

Tasks	*M*	*SD*	% Agreement
Clerical Work			
Complete attendance verification reports	3.50	0.51	100.00
Complete grade verification reports	3.50	0.51	100.00
Take inventory	3.50	0.51	100.00
Write student letters of recommendation	3.41	0.60	95.45
Submit state reports	3.41	0.80	90.91
Manage the total program budget	3.41	0.85	86.36
Order FFA t-shirts	3.23	0.69	86.36
Submit Perkins reports	3.00	1.02	68.18[a]
Gain program approval with Department of Education	2.86	1.08	63.64[a]
Colleague Relations			
Collaborate with fellow school staff	3.55	0.51	100.00
Committee Service			
Serve on agricultural education committees (i.e., State FFA Board of Directors, NAAE committees, and Curriculum revision)	2.77	1.07	68.18[a]
Serve as member of agricultural education teacher association committee for professional development	2.77	1.19	63.64[a]
Serve on school-wide committees (i.e., School Improvement Team)	2.68	1.09	59.09[a]
Serve as member of state fair education committee	2.00	1.16	36.36[b]
Serve as member of state livestock committee	1.86	1.082	31.82[b]
Serve as Committee Chair for Positive Behavior Interventions and Supports (PBIS)	2.00	0.93	22.73[b]
Community Relations			
Integrate local community into the program	3.64	0.49	100.00
Develop public relations	3.36	0.66	90.91
Work with booster clubs	3.14	0.77	86.36

Participate in the local community (i.e., civic organizations)	3.00	0.87	72.73[a]
Manage parents	3.00	0.82	68.18[a]
Coordinate alumni	2.86	0.77	63.64[a]
Facilities Management			
Manage school facilities	2.77	0.97	68.18[a]
Manage animals	2.73	1.16	63.64[a]
Repair school equipment	2.18	1.05	45.45[b]
Landscape school grounds	1.82	0.96	27.27[b]
Grants and Funding			
Assist with fundraising	3.50	0.60	95.45
Apply for grants	3.23	0.87	81.82
Conduct grant spending	3.18	0.91	77.27[a]
Conduct grant budgeting	3.09	0.92	72.73[a]
Conduct grant reporting	3.09	0.92	72.73[a]
Organize the County Buyer's Gala	1.59	0.734	13.64[b]
Local School Expectations			
Manage time	3.68	0.48	100.00
Attend Individualized Education Plan (IEP)/504 meetings	3.64	0.49	100.00
Attend faculty/staff meetings	3.59	0.50	100.00
Attend Professional Learning Community (PLC) meetings	3.59	0.73	95.45
Attend school-wide events	3.36	0.67	90.91
Perform regular school-wide duties (i.e., gate, lunch, and hall)	3.41	0.73	86.36
Support students in their extracurricular activities	3.18	0.85	81.82
Collaborate with other teachers to compile educational resources	3.00	0.87	72.73[a]
Attend school board meetings	2.91	0.68	72.73[a]
Serve as the community/school agricultural expert	2.82	0.85	72.73[a]
Cover other teachers' classes as needed	2.86	0.94	68.18[a]
Align semester exams to State standards for Ag courses	2.86	1.17	63.64[a]
Serve as lead teacher for agricultural education department	2.86	0.99	63.64[a]
Facilitate school-wide culture building events and activities	2.82	1.01	59.09[a]
Serve as test facilitators/proctors for standardized testing	2.77	0.97	59.09[a]
Serve as a class sponsor/advisor	2.64	1.09	54.55[a]
Develop data-informed recommendations to change/manage behaviors	2.77	1.07	50.00[b]

Improve teachers' practice of Positive Behavior Interventions and Supports (PBIS)	2.59	1.01	50.00[b]
Serve as an organizational coach	2.50	1.01	50.00[b]
Oversee fair displays	2.14	0.89	45.45[b]
Analyze school-wide discipline data	2.36	1.00	36.36[b]
Serve as Hunter Safety Course Instructor	2.05	0.95	36.36[b]
Serve as prom/homecoming chaperone	2.23	0.97	31.82[b]
Chaperone trips for other CTE teachers	2.14	0.77	27.27[b]
Develop County curriculum mapping resources	2.14	0.83	22.73[b]
Construct mums for homecoming	1.73	0.77	9.09[b]
Professional Development			
Attend state-wide agricultural education professional development	3.68	0.48	100.00
Attend school-wide professional development	3.59	0.50	100.00
Document professional development to maintain licensure	3.59	0.67	90.91
Maintain professional development plan	3.32	0.89	81.82
Lead professional development workshops	3.23	0.87	81.82
Professionalism			
Demonstrate professionalism at work	3.86	0.35	100.00
Demonstrate professionalism in the community	3.86	0.35	100.00
Participate in professional organizations (i.e., NAAE and state agricultural education teacher associations)	3.73	0.46	100.00
Assist with teacher professional activities	3.18	1.01	77.27[a]
Serve as a leader in professional organizations (i.e., NAAE and state agricultural education teacher associations)	3.05	1.05	68.18[a]
Student Competitive Events			
Assist with regional and state level CDE/LDE competitions	3.41	0.85	86.36
Lead summer agriculture tour for students	2.27	1.08	54.55[a]
Lead summer livestock clinic for students	2.18	1.10	50.00[b]
Proctor contest for students at state fair	1.95	0.95	40.91[b]
Serve as National FFA SAE proficiency room host	2.05	1.09	31.82[b]
Student Recruitment			
Recruit students to your program	3.77	0.43	100.00
Student Relations			
Develop rapport with students	3.77	0.43	100.00
Assist students with college scholarship/admission paperwork	3.18	0.80	86.36
Serve as counselor/life coach for students	3.00	0.76	81.82
Be like a mom/dad for some students	2.59	1.05	54.55[a]

Student Transportation			
Transport students to state FFA convention	3.23	0.87	81.82
Serve as a school bus/van driver	2.32	1.21	45.45[b]
Teacher Mentorship			
Mentor early-career agricultural education teachers	3.45	0.80	90.91
Serve as cooperating teacher for university student teacher	3.14	1.08	77.27[a]
Volunteerism			
Volunteer with community agricultural groups (i.e., fair board, at the fair, with Farm Bureau, and with local farmers)	2.50	1.06	54.55[a]
Serve as a livestock show volunteer	2.23	1.02	45.45[b]
Serve on county fair board	2.05	0.95	36.36[b]

Note. Responses utilized a 4-point scale 1 (*Strongly Disagree*) to 4 (*Strongly Agree*). Smaller mean (*M*) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes 51.00% to 79.99% consensus of agreement; [b]Denotes less than 51.00% consensus of agreement.

Twenty-eight statements reached a level of agreement between 51.00% and 79.99%, advancing to Round 3 for consideration by the panelists. Twenty-two tasks failed to reach at least 51.00% agreement; therefore, they were eliminated from the study.

Round 3

Table 16 displays the consensus of agreement for tasks carried forward from Round 2. Of the 28 tasks achieving between 51.00% and 79.99% agreement in Round 2, panelists reached consensus of agreement (80.00% or greater responding *Yes*) for four tasks, one in each of the following themes: Grants and Funding, Local School Expectations, Professionalism, and Teacher Mentorship. Twenty-four tasks failed to reach consensus of agreement and were eliminated from the study. Examples of tasks failing to reach consensus included: Gain program approval with Department of Education ($M = 1.70$, $SD = 0.47$), Serve on school-wide committees ($M = 1.75$, $SD = 0.44$), Manage parents ($M = 1.75$, $SD = 0.44$), Manage animals ($M = 1.65$, $SD = 0.49$), Conduct grant budgeting ($M = 1.70$, $SD = 0.47$), Collaborate with other teachers to compile educational resources ($M = 1.75$, $SD = 0.44$), Serve as a leader in professional organizations ($M = 1.70$, $SD =$

0.47), Lead summer agriculture tour for students (*M* = 1.55, *SD* = 0.51), Be like a mom/dad for some students (*M* = 1.50, *SD* = 0.51), and Volunteer with community agricultural groups (*M* = 1.65, *SD* = 0.49). Panelists also provided their rationale for selecting *No* for certain tasks (see Appendix N).

Table 16

Final Consensus of Agreement for Tasks Receiving between 51.00% - 79.99% Agreement in Round Two by Delphi Panelists in Response to the Question, "What additional tasks are associated with the roles and responsibilities of a school-based agricultural education teacher in a typical year aside from classroom and laboratory instruction, FFA, and SAE?" (N = 20)

Tasks	*M*	*SD*	% Agreement
Clerical Work			
Gain program approval with Department of Education	1.70	0.47	70.00[a]
Submit Perkins reports	1.60	0.50	60.00[a]
Committee Service			
Serve on school-wide committees (i.e., School Improvement Team)	1.75	0.44	75.00[a]
Serve on agricultural education committees (i.e., State FFA Board of Directors, NAAE committees, and Curriculum revision)	1.75	0.44	75.00[a]
Serve as member of agricultural education teacher association committee for professional development	1.60	0.50	60.00[a]
Community Relations			
Manage parents	1.75	0.44	75.00[a]
Coordinate alumni	1.70	0.47	70.00[a]
Participate in the local community (i.e., civic organizations)	1.65	0.49	65.00[a]
Facilities Management			
Manage animals	1.65	0.49	65.00[a]
Manage school facilities	1.60	0.50	60.00[a]
Grants and Funding			
Conduct grant spending	1.80	0.41	80.00
Conduct grant budgeting	1.70	0.47	70.00[a]
Conduct grant reporting	1.65	0.49	65.00[a]
Local School Expectations			
Serve as lead teacher for agricultural education department	1.80	0.41	80.00

Collaborate with other teachers to compile educational resources	1.75	0.44	75.00[a]
Align semester exams to State standards for agricultural courses	1.70	0.47	70.00[a]
Cover other teachers' classes as needed	1.70	0.47	70.00[a]
Attend school board meetings	1.65	0.49	65.00[a]
Serve as test facilitators/proctors for standardized testing	1.65	0.49	65.00[a]
Serve as the community/school agricultural expert	1.65	0.49	65.00[a]
Serve as a class sponsor/advisor	1.55	0.51	55.00[a]
Facilitate school-wide culture building events and activities	1.50	0.51	50.00[a]
Professionalism			
Assist with teacher professional activities	1.85	0.37	85.00
Serve as a leader in professional organizations (i.e., NAAE and state agricultural teacher associations)	1.70	0.47	70.00[a]
Student Competitive Events			
Lead summer agriculture tour for students	1.55	0.51	55.00[a]
Student Relations			
Be like a mom/dad for some students	1.50	0.51	50.00[a]
Teacher Mentorship			
Serve as cooperating teacher for university student teacher	1.85	0.37	85.00
Volunteerism			
Volunteer with community agricultural groups (i.e., fair board, at the fair, with Farm Bureau, and with local farmers)	1.65	0.49	65.00[a]

Note. Mean scores in Round 3 based on responses to *Yes* (2) or *No* (1) questions. Smaller mean (*M*) values indicate stronger disagreement, and larger mean values indicate stronger agreement; [a]Denotes consensus of agreement less than 80.00%

Final Analysis

Tasks achieving at least an 80.00% consensus of agreement in both Round 2 ($N = 35$ tasks) and Round 3 ($N = 4$ tasks) were compiled into a final list of tasks associated with other professional responsibilities of teaching SBAE aside from classroom and laboratory, FFA, and SAE. In total, 39 tasks in 11 themes reached consensus of agreement. Table 17 includes the final list of tasks associated with teaching SBAE in the area of other professional responsibilities. Clerical Work had 77.78% ($f = 7$) of tasks in the theme reach consensus. Colleague Relations had

100.00% (*f* = 1) of tasks in the theme reach consensus. Committee Service had 0.00% (*f* = 0) of tasks in the theme reach consensus. Community Relations had 50.00% (*f* = 3) of tasks in the theme reach consensus. Facilities Management had 0.00% (*f* = 0) of tasks in the theme reach consensus. Grants and Funding had 50.00% (*f* = 3) of tasks in the theme reach consensus. Local School Expectations had 30.77% (*f* = 8) of tasks in the theme reach consensus. Professional Development had 100.00% (*f* = 5) of tasks in the theme reach consensus. Professionalism had 80.00% (*f* = 4) of tasks in the theme reach consensus. Student Competitive Events had 20.00% (*f* = 1) of tasks in the theme reach consensus. Student Recruitment had 100.00% (*f* = 1) of tasks in the theme reach consensus. Student Relations had 75.00% (*f* = 3) of tasks in the theme reach consensus. Student Transportation had 50.00% (*f* = 1) of tasks in the theme reach consensus. Teacher Mentorship had 100.00% (*f* = 2) of tasks in the theme reach consensus. Volunteerism had 0.00% (*f* = 0) of tasks in the theme reach consensus (see Table 17).

Table 17

Final Tasks Identified by Delphi Panelists in Response to the Question, "What additional tasks are associated with the roles and responsibilities of a school-based agricultural education teacher in a typical year aside from classroom and laboratory instruction, FFA, and SAE?"

Tasks
Clerical Work
Complete attendance verification reports
Complete grade verification reports
Manage the total program budget
Order FFA t-shirts
Submit state reports
Take inventory
Write student letters of recommendation
Colleague Relations
Collaborate with fellow school staff
Community Relations
Develop public relations
Integrate local community into the program
Work with booster clubs
Grants and Funding
Apply for grants

- Assist with fundraising
- Conduct grant spending

Local School Expectations
- Attend faculty/staff meetings
- Attend Individualized Education Plan (IEP)/504 meetings
- Attend Professional Learning Community (PLC) meetings
- Attend school-wide events
- Manage time
- Perform regular school-wide duties (i.e., gate, lunch, and hall)
- Serve as lead teacher for agricultural education department
- Support students in their extracurricular activities

Professional Development
- Attend school-wide professional development
- Attend state-wide agricultural education professional development
- Document professional development to maintain licensure
- Lead professional development workshops
- Maintain professional development plan

Professionalism
- Assist with teacher professional activities
- Demonstrate professionalism at work
- Demonstrate professionalism in the community
- Participate in professional organizations (i.e., NAAE and state agricultural education teacher associations)

Student Competitive Events
- Assist with regional and state level CDE/LDE competitions

Student Recruitment
- Recruit students to your program

Student Relations
- Assist students with college scholarship/admission paperwork
- Develop rapport with students
- Serve as counselor/life coach for students

Student Transportation
- Transport students to state FFA convention

Teacher Mentorship
- Mentor early-career agricultural education teachers
- Serve as cooperating teacher for university student teacher

Chapter Summary

Chapter four provided a detailed account of the findings of the Delphi study. The results from the findings are summarized below:

- Description of Delphi Panel of Experts: 60.87% (*f* = 14) of respondents were female, 22 (95.65%) were traditionally certified SBAE teachers, 91.30% (*f* = 21) were white, and the average age of respondents was 33.78 years. Respondents taught in 16 different states and 5 (21.74%) were currently teaching SBAE. The average number of years of teaching experience was 8.39 years.
- Objective 1: Panelists identified 84 unduplicated tasks (derived from 265 original tasks) associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction. Of those, 74 tasks reached consensus of agreement (i.e., 80.00% or greater).
- Objective 2: Panelists identified 99 unduplicated tasks (derived from 296 original tasks) associated with the roles and responsibilities of SBAE teachers regarding FFA advisement. Of those, 80 tasks reached consensus of agreement (i.e., 80.00% or greater).
- Objective 3: Panelists identified 80 unduplicated tasks (derived from 168 original tasks) associated with the roles and responsibilities of SBAE teachers regarding SAE. Of those, 45 tasks reached consensus of agreement (i.e., 80.00% or greater).
- Objective 4: Panelists identified 85 unduplicated tasks (derived from 136 original tasks) associated with additional professional responsibilities of teaching SBAE aside from classroom and laboratory, FFA, and SAE. Of those, 39 tasks reached consensus of agreement (i.e., 80.00% or greater).

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS, AND DISCUSSION

Chapter V offers an overview of the study's purpose and objectives as well as a summary of the findings related to the tasks associated with teaching SBAE as identified by the Delphi panel. Included in the chapter are the conclusions of the study, their implications, and subsequent recommendations for future practice and research followed by discussion.

Purpose of the Study

The purpose of the study was to identify the tasks associated with the roles and responsibilities of SBAE teachers.

Research Objectives

Four objectives guided this study:

1. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding classroom and laboratory instruction.
2. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding FFA advisement.
3. Determine the tasks associated with the roles and responsibilities of SBAE teachers regarding students' Supervised Agricultural Experiences (SAEs).

4. Determine the additional tasks associated with the professional roles and responsibilities of SBAE teachers aside from classroom and laboratory instruction, FFA, and SAEs.

Summary of Methods

A modified, three-round Delphi method was implemented to meet the objectives of the study. The study's frame consisted of doctoral students in agricultural education with a minimum of three years of SBAE teaching experience as identified by the department heads of their respective agricultural education programs. In total, 22 universities were identified as offering a doctoral program in agricultural education. An email was sent to department heads of these universities requesting the names and email addresses of agricultural education doctoral students enrolled in their programs. Of the programs emailed, 13 universities (59.00%) responded. The study identified 40 potential Delphi panelists meeting these criteria, of whom 23 (57.50%) responded to Round 1. Therefore, the 23 respondents were considered the panel of experts for the study. Twenty-two (95.65%) expert panelists responded to Round 2, and 20 (86.96%) expert panelists responded to Round 3. Dalkey et al. (1972) suggested securing responses from at least 13 panelists ensures a Delphi study is reliable with a coefficient score of 0.90. This study met that threshold; therefore, it can be assumed to be reliable. The study's instruments were checked for face and content validity by a panel of experts consisting of seven faculty members and one graduate student at Oklahoma State University with experience in social science research, instrument development, and SBAE. After slight modifications were made, they were deemed valid for use in the study.

An initial email was sent to potential panelists on September 29, 2022 describing the study and directing them to a Qualtrics link to the Round 1 instrument. This instrument asked about the demographics of respondents and the following four open-ended questions:

4. What tasks are associated with the roles and responsibilities of an SBAE teacher regarding classroom/laboratory instruction in a typical year?
5. What tasks are associated with the roles and responsibilities of an SBAE teacher regarding FFA advisement in a typical year?
6. What tasks are associated with the roles and responsibilities of an SBAE teacher regarding supervised agricultural experiences (SAEs) in a typical year?
7. What additional tasks are associated with the roles and responsibilities of an SBAE teacher in a typical year (aside from classroom/laboratory instruction, FFA, and SAE)?

For each round of the study, a reminder email was sent to potential panelists approximately one week following the initial email for the round per Dillman et al.'s (2014) Tailored Design Method, and the instrument for each round was closed one week following the reminder email. Responses to the open-ended questions in Round 1 were analyzed using the constant comparison method (Creswell & Guetterman, 2019). Duplicated responses were grouped into one task descriptive of the responses, and the resulting unduplicated tasks were arranged into themes.

In Round 2, the unduplicated tasks were again sent to panelists through a second Qualtrics instrument. These tasks were presented in the form of a four-point agreement scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, 4 = *Strongly Agree*). Panelists were provided the opportunity to disclose additional tasks not included in Round 2. An 80.00% level of agreement was chosen *a priori* as the threshold for determining consensus for Round 2. Items achieving consensus of agreement were included in the final list of tasks of SBAE teachers. Items achieving 51.00% to 79.99% level of agreement were included in Round 3. Items achieving less than 51.00% level of agreement were eliminated from the study.

Round 3 consisted of items achieving 51.00% to 79.99% level of agreement. These items were presented to panelists through a third Qualtrics link to refine consensus of agreement. Panelists were asked whether the task should be included as a task of SBAE teachers (2 = *Yes*, 1 = *No*). Panelists also were asked to provide rationale for their decision. Responses achieving 80.00% level of agreement were considered to have reached consensus and were included in the final list of tasks of SBAE teachers. These tasks were added to list of tasks reaching consensus of agreement in Round 2 for a completed list of tasks of SBAE teachers as identified by the Delphi panelists.

Summary of Findings

Results indicated 14 (60.87%) respondents were female, 22 (95.65%) were traditionally certified SBAE teachers, 91.30% ($f = 21$) were white, and the average age of respondents was 33.78 years. Respondents taught in 16 different states and five (21.74%) were currently teaching SBAE. Initial results for Round 1 yielded 865 original tasks and 54 themes across the four question areas. After constant comparison analysis, 348 unduplicated tasks were identified. In the area of classroom and laboratory instruction, 84 tasks were identified within 14 themes. In the area of FFA, 99 tasks were identified within 13 themes. In the area of SAE, 80 tasks were identified within 12 themes, and regarding the additional tasks expected of a SBAE teacher, 85 tasks were identified within 15 themes.

Round 2 sought to establish consensus of agreement for tasks identified in Round 1. After analysis, a total of 216 items reached an 80.00% level of agreement and were included in the final list of tasks of SBAE teachers. A total of 81 items achieved a 51.00% to 79.99% level of agreement and were included in Round 3. Fifty-one items achieved less than 51.00% level of agreement and were not included in the final list of tasks of SBAE teachers.

Round 3 included items achieving 51.00% to 79.99% level of agreement. An additional 22 tasks achieved an 80.00% level of agreement and were included in the final list of tasks of SBAE teachers. However, 59 tasks presented to panelists in Round 3 failed to achieve consensus of agreement and were not included in the final list of tasks.

Conclusions

General Conclusions

This study focused on task-specific HC (Gibbons & Waldman, 2004) of SBAE teachers through the identification of job-specific tasks (Autor & Handel, 2013; Autor et al., 2003) associated with teaching SBAE. A total of 238 specific job tasks in 47 different themes areas reached consensus of agreement from the panelists associated with the various aspects of teaching SBAE. The beliefs the panel of experts hold regarding the tasks of SBAE teachers point to a single, overarching conclusion: there are too many expectations placed on SBAE teachers. Because these panelists were specifically chosen due to their unique perspectives of having an intimate and inherent interest in teaching SBAE, it is perhaps even more alarming the number of tasks that emerged. As such, it is no wonder that SBAE is a profession that ". . . devours its young" (Osborne, 1992, p. 3).

Final consensus of agreement among Delphi panelists identified 80 tasks in the area of FFA, 74 tasks in the area of classroom and laboratory instruction, 45 tasks in the area of SAE, and 39 tasks regarding additional professional responsibilities. It is no surprise SAE represented the lowest number of tasks in comparison to the other two components, as historically, SAEs have been the most underserved component of the TCM (Camp et al., 2000; Croom, 2008; Lewis et al., 2012; Torres et al., 2008).

One hundred and ten items failed to reach consensus of agreement, and six themes were eliminated through analysis. These tasks are widely varied and demonstrate the breadth and depth

of the responsibilities of SBAE teachers as they relate to each of the three components of the TCM and other professional responsibilities designated by the local school district. These conclusions align with similar findings regarding the roles, responsibilities, workload, and characteristics of SBAE teachers and the expectations placed on teachers as a result of these factors (Eck et al., 2019; Lambert et al., 2011; Traini et al., 2021; Torres et al., 2008). Based on the findings, it is apparent that teachers are expected to complete an overwhelming number of tasks related to their role as SBAE instructors. Perhaps this is due to the expectation that agriculture should be taught both as a content and a context (Roberts & Ball, 2009). As the skills expected of students change, so do the expectations of teachers to meet them. This potentially results in everchanging roles and responsibilities being added to the workload of SBAE, thus expanding the tasks of teachers as well.

It can be concluded further that SBAE teachers manage comprehensive programs reflective of the TCM. Conceptually, the TCM is a balanced approach to SBAE embodying a combination of classroom and laboratory instruction, FFA, and SAE in a comprehensive program (National Council for Agricultural Education, 2012; Phipps et al., 2008; Talbert et al., 2008). The replication of numerous tasks and themes across the areas of classroom and laboratory instruction, FFA, and SAE indicate that it is difficult for SBAE teachers to designate tasks as belonging definitively to specific components of the TCM. This notion aligns with Baker et al.'s (2012) Comprehensive Model for Secondary Agricultural Education which maintains that experiences can overlap with each other within the different components of the TCM. Perhaps this can be accounted for by the complex and comprehensive nature of SBAE and its individual components.

Regarding the theoretical framework of the study, the job-specific tasks associated with the HC of SBAE teachers are numerous and multifaceted. This leads to the development of specialized skills and, as a result, the acquisition of sector-specific skills contributing to the HC of

SBAE teachers (Smith, 2010). The skills associated with these job-specific tasks will enhance the HC of SBAE teachers (Robinson & Baker, 2013), and have the potential to increase their employability, perceived value, and success in the profession (Becker, 1964; Little, 2003; Shultz, 1971; Smith, 2010; Smylie, 1996).

Objective 1: Tasks associated with teaching SBAE in the area of Classroom and Laboratory Instruction

Regarding classroom and laboratory instruction, 74 tasks reached consensus of agreement for SBAE teachers. Of the four question areas, classroom and laboratory instruction accounted for 31.09% of accepted tasks, representing a total agreement of 88.10%. This indicates the specific tasks associated with classroom and laboratory instruction are generally accepted across the profession and comprise approximately one-third of a teacher's expected tasks. This conclusion supports the findings of Torres et al. (2008) who found teachers spend approximately 36.00% of their time on teaching and teaching-related activities. Based on the findings of the study, it can be reasonably inferred that tasks related to classroom and laboratory instruction are integral to the success of SBAE teachers. As an entity of CTE, the value of the instructional component of the SBAE model has been emphasized since the passage of the Smith-Hughes Act of 1917 (Gordon, 2014; Phipps et al., 2008). To that end, the findings of the study support the notion that SBAE is highly dependent on the tasks teachers are expected to perform with regard to classroom and laboratory instruction. Three overarching themes emerged in the study as conclusions related to classroom and laboratory instruction.

First, it is concluded that SBAE teachers are relationship builders. The findings of the study indicate teachers should develop relationships with their students, colleagues, administrators, alumni, students' parents, and the community in which they teach. This conclusion is based on the inclusion of themes related to building relationships and rapport

among students and stakeholders, motivating students to learn, and including all learners in the instructional process. Tasks related to this conclusion include serving as a mentor for students, building relationships with students, creating an inclusive learning environment, and motivating students to learn. These conclusions align with findings from Eck et al. (2019) which identified teachers as being relatable, student focused, and empathetic. In addition, Roberts and Dyer (2004) identified caring for students, working well with parents, establishing strong community relationships, and working well with alumni groups as characteristics exhibited by effective SBAE teachers.

Second, it is concluded that SBAE teachers are competency driven. From the content they teach to their own professional development, SBAE teachers value competency and technical skill acquisition. This conclusion is supported by themes such as Authentic Skill Development and Instructional Design. Specific tasks aligning with this conclusion include assisting students in obtaining industry-based certifications, teaching practical skills to students, providing inquiry-based learning opportunities for all courses, aligning curriculum to appropriate standards, and applying curriculum concepts to real-world situations and scenarios, to name a few. This reinforces findings from DiBenedetto et al. (2018) who found the acquisition of technical, competency-driven skills as a professional need of SBAE teachers. In additional, it supports the content-based model proposed by Roberts and Ball (2009) by demonstrating the need for technical agricultural skill acquisition.

Third, it is concluded that SBAE teachers are quality instructors. Specifically, SBAE teachers plan for and execute effective instruction in various settings including the classroom, laboratories, and informal teaching environments. This instruction is intentional and well thought out. Teachers spend a significant amount of time planning for instruction which is consistent with previous research (Lambert et al., 2011; Robinson et al., 2010; Torres et al., 2008; Torres & Ulmer, 2007). These conclusions are based on the inclusion of tasks such as instructing students,

managing the classroom, organizing teaching materials and resources, practicing labs ahead of time, preparing daily lesson plans, preparing lab and classroom facilities for instruction, and managing time for preparation.

Objective 2: Tasks associated with teaching SBAE in the area of FFA advisement

Regarding the FFA component, 80 tasks reached consensus of agreement for SBAE teachers. Of the four question areas, FFA accounted for 33.61% of accepted tasks, representing a total agreement of 80.81%. This indicates the specific teacher tasks associated with FFA are generally accepted across the profession and comprise approximately one-third of a teacher's expected tasks. Based on the findings of the study, it can be reasonably inferred that tasks related to FFA consume approximately the same amount of time as classroom and laboratory instruction but more time than SAE and additional professional responsibilities. This differs slightly from the findings of Torres et al. (2008) who found teachers spend approximately 24% of their time on FFA related activities. Perhaps this is due to the members of the Delphi panel having more experience with FFA related activities, which was emphasized in the consensus building process. Three overarching themes emerged in the study as conclusions related to FFA.

First, SBAE teachers are competitive in FFA events. Competition in CDEs, LDEs, Agriscience Fair, and public speaking drive tasks related to FFA within SBAE. Teachers instruct and prepare students for these activities to provide opportunities for student success and recognition. This conclusion is supported by themes such as Awards and Applications; Competitive Student Events; Student Recognition; and Student Conventions, Camps, and Conferences. Congruently, tasks supporting the claim include motivating students to apply for awards; assisting students in developing degree, star, and proficiency applications; preparation for and assessing student skill development in CDE, LDE, speaking, and agriscience fair events;

attending FFA convention; and facilitating award recognition for student success. This aligns with Jones's and Edward's (2019) description of the role of competition in SBAE programs. It is likely that teacher involvement in competitive events stems from their own positive experiences in these events as students.

Second, SBAE teachers manage administrative tasks related to FFA activities. These tasks most likely enhance the student learning experience and promote positive interactions with FFA. Findings supporting this conclusion include tasks related to clerical work such as completing required paperwork for student travel to events, planning chapter trips, purchasing supplies for chapter events, and submitting student contest materials as well as tasks related to fundraising such as managing and raising chapter funds. This conclusion supports the findings of Torres et al. (2008) who found teachers spend 8% of their time on administrative tasks.

Third, SBAE teachers engage the local community in their FFA chapter. This engagement includes working with local organizations and community efforts as well as involving the community in chapter activities. Tasks related to community engagement include communicating with FFA alumni and supporters, establishing program culture within the community, fostering connections in the local community, and managing alumni relations. This supports the claim of Sherman and Sorensen (2020) that students' educational opportunities are enhanced through exposure to an external support system such as the local community. It is possible that local factors such as the openness of the community to volunteer with the program greatly impact the extent to which students benefit from community engagement with the FFA chapter.

Objective 3: Tasks associated with teaching SBAE in the area of SAE

Regarding the SAE component, 45 tasks reached consensus of agreement for SBAE teachers. Of the four question areas, SAE accounted for 18.91% of accepted tasks, representing a

total agreement of 56.25%. This indicates the specific teacher tasks associated with SAE are less generally accepted across the profession than classroom and laboratory instruction and FFA. Based on the findings of the study, it can be reasonably inferred that SBAE teachers spend less time on tasks related to SAE than classroom and laboratory instruction and FFA. This supports the findings of Torres et al. (2008) who found teachers spend approximately 4% of their time on SAE related activities. Historically, SAE has been underrepresented in the TCM (Camp et al., 2000; Croom, 2008; Lewis et al., 2012). Three overarching themes emerged in the study as conclusions related to SAE.

First, SBAE teachers are competitive in SAE related tasks. Teachers assist students in developing competitive award applications pertaining to their SAEs while creating opportunities for the recognition of student success. Tasks related to student SAE success include assisting students with proficiency award, degree, and star applications; facilitating award recognition for SAEs; providing opportunities for student success within SAE; and reviewing student applications. This conclusion supports the notion that student competition is used as an instructional approach in SBAE (Jones & Edwards, 2019).

Second, SBAE teachers engage the local community in the SAE component of their programs. SBAE teachers carry out tasks intended to enhance educational experiences by exposing students to community connections, establishing a professional network for students, and engaging them with the local community. Findings of the study supporting this conclusion are the inclusion of task related to Community Development and Relationships and Rapport. Such tasks include connecting students with community members for the purposes of work-based learning placements and experiential learning opportunities as well as working to develop trust among community members, particularly students' families. This supports the assertation that connections to the local community creates variety in local programming, thus making SBAE programs successful (Sherman & Sorensen, 2020).

Third, SBAE teachers assist students in planning, developing, and implementing SAEs. These SAEs are varied and require expertise in the areas of entrepreneurship, placement, agribusiness, and agriscience research. Tasks related to this conclusion include assisting all students in developing and planning SAEs; ensuring each student has a viable SAE project; guiding students' reflection on personal and career goals to develop SAE plans; creating cohesive connections between SAEs, classroom instruction, and FFA; and providing technical support student SAE projects. These conclusions support the claim that SAEs are an integral component of the TCM and serve as pivotal experiences in SBAE (Croom, 2008; Lewis et al., 2012).

Objective 4: Additional tasks associated with the roles and responsibilities of teaching SBAE

Regarding additional tasks, 39 tasks reached consensus of agreement for SBAE teachers. Of the four question areas, additional tasks associated with teaching SBAE accounted for 16.39% of accepted tasks, representing a total agreement of 45.88%. This indicates the additional teacher tasks associated with SBAE are varied, diverse, and less generally agreed upon across the profession. Based on the findings of the study, it can be reasonably inferred that SBAE teachers spend the least amount of time on tasks related to additional professional responsibilities. This supports the findings of Torres et al. (2008) who found teachers spend approximately 8% of their time on teaching related activities such as school prescribed tasks not including teaching and engagement with community. SBAE courses are elective career and technical education courses housed in public schools (Phipps et al., 2008), which leads to increased autonomy in what is taught and how it is taught. There also are differences in expectations placed on SBAE and general education teachers in the form of extracurricular involvement. Each of these factors point to the idea that SBAE teachers are expected to spend more time on responsibilities both in and out of the classroom (Smalley & Rank, 2019). Three overarching themes emerged in the study as conclusions related to additional tasks associated with teaching SBAE.

First, SBAE teachers manage administrative tasks related to other school prescribed activities. These tasks are important to the function of the program and teachers' involvement in general school activities. Tasks related to this conclusion include completing attendance and grade verification reports, managing the program budget, submitting state reports, taking inventory of equipment and supplies, and applying or grants. These conclusions support the findings of Torres et al. (2008) who found administrative tasks composed 8% of teacher workload. It can be reasonably inferred that these administrative tasks are both prescribed by the local school district and self-imposed to ensure organization and efficiency in the SBAE program.

Second, SBAE teachers are engaged members of their local schools. The role of SBAE teachers undoubtedly includes being a good school team member (Talbert et al., 2014). Tasks related to this conclusion include assisting with teacher professional activities; demonstrating professionalism in the school and community; attending faculty, Individualized Education Plan, and 504 meetings; performing regular school-wide duties, such as hall or cafeteria duty; and supporting students in extracurricular activities. This conclusion reinforces the notion that teachers are expected to be involved in school-wide activities and engage with other programs (Smalley & Rank, 2019; Talbert et al., 2014).

Third, SBAE teachers develop relationships within their schools and communities. These relationships are meant to enhance teachers' networks both in and out of the school setting. Tasks related to this conclusion include collaborating with fellow school staff, developing rapport with all students, serving as a counselor and life coach for students, mentoring early-career SBAE teachers, and integrating the local community into the program. This conclusion supports the findings of Eck et al. (2019) and Roberts and Dyer (2004) describing effective teachers as those who build rapport with others, are empathetic, and connect easily with stakeholders and supporters.

Recommendations for Research

Due to the sample size and the nature of the Delphi method (Hsu & Sandford, 2007), the findings of the study should not be generalized to the general SBAE population. To address this limitation, the study should be replicated with a larger participant size and broader scope. Specifically, it is recommended that a national study be conducted consisting of respondents across all career phases (i.e., early, mid, and late career teachers). In addition, a study should be conducted with pre-service SBAE teachers to determine the specific job tasks for which they are competent and the ones in which they need additional support. Finally, it is recommended that studies be conducted in each state to determine the tasks of SBAE teachers specific to the state or region in which they teach. Such studies lend themselves to worthy needs assessments to determine teachers' self-perceived competencies with completing these tasks and their values for doing so. Moreover, it is recommended that these tasks be evaluated by teachers across various career phases, state agricultural education staff members, school administrators, and teacher education faculty to determine the perceived importance of job-specific HC acquired by teachers. Comparisons between the groups could be used to determine which tasks are most essential. Doing so would provide an indication of which tasks of SBAE teachers and stakeholders value more than others. Such an analysis would provide essential information regarding the workload of SBAE teachers as well as the importance through which they perceive individual tasks. In turn, the findings could potentially be used for context in studies examining stress, burnout, retention, and person-environment fit of SBAE teachers.

Further, additional research should be conducted to determine the amount of stress SBAE teachers report regarding their performance of each task. It is possible that teachers might experience higher levels of stress regarding certain tasks than others? Is there a relationship between the amount the stress teachers experience regarding tasks and their retention in the field? Such information would provide insight into the professional needs of SBAE teachers, guiding

professional development efforts and offering enhanced support with regard to technical content and instructional design and delivery. Moreover, knowing the amount of stress teachers experience with SBAE tasks would be valuable for implementing personal supports for teachers and creating self-awareness among teachers regarding boundaries, limiting factors, and a healthy work-life balance (Haddad et al., 2022; Traini et al., 2021). Studies making use of self-reported stress levels could be conducted statically or longitudinally, providing better insight into the current stress levels of teachers or the way stress changes over time throughout a school year.

Research also should be conducted to determine the amount of burnout SBAE teachers experience with the tasks required of them. Do teachers experience more burnout regarding certain tasks in comparison to others? Does this burnout lead to less enthusiasm for certain topics, which could lead to lower impact potential for student learning in those topics? What relationship is there between teacher task burnout and longevity in the profession? Answers to these questions would be beneficial for teacher preparation programs with regard to course offerings. In addition, this information could better inform expectations from state CTE departments as well as the National Council for Agricultural Education. A longitudinal approach should study teacher burnout in the context of the tasks identified in this study to determine areas of possible improvement regarding how and when individual states choose to schedule their various competitive events. Understanding the nature of SBAE teacher burnout in the context of tasks could allow for better timing of shifts in focus regarding expectations of teachers.

Finally, it is recommended the tasks identified in this study be used to determine the fit between the personal interests and characteristics of SBAE teachers and the professional environment they serve. Using tasks to contextualize person-environment fit among SBAE teachers could yield significant data regarding teachers' fit in the profession, their professional needs regarding building the personal competence needed to be successful, ways to improve their teaching environment, and their longevity in the profession. Moreover, measuring teachers'

person-environment fit along with the stress of teachers could provide crucial insight into the nature of teacher burnout and retention within the profession.

Recommendations for Practice

In terms of practice, it is recommended that teacher preparation programs evaluate the tasks required of SBAE for overlap with instructional content intended for pre-service teachers. Informing pre-service SBAE teachers of the tasks required of them will help them to better prepare for teaching internship placements as well as motivate them to acquire the skills necessary to prepare for these tasks. Further, the findings of this study can better inform potential teachers of the specific job-task expectations of the profession, allowing them to better determine if the profession is the right fit for them. Teacher attrition and retention rates may be impacted by such decision-making as preservice teachers who are less likely to remain in teaching may choose a different career path. It is also recommended that these tasks be used to create professional development specific to the phases of career tenure within SBAE (early, mid, and late). Such professional development could be featured in a staggered approach for different career phases of teaching SBAE. Specifically, a focused set of tasks could be identified as essential and presented to early career teachers, then additional tasks could be staggered to focus on mid and late career teachers depending on their specific needs.

Discussion and Implications

There are too many job-specific tasks required of SBAE teachers. This is both a beauty and a curse of teaching SBAE. As an elective course, SBAE is unique in that it is not standardized and therefore affords flexibility in what is taught and how it is presented to students. The notion that agriculture can be taught as both a content and a context (Roberts & Ball, 2009) allows for teachers to instruct students using a variety of instructional strategies and approaches. This flexibility demonstrates the beauty of SBAE, in that it is local in nature and can be adapted

to meet the needs of SBAE students. Conversely, because SBAE is not taught as a standardized curriculum across the nation, and because it is largely dependent on the local program's needs, the roles, responsibilities, and job tasks of teachers vary and can become intensified over time leading teachers to feeling discouraged and overwhelmed. In comparison to general education teachers, SBAE teachers are expected to perform tasks in three different domains of an integral system (Croom, 2008) as opposed to teaching a single subject. To that end, teachers are expected to perform an increasing level of tasks and responsibilities, leading to issues with teacher attrition (Solomonson et al., 2019), burnout (Kitchel et al., 2012), and stress (Thieman et al., 2012).

The panel of experts for this study was chosen based on their expertise in the field of SBAE demonstrated by their past teaching experience and desire to continue with a terminal degree in agricultural education. However, it is important to recognize an important feature of this group. More than 75% of them purposefully left the SBAE classroom. Why? These individuals are assumed to be high-flyers who have an obvious interest in and passion for SBAE; however, they left the profession prematurely and will likely not retire as SBAE teachers. Is it possible that these teachers chose to leave the classroom because the job-specific tasks required of them had become too demanding? The findings of this study suggest that these individuals were overworked and, by extension, unable to balance the expectations of the profession with their desire to find fulfillment in the field of teaching.

A shortage of qualified SBAE teachers has plagued the profession for decades (Eck & Edwards, 2019). SBAE teachers face mounting challenges (Boone & Boone, 2007; Boone & Boone, 2009), needs (DiBenedetto et al., 2018; Roberts et al., 2020), and characteristics of effective teaching (Eck et al., 2019; Roberts & Dyer, 2004). Each of these factors combined create a complex SBAE system which teachers must navigate (Haddad et al., 2022; Traini et al., 2021). Yet, teachers are expected to successfully manage this system while performing a copious number of tasks. This all points to a SBAE system in which teachers are overwhelmed by the job

tasks required of them. It is likely that teachers have too much on their plate. Perhaps it is time the various entities of SBAE programs (i.e., The Council for Agricultural Education, AAAE, State CTE Staff, and the National FFA Organization) work together to eliminate certain tasks of SBAE teachers to make the job more manageable. At the very least, additional personal and professional support systems should exist for SBAE teachers as they navigate the overwhelming amount of work expected of them. Will SBAE continue to be "a profession that literally devours its young and forces them to look elsewhere for professional and personal satisfaction" (Osborne, 1992, p. 3), or can the overwhelming number of tasks required of teachers be reined in and trimmed down to allow for more acceptable work-life balance and job satisfaction among teachers? The evaluation of job-specific HC and its associated perceived value holds tremendous potential importance in the profession, and it should continue to be explored along with possible stress, burnout, retention, and professional factors impacting the overall health and well-being of SBAE teachers.

REFERENCES

Adler, M., & Ziglio, E. (1996). *Gazing into the oracle: The Delphi method and its application to social policy and public health.* Jessica Kingsely Publishers.

Advance CTE (2023). *History of CTE*. https://careertech.org/100yrs

American Association for Agricultural Education. (2018, May). *AAAE degree resource.* https://aaea.wildapricot.org/resources/Documents/National/AAAE%20Degree%20Resource%20-%20Revised%20May%202018.pdf

Autor, D. H., & Handel, M. J. (2013). Putting tasks to the test: Human capital, job tasks, and wages. *Journal of Labor Economics, 31*(2), 59–96. https://doi.org/10.1086/669332

Autor, D. H., Frank, L., & Richard, J. M. (2003). The skill content of recent technological change: An empirical investigation. *Quarterly Journal of Economics, 118*, 1279–1333. https://doi.org/10.3386/w8337

Bailey, B. (2000). The impact of mandated change on teachers. In N. Bascia & A. Hargreaves (Eds.)*, The sharp edge of educational change: Teaching, leading, and the realities of reform* (pp. 112–128). Routledge Falmer.

Baker, M. A., Robinson, J. S., & Kolb, D. A. (2012). Aligning Kolb's experiential learning theory with a comprehensive agricultural education model. *Journal of Agricultural Education, 53*(4), 1–16. https://doi.org/10.5032/jae.2012.04001

Ballet, K., Kelchtermans, G., & Loughran, J. (2006). Beyond intensification towards a scholarship of practice: Analysing changes in teachers' work lives. *Teachers and Teaching: Theory and Practice, 12*(2), 209–229. https://doi.org/10.1080/13450600500467415

Barrios, M., Guilera, G., Nuño, L., & Gómez-Benito, J. (2021). Consensus in the Delphi method: What makes a decision change? *Technological Forecasting & Social Change, 163*, 1–10. https://doi.org/10.1016/j.techfore.2020.120484

Bartlett, L. (2004). Expanding teacher work roles: A resource for retention or a recipe for overwork? *Journal of Education Policy, 19*(5), 565–582. https://doi.org/10.1080/0268093042000269144

Bascia, N., & Rottmann, C. (2011). What's so important about teachers' working conditions? The fatal flaw in North American educational reform. *Journal of Education Policy, 26*(6), 787–802. https://doi.org/10.1080/02680939.2010.543156

Becker, G. (1964). *Human capital: A theoretical and empirical analysis with special reference to education.* The University of Chicago Press.

Blezek, A. G., & Dillon, R. D. (1991). Perceptions of agribusiness leaders toward agricultural education in Nebraska. *Journal of Agricultural Education, 32*(2), 35–39. https://doi.org/10.5032/jae.1991.02034

Boone, H. N., & Boone, D. A. (2007). Problems faced by high school agricultural education teachers. *Journal of Agricultural Education, 48*(2), 36–45. https://doi.org/10.5032/jae.2007.02036

Boone, H. N., & Boone, D. A. (2009). An assessment of problems faced by high school agricultural education teachers. *Journal of Agricultural Education, 50*(1), 21–32. https://doi.org/10.5032/jae.2009.01021

Brady, S. (2015). Utilizing and adapting the Delphi method for use in qualitative research. *International Journal of Qualitative Methods, 14*(5), 1–6. https://doi.org/10.1177/1609406915621381

Brady, S. R. (2016). Utilizing the Delphi method in community based participatory research. In L. Jason & D. Glenwick (Eds.), *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods*. Oxford Press.

Branan, S., & Rohs, F. R. (1991). Home economists identify research needs. *Journal of Extension, 29*(2), Article 25. https://archives.joe.org/joe/1991summer/rb3.php

Brent, B. O. (2000). What you never knew about school volunteers. *Education Digest, 66*(2), 55–59. https://www.proquest.com/docview/218190787?accountid=4117

Buriak, P., & Shinn, G. C. (1989). Mission, initiatives, and obstacles to research in agricultural education: A national Delphi using external decision-makers. *Journal of Agricultural Education, 30*(4), 14–23. https://doi.org/10.5032/jae.1989.04014

Buriak, P., & Shinn, G. C. (1993). Structuring research for agricultural education: A national Delphi involving internal experts. *Journal of Agricultural Education 34*(2), 3l–36. https://doi.org/10.5032/jae.1993.02031

Camp, W. G., & Sutphin, H. D. (1991). Integrating microcomputers and related technologies in agricultural education. *Journal of Agricultural Education, 32*(l), 41–46. https://doi.org/10.5032/jae.1991.01041

Camp, W. G., Clarke, A., & Fallon, M. (2000). Revisiting supervised agricultural experiences. *Journal of Agricultural Education, 41*(3), 13–22. https://doi.org/10.5032/jae.2000.03013

Cannon, A. F., Smalley, S., & Hainline, M. S. (2022). Perceptions of agricultural educators entering the profession through alternative means. *Journal of Agricultural Education, 63*(2), 1–16. https://doi.org/10.5032/jae.2022.02001

Cano, J. (1990, June). Teacher stress – Teacher burnout: A profession at risk. *The Agricultural Education Magazine, 62*(12), 13–14. https://www.naae.org/profdevelopment/magazine/archive_issues/Volume62/v62i12.pdf

Cano, J., & Miller, G. (1992). An analysis of job satisfaction and job satisfier factors among six taxonomies of agricultural education teachers. *Journal of Agricultural Education, 33*(4), 9–16. https://doi.org/10.5032/jae.1992.04009

Career and Technical Student Organizations (2023). *National coordinating council for career and technical student organizations*. https://www.ctsos.org/about-us/

Castillo, J. X., & Cano, J. (1999). A comparative analysis of Ohio agriculture teachers' level of job satisfaction. *Journal of Agricultural Education, 40*(4), 67–79. https://doi.org/10.5032/jae.1999.04067

Chan, D. (2002). Stress, self-efficacy, social support, and psychological distress among prospective teachers in Hong Kong. *Educational Psychology, 22*(5), 557–570. https://doi.org/10.1080/0144341022000023635

Chenevey, J. L., Ewing, J. C., & Whittington, M. S. (2008). Teacher burnout and job satisfaction among agricultural education teachers. *Journal of Agricultural Education, 49*(3), 12–22. https://doi.org/10.5032/jae.2008.03012

Chizari, M., & Taylor, W. N. (1991). Agricultural teachers' perceptions of adult education programs: An examination of critical educational needs, obstacles faced, and support needed. *Journal of Agricultural Education, 32*(2), 23–28. https://doi.org/10.5032/jae.1991.02023

Clark, M. S., Kelsey, K. D., & Brown, N. R. (2014). The thornless rose: A phenomenological look at decisions career teacher make to remain in the profession. *Journal of Agricultural Education, 55*(3), 43–56. https://doi.org/10.5032/jae.2014.03043

Conner, N., & Roberts, T. G. (2013). Competencies and experiences needed by pre-service agricultural educators to teach globalized curricula: A modified Delphi study. *Journal of Agricultural Education, 54*(1), 8–17. https://doi.org/10.5032/jae.2013.01008

Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson Education Inc.

Croom, D. B. (2003). Teacher burnout in agricultural education. *Journal of Agricultural Education, 44*(2), 1–13. https://doi.org/10.5032/jae.2003.02001

Croom, D. B. (2008). The development of the integrated three-component model of agricultural education. *Journal of Agricultural Education, 49*(1), 110–120. https://doi.org/10.5032/jae.2008.01110

Curriculum for Agricultural Science Education (2023). *CASE major concepts*. https://www.case4learning.org/about-case/case-major-concepts/

Dalkey, N. C. (1969). *The Delphi method: An experimental study of group opinion*. The Rand Corporation.

Dalkey, N. C., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. *Management Science*, *9*(3), 458–467. https://doi.org/10.1287/mnsc.9.3.458

Dalkey, N. C., Rourke, D. L., Lewis, R., & Snyder, D. (1972). *Studies in the quality of life.* Lexington Books.

Diamond, I. R., Grant, R. C., Feldman, B. M., Pencharz, P. B., Ling, S. C., Moore, A. M., & Wales, P. W. (2014). Defining consensus: A systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology, 67*(4), 401–409. https://doi.org/10.1016/j.jclinepi.2013.12.002

DiBenedetto, C. A., Willis, V. C., & Barrick, R. K. (2018). Needs assessments for school-based agricultural education teachers: A review of literature. *Journal of Agricultural Education, 59*(4), 52–71. https://doi.org/10.5032/jae.2018.04052

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.

Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2021). *COVID-19 and education: The lingering effects of unfinished learning.* McKinsey & Company. https://www.echs-nm.com/wp-content/uploads/2021/10/covid-19-and-education-the-lingering-effects-of-unfinished-learning-v3.pdf

DuBois, D. L., & Neville, H. A. (1997). Youth mentoring: Investigation of relationship characteristics and perceived benefits. *Journal of Community Psychology, 25*(3), 227–234. https://doi.org/10.1002/(SICI)1520-6629(199705)25:3<227::AID-JCOP1>3.0.CO;2-T

Easterly, R. G., III, & Myers, B. E. (2017). Characteristics of enthusiastic and growing school-based agricultural education teachers: A Delphi approach. *Journal of Agricultural Education, 58*(2), 1–19. https://doi.org/10.5032/jae.2017.02001

Eck, C. J., & Edwards, M. C. (2019). Teacher shortage in school-based, agricultural education (SBAE): A historical review. *Journal of Agricultural Education, 60*(4), 223–239. https://doi.org/10.5032/jae.2019.04223

Eck, C. J., Robinson, J. S., Cole, K. L., Terry, R., Jr., & Ramsey, J. W. (2020). The validation of the effecting teaching instrument for school-based agricultural education teachers. *Journal of Agricultural Education, 61*(4), 229–248. https://doi.org/10.5032/jae.2020.04229

Eck, C. J., Robinson, J. S., Cole, K. L., Terry, R., Jr., & Ramsey, J. W. (2021). Identifying the characteristics of effective school-based agricultural education teachers: A national census study. *Journal of Agricultural Education, 62*(3), 292–309. https://doi.org/10.5032/jae.2021.03292

Eck, C. J., Robinson, J. S., Ramsey, J. W., & Cole, K. L. (2019). Identifying the characteristics of an effective agricultural education teacher: A national study. *Journal of Agricultural Education, 60*(4), 1–18. https://doi.org/10.5032/jae.2019.04001

Educators for Excellence. (2020). *Voices from the virtual classroom: A survey of America's teachers on COVID-19-related education issues.* https://e4e.org/sites/default/files/voices_from_the_virtual_classroom_2020.pdf

Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.

Frick, M. J. (1993). Developing a national framework for a middle school agricultural education curriculum. *Journal of Agricultural Education, 34*(2), 77–84. https://doi.org/10.5032/jae.1993.02077

Frick, M. J., Kahler, A. A., & Miller, W. W. (1991). A definition and the concepts of agricultural literacy. *Journal of Agricultural Education, 32*(2), 49–57. https://doi.org/10.5032/jae.1991.02049

Garland, H. (1985). A cognitive mediation theory of task goals and human performance. *Motivation and Emotion, 9*(4), 345–367. https://doi.org/10.1007/BF00992205

Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational research: Competencies for analysis and research* (8th ed.). Pearson Education Inc.

Gibbons, R., & Waldman, M. (2004). Task-specific human capital. *American Economic Review, 94*(2), 203-207. https://doi.org/10.1257/0002828041301579

Glaser, B. G. (1978). *Theoretical sensitivity*. Sociology Press.

Goldhaber, D., & Theobald, R. (2022). Teacher attrition and mobility in the pandemic. *Educational Evaluation and Policy Analysis, 201*, 1–6. https://doi.org/10.3102/01623737221139285

Gordon, H. R. D. (2014). *The history and growth of career and technical education in America* (4th ed.). Waveland Press, Inc.

Grady, T. L., & Burnett, M. F. (1985). The relationship between job satisfaction and performance of vocational agriculture teachers. *Journal of Vocational Education Research, 10*(3), 53–69. https://eric.ed.gov/?id=EJ333938

Grossman, J. B., & Tierney, J. P. (1998). Does mentoring work? An impact study of the Big Brothers Big Sisters program. *Evaluation Review, 22*(3), 403–426. https://doi.org/10.1177%2F0193841X9802200304

Haddad, B., Traini, H. Q., & McKim, A. J. (2022, May 16–19). *We've crossed a line: A philosophical examination of systemic implications surrounding SBAE teachers' attempts at boundary setting* [Paper presentation]. American Association for Agricultural Education National Research Conference, Oklahoma City, OK, United States. https://aaea.wildapricot.org/resources/Documents/National/2022Meeting/2022AAAEPaperProceedings.pdf

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*(6), 495–513. https://doi.org/10.1016/j.jsp.2005.11.001

Halvorson, G. A. (2015). The role of a 1994 land grant college. *Rangelands, 38*(1), 14–15. https://doi.org/10.1016/j.rala.2015.12.004

Hamilton L. S., Grant D., Kaufman J. H., Diliberti M. K., Schwartz H. L., Hunter G. P., Setodji C. M., & Young C. J. (2020). *COVID-19 and the state of K–12 schools: Results and technical documentation from the spring 2020 American Educator Panels COVID-19 Surveys.* RAND Corporation. https://doi.org/10.7249/RRA168-1

Harder, A., Place, N. T., & Scheer, S. D. (2010). Towards a competency-based extension education curriculum: A Delphi study. *Journal of Agricultural Education, 51*(3), 44–52. https://doi.org/10.5032/jae.2010.03044

Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32*(4), 1008–1015. https://doi.org/10.1046/j.1365-2648.2000.t01-1-01567.x

Heckman, J. L. (2000). *Invest in the very young*. Ounce of Prevention Fund. https://www.impactforequity.org/wp-content/uploads/2014/01/Heckman-Invest-In-Very-Young.pdf

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Southwest Educational Development Laboratory.

Hess, F. M. (2000). Tear down this wall: The case for a radical overhaul of teacher certification. *Educational Horizons, 80*(4), 169–183. https://www.jstor.org/stable/42927125

Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research, and Evaluation, 12*, Article 10. https://doi.org/10.7275/pdz9-th90

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

Hurrell J. J., Nelson, D. L., & Simmons, B. L. (1998). Measuring job stressors and strains: Where we have been, where we are, and where we need to go. *Journal of Occupational Health Psychology, 3*(4), 368–389. https://doi.org/10.1037/1076-8998.3.4.368

Hyslop-Margison, E. J. (2000). An assessment of the historical arguments in vocational education reform. *Journal of Career and Technical Education 17*(1), 23–30. https://doi.org/10.21061/jcte.v17i1.590

Ingersoll, R. (2017). Misdiagnosing America's teacher quality problem. In G. K. LeTendre & M. Akiba (Eds.), *International handbook of teacher quality and policy* (pp. 79–96). Routledge.

Jenkins, C. C., III, & Kitchel, T. (2009). Identifying quality indicators of SAE and FFA: A Delphi approach. *Journal of Agricultural Education, 50*(3), 33–42. https://doi.org/10.5032/jae.2009.03033

Jones N., & Youngs P. (2012). Attitudes and affect: Daily emotions and their association with the commitment and burnout of beginning teachers. *Teachers College Record, 114*(2), 1–36. https://doi.org/10.1177/016146811211400203

Jones, M. C., & Edwards, M. C. (2019). Competition as an instructional approach in school-based, agricultural education (SBAE): A historical review. *Journal of Agricultural Education, 60*(1), 109–128 https://doi.org/10.5032/jae.2019.01109

Jones, N. D., Camburn, E. M., Kelcey, B., & Quintero, E. (2022). Teachers' time use and affect before and after COVID-19 school closures. *AERA Open, 8*, 1–14. https://doi.org/10.1177/23328584211068068

Kitchel, T., Smith, A. R., Ball, A. L., Robinson, J. S., Lawver, R. G., Park, T. D., & Schell, A. (2012). Teacher job satisfaction and burnout viewed through social comparisons. *Journal of Agricultural Education, 53*(1), 31–44. https://doi.org/10.5032/jae.2012.01031

Knoll, M. (1997). The project method: Its vocational education origin and international development. *Journal of Industrial Teacher Education 34*(3), 59–80. http://scholar.lib.vt.edu/ejournals/JITE/v34n3/Knoll.html?re

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Kraft, M. A., Simon, N. S., & Lyon, M. A. (2021). Sustaining a sense of success: The protective role of teacher working conditions during the COVID-19 pandemic. *Journal of Research on Educational Effectiveness, 14*(4), 727–769. https://doi.org/10.1080/19345747.2021.1938314

Kurtz, H. (2020, September 1). Teacher morale and student enrollment declining under COVID-19, survey shows. *Education Week.* https://www.edweek.org/leadership/teacher-morale-and-student-enrollment-declining-under-COVID-19-survey-shows/2020/09

Lambert, M. D., Henry, A. L., & Tummons, J. D. (2011). How do early career agriculture teachers talk about their time*? Journal of Agricultural Education, 52*(3), 50–63. https://doi.org/10.5032/jae.2011.03050

Lawrence, M. (2022, August 30). *Celebrating the second Morrill act of 1890*. USDA National Institute of Food and Agriculture. https://www.nifa.usda.gov/about-nifa/blogs/celebrating-second-morrill-act-1890#:~:text=On%20Aug.,in%20agriculture%20and%20mechanical%20arts.

Lemons, L. L., Brashears, T. M., Burris, S., Meyers, C., & Price, M. A. (2015). Factors contributing to attrition as reported by leavers of secondary agriculture programs. *Journal of Agricultural Education, 56*(4), 17–30. https://doi.org/10.5032/jae.2015.04017

Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *The Academy of Management Review, 24*(1), 31–48. https://doi.org/10.2307/259035

Lewin, K. (1951). *Field theory in social sciences*. Harper & Row.

Lewis, L. J., Rayfield, J., & Moore, L. L. (2012). An assessment of students' perceptions toward factors influencing supervised agricultural experience participation. *Journal of Agricultural Education, 53*(4), 55–69. https://doi.org/10.5032/jae.2012.04055

Linstone, H. A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications.* Addison–Wesley Publishing Company.

Little, A. W. (2003). Motivating learning and the development of human capital. *British Association for International and Comparative Education, 33*(4), 437–452. https://doi.org/10.1080/0305792032000127748

Locke, E. A. (1968). Toward a theory of motivation and incentives. *Organizational Behavior and Human Performance, 3*(2), 157–189. https://doi.org/10.1016/0030-5073(68)90004-4

LoSciuto, L., Rajala, A. K., Townsend, T. N., & Taylor, A. S. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. *Journal of Adolescent Research, 11*(1), 116–129. https://psycnet.apa.org/doi/10.1177/0743554896111007

Martin, A. G., & Frick, M. J. (1998). The Delphi technique: An informal history of its use in agricultural education research since 1984. *Journal of Agricultural Education, 39*(1), 73–79. https://doi.org/10.5032/jae.1998.01073

McCampbell, W. H., & Stewart, B. R. (1992). Career ladder programs for vocational educators: Desirable characteristics. *Journal of Vocational Education Research, 17*(l), 53–68. https://eric.ed.gov/?id=EJ477052

McKibben, J. D., Clemons, C. A., & Nurradin, M. (2022). Hybrid vigor: A quantitative analysis of job satisfaction of United States school based secondary agricultural education classrooms. *Journal of Agricultural Education, 63*(2), 238–250. https://doi.org/10.5032/jae.2022.02238

McKim, A. J., & Velez, J. J. (2016). An evaluation of the self-efficacy theory in agricultural education. *Journal of Agricultural Education, 57*(1), 73–90. https://doi.org/10.5032/jae.2016.01073

McMillion, M. B. (1974, February). Is more recruitment the answer? *The Agricultural Education Magazine, 46*(8), 171–172. https://www.naae.org/profdevelopment/magazine/archive_issues/Volume46/v46i8.pdf

Merriam-Webster. (n.d.). *Merriam-Webster.com dictionary*. https://www.merriam-webster.com/dictionary/teacher

Moore, G. E. (1988). The forgotten leader in agricultural education: Rufus W. Stimson. *The Journal of the American Association of Teacher Educators in Agriculture, 29*(3), 50–58. https://doi.org/10.5032/jaatea.1988.03050

Mundt, J. P., & Connors, J. J. (1999). Problems and challenges associated with the first years of teaching agriculture: A framework for preservice and inservice education. *Journal of Agricultural Education, 40*(1), 38–48. https://doi.org/10.5032/jae.1999.01038

Murray, K., Flowers, J., Croom, B., & Wilson, B. (2011). The agricultural teacher's struggle for balance between career and family. *Journal of Agricultural Education, 52*(2), 107–117. https://doi.org/10.5032/jae.2011.02107

Myers, B. E., & Thompson, G. W. (2009). Integrating academics into agriculture programs: A Delphi study to determine perceptions of the national agriscience teacher ambassador academy participants. *Journal of Agricultural Education, 50*(2), 75–86. https://doi.org/10.5032/jae.2009.02075

Myers, B. E., Dyer, J. E., & Washburn, S. G. (2005). Problems facing beginning agriculture teachers. *Journal of Agricultural Education, 46*(3), 47–55. https://doi.org/10.5032/jae.2005.03047

National Archives (2022, May). *Milestone documents: Morrill Act (1862)*. https://www.archives.gov/milestone-documents/morrill-act#:~:text=Passed%20on%20July%202%2C%201862,tribal%20lands%20of%20Native%20communities.

National Association of Agricultural Education (2022). *NAAAE annual report*. https://www.naae.org/resources/annualreport.cfm

National Center for Education Statistics (2023). *Vocational education in the United States*. https://nces.ed.gov/pubs/web/95024-2.asp

National Council for Agricultural Education (2012). *Agricultural education*. https://thecouncil.ffa.org/ageducation/

National Council for Agricultural Education (2015). *National AFNR standards, revised 2015*. https://thecouncil.ffa.org/afnr/

National Council for Agricultural Education SAE for All Taskforce (2017). *Supervised agricultural experience: SAE for all student guide*. https://aese.psu.edu/teachag/instructional-classroom-resources/school-based-support/supervised-agricultural-experience

National FFA Organization (2018). *Frequently asked questions: National FFA charter revision*. https://www.ffa.org/the-feed/frequently-asked-questions-national-ffa-charter-revision/#:~:text=What%20is%20the%20FFA%20federal,as%20the%20organization's%20governance%20document

National FFA Organization (2022a, August 16). *Membership in National FFA Organization reaches all-time high*. https://www.ffa.org/press-releases/ffa-membership-reaches-all-time-high/

National FFA Organization (2022b). *Official FFA manual*. https://ffa.app.box.com/s/z6bkjdmqd7e329a58a27e5xn1fzcqeqq

National FFA Organization (2022c). *FFA statistics*. https://www.ffa.org/statistics/

National FFA Organization (2023a). *Agricultural education*. https://www.ffa.org/agricultural-education/

National FFA Organization (2023b). *About FFA*. https://www.ffa.org/about/

National FFA Organization (2023c). *FFA history*. https://www.ffa.org/ffa-history/

National FFA Organization (2023d). *Career and leadership development events*. https://www.ffa.org/participate/cde-lde/

O'Day, J. (2002). Complexity, accountability, and school improvement. *Harvard Educational Review, 72*(3), 293–329. https://doi.org/10.17763/haer.72.3.021q742t8182h238

Oklahoma Career Tech (2023). *Agricultural education*. https://oklahoma.gov/careertech/educators/agricultural-education.html

Osborne, E. W. (1992, June). A profession that eats its young. *The Agricultural Education Magazine, 64*(12), 3–4. https://www.naae.org/profdevelopment/magazine/archive_issues/Volume64/Vol64_No12.pdf

Parr, B., & Edwards, M. C. (2004). Inquiry-based instruction in secondary agricultural education: Problem-solving an old friend revisited. *Journal of Agricultural Education, 45*(4), 106–117. https://doi.org/10.5032/jae.2004.04106

Perkins Collaborative Resource Network (2022). *Perkins V*. https://cte.ed.gov/legislation/perkins-v#:~:text=Perkins%20was%20reauthorized%20as%20the,of%202006%20(Perkins%20IV).

Phipps L. J., & Osborne, E. W. (1988). *Handbook on agricultural education in public schools*. The Interstate Printers & Publishers, Inc.

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

Privitera, G. J. (2017). *Research methods for the behavioral sciences* (2nd ed.). Sage.

Prosser, C. A. (1912). Practical arts and vocational guidance. *Addresses and Proceedings, 50*. National Education Association

Ramsey, J. W., & Edwards, M. C. (2011). Entry-level technical skills that agricultural industry experts expected students to learn through their supervised agricultural experiences: A modified Delphi study. *Journal of Agricultural Education, 52*(2), 82–94. https://doi.org/10.5032/jae.2011.02082

Ramsey, J. W., & Edwards, M. C. (2012). Entry-level technical skills that teachers expected students to learn through their supervised agricultural experiences (SAEs): A modified Delphi study. *Journal of Agricultural Education, 53*(3), 42–55. https://doi.org/10.5032/jae.2012.03042

Rankin, J. G. (2016). *First aid for teacher burnout: How you can find peace and success*. Taylor & Francis.

Rayfield, J., & Croom, B. (2010). Program needs of middle school agricultural education teachers: A Delphi study. *Journal of Agricultural Education, 51*(4), 131–141. https://doi.org/10.5032/jae.2010.04131

Reich, J., Buttimer, C. J., Coleman, D., Colwell, R., Faruqi, F., & Larke, L. R. (2020, July). *What's lost, what's left, what's next: Lessons learned from the lived experiences of teachers during the pandemic*. https://doi.org/10.35542/osf.io/8exp9

Roberts, R., Wittie, B. M., Stair, K. S., Blackburn, J. J., & Smith, H. E. (2020). The dimensions of professional development needs for secondary agricultural education teachers across career stages: A multiple case study comparison. *Journal of Agricultural Education, 61*(3), 128–143. https://doi.org/10.5032/jae.2020.03128

Roberts, T. G. (2006). A philosophical examination of experiential learning theory for agricultural educators. *Journal of Agricultural Education, 47*(1), 17–29. https://doi.org/10.5032/jae.2006.01017

Roberts, T. G., & Ball, A. L. (2009) Secondary agricultural science as content and context for teaching. *Journal of Agricultural Education, 50*(1), 81–91. https://doi.org/10.5032/jae.2009.01081

Roberts, T. G., & Dyer, J. E. (2004a). Characteristics of effective agriculture teachers. *Journal of Agricultural Education, 45*(4), 82–95. https://doi.org/10.5032/jae.2004.04082

Roberts, T. G., & Dyer, J. E. (2004b). Inservice needs of traditionally and alternatively certified agriculture teachers. *Journal of Agricultural Education, 45*(4), 57–70. https://doi.org/10.5032/jae.2004.04057

Roberts, T. G., & Kitchel, T. (2010). Designing professional knowledge curriculum and instruction. In R. M. Torres, T. Kitchel, & A. L. Ball (Eds.), *Preparing and advancing teachers in agricultural education* (pp. 100–111). The Ohio State University Curriculum Materials Service.

Robinson, J. S., & Baker, M. A. (2013). The effect of human capital on principals' decisions to interview candidates in agricultural education: Implications for pre-service teachers. *Journal of Agricultural Education, 54*(1), 139–152. https://doi.org/10.5032/jae.2013.01139

Robinson, J. S., & Edwards, M. C. (2012). Assessing the teacher self-efficacy of agriculture instructors and their early career employment status: A comparison of certification types. *Journal of Agricultural Education, 53*(1), 150–161. https://doi.org/10.5032/jae.2012.01150

Robinson, J. S., & Haynes, J. C. (2011). Value and expectations of supervised agricultural experiences as expressed by agriculture instructors in Oklahoma who were alternatively certified. *Journal of Agricultural Education, 52*(2), 47–57. https://doi.org/10.5032/jae.2011.01047

Robinson, J. S., Kryshner, S., Haynes, J. C., & Edwards, M. C. (2010). How Oklahoma State University students spent their tie student teaching in agricultural education: A fall versus spring semester comparison with implications for teacher education. *Journal of Agricultural Education, 51*(4), 142–153. https://doi.org/10.5032/jae.2010.04142

Rowe, G., & Wright, G. (1999). The Delphi technique as a forecasting tool: Issues and analysis. *International Journal of Forecasting, 15*(4), 353–375. https://doi.org/10.1016/S0169-2070(99)00018-7

Ruhland, S. K., & Bremer, C. D. (2002). Professional development needs of novice career and technical education teachers. *Journal of Career and Technical Education, 19*(1), 18–31. https://doi.org/10.21061/jcte.v19i1.656

Saad, L. (2022, July 14). *Confidence in public schools turns more partisan*. Gallup. https://news.gallup.com/poll/394784/confidence-public-schools-turns-partisan.aspx

SAE for All (2023). *The SAE for all program*. https://saeforall.org/sae-for-all-program/?wizard

Sanders, M. G. (2001). The role of "community" in comprehensive school, family, and community partnership programs. *The Elementary School Journal, 102*(1), 19–34. https://doi.org/10.1086/499691

Saucier, P. R., McKim, B. R., & Tummons, J. D. (2012). A Delphi approach to the preparation of early-career agricultural educators in the curriculum area of agricultural mechanics: Fully qualified and highly motivated or status quo? *Journal of Agricultural Education*, *53*(1), 136–149. https://doi.org/10.5032/jae.2012.01136

Sherman, A., & Sorensen, T. J. (2020). A national examination of the predictors of volunteer utilization in school-based agricultural education. *Journal of Agricultural Education, 61*(2), 339–357. https://doi.org/10.502/jae.2020.02339

Shoulders, C. W., & Myers, B. E. (2013). Teachers' use of experiential learning stages in agricultural laboratories. *Journal of Agricultural Education, 54*(3), 100–115. https://doi.org/10.5032/jae.2013.03100

Shultz, T. W. (1971). *Investment in human capital: The role of education and of research*. The Free Press.

Simon, L. A., Haygood, J. D., Akers, C. L., Doerfert, D. L., & Davis, C. S. (2005). Master's level agricultural communications curriculum: A national Delphi study. *Journal of Agricultural Education*, *46*(3), 56–69. https://doi.org/10.5032/jae.2005.03056

Sims, S. (2017). *TALIS 2013: Working conditions, teacher job satisfaction and retention* (Department for Education Statistical Working Paper). Department of Education.

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education, 27*(6), 1029–1038. https://doi.org/10.1016/j.tate.2011.04.001

Skaalvik, E. M., & Skaalvik, S. (2016). Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession, *Creative Education, 7*(13), 1785–1799. https://doi.org/10.4236/ce.2016.713182

Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: Relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. A longitudinal study. *Teachers and Teaching: Theory and Practice, 26*(7–8), 602–616. https://doi.org/10.1080/13540602.2021.1913404

Skulmoski, G. J., Hartman, J. K., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of Information Technology Education, 6*, 1–21. https://doi.org/10.28945/199

Slusher, W. L., Robinson, J. S., & Edwards, M. C. (2011). Assessing the animal science technical skills needed by secondary agricultural education graduates for employment in the animal industries: A modified Delphi study. *Journal of Agricultural Education, 52*(2), 95–106. https://doi.org/10.5032/jae.2011.02095

Smith, A. R., Foster, D. D., & Lawver, R. G. (2022). *National agricultural education supply and demand study, 2021 executive summary*. https://aaaeonline.org/resources/Documents/2021%20NSD%20Executive%20Summary.pdf

Smith, E. (2010). Sector-specific human capital and the distribution of earnings. *Journal of Human Capital, 4*(1), 35–61. https://doi.org/10.1086/655467

Smith, K. L., & Rayfield, J. (2016). An early historical examination of the educational intent of supervised agricultural experiences (SAEs) and project-based learning in agricultural education. *Journal of Agricultural Education, 57*(2), 146–160. https://doi.org/10.5032/jae.2016.02146

Smylie, M. A. (1996). From bureaucratic control to building human capital: The importance of teacher learning in education reform. *Educational Researcher, 25*(9), 9–11. https://doi.org/10.3102/0013189X025009009

Solomonson, J. K., & Retallick, M. S. (2018). Over the edge: Factors nudging mid-career, school-based agriculture teachers out of the profession. *Journal of Agricultural Education, 59*(4), 1–19. https://doi.org/10.5032/jae.2018.04001

Solomonson, J. K., Korte, D. S., Theiman, E. B., Retallick, M. S., & Keating, K. H. (2018). Factors contributing to Illinois school-based agriculture teachers' final decision to leave the classroom. *Journal of Agricultural Education, 59*(2), 321–342. https://doi.org/10.5032/jae.2018.02321

Solomonson, J. K., Theiman, E. B., Korte, D. S., & Retallick, M. S. (2019). Why do they leave and where do they go? A qualitative study of Illinois school-based agriculture teachers who left the profession. *Journal of Agricultural Education, 60*(4), 115–131. https://doi.org/10.5032/jae.2019.04115

Sorensen, T. J., & McKim, A. J. (2014). Perceived work-life balance ability, job satisfaction, and professional commitment among agriculture teachers. *Journal of Agricultural Education, 55*(4), 116–132. https://doi.org/10.5032/jae.2014.04116

Sorensen, T. J., McKim, A. J., & Velez, J. J. (2016). A national study of work-family balance and job satisfaction among agriculture teachers. *Journal of Agricultural Education, 57*(4), 146–159. https://doi.org/10.5032/jae.2016.04146

Sorensen, T. J., McKim, A. J., & Velez, J. J. (2017). A national study of work characteristics and work-family conflict among secondary agricultural educators. *Journal of Agricultural Education, 58*(2), 214–231. https://doi.org/10.5032/jae.2017.02214

Stitt-Gohdes, W. L., & Crews, T. B. (2004). The Delphi technique: A research strategy for career and technical education. *Journal of Career and Technical Education, 20*(2), 55–67. https://files.eric.ed.gov/fulltext/EJ1069510.pdf

Straquadine, G. S. (1990, June). Work, is it your drug of choice? *The Agricultural Education Magazine, 62*(12), 11–12. https://www.naae.org/profdevelopment/magazine/archive_issues/Volume62/v62i12.pdf

Stripling, C. T., & Ricketts, J. C. (2016). Research priority 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century. In T. G. Roberts, A. Harder, & M. T. Brashears (Eds.). *American Association for Agricultural Education national research agenda: 2016–2020.* (pp. 29–35). Gainesville, FL: Department of Agricultural Education and Communication.

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute. https://doi.org/10.54300/247.242

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives, 27*(35), 1–36. https://doi.org/10.14507/epaa.27.3696

Sutphin, H. D., & Camp, W. G. (1990). A model for building consensus on the applications for microcomputers in agricultural education. *Journal of Vocational Education Research, 15*(3), 65–79. https://eric.ed.gov/?id=EJ426615

Talbert, B. A. S., Vaughn, R., Croom, B., & Lee, J. S. (2014). *Foundations of agricultural education.* Pearson Education, Inc.

Tavernier, E. M., & Hartley, M. P. (1994). A model for coalition building in urbanizing areas. *Journal of Extension, 33*(5), Article 4. https://archives.joe.org/joe/1995october/a2.php

Terry, R., Jr., & Briers, G. E. (2010). Roles of the secondary agriculture teacher. In R. M. Torres, T. Kitchel, & A. L. Ball (Eds.), *Preparing and advancing teachers in agricultural education* (pp. 86–99). The Ohio State University Curriculum Materials Service.

Thieman, E. B., Henry, A. L., & Kitchel, T. (2012) Resilient agricultural educators: Taking stress to the next level. *Journal of Agricultural Education, 53*(1) 81–94. https://doi.org/10.5032/jae.2012.01081

Tippens, A., Ricketts, J. C., Morgan, A. C., Navarro, M., & Flanders, F. B. (2013). Factors related to teachers' intention to leave the classroom early. *Journal of Agricultural Education, 54*(4), 58–72. https://doi.org/10.5032/jae.2013.04058

Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review, 73*(1), 71–97. https://doi.org/10.1080/00131911.2019.1705247

Torres, R. M., & Dormody, T. J. (1997). FFA advisors' educational exposure to, use of, and attitude toward the program of activities. *Journal of Agricultural Education, 38*(4), 11–20. https://doi.org/10.5032/jae.1997.04011

Torres, R. M., & Ulmer, J. D. (2007). An investigation of time distribution of pre-service teachers while interning. *Journal of Agricultural Education, 48*(2), 1–12. https://doi.org/10.5032/jae.2007.02001

Torres, R. M., Kitchel, T., & Ball, A. L. (2010). *Preparing and advancing teachers in agricultural education.* The Ohio State University Curriculum Material Services.

Torres, R. M., Lawver, R. G., & Lambert, M. D. (2009, September 22). *Job stress among secondary agriculture teachers: Highs and lows* [Paper presentation]. American Association for Agricultural Education North Central Region Conference, Ithaca, NY, United States. https://aaaeonline.org/Resources/Documents/Research%20Conference%20Proceedings,%20North%20Central%202008.pdf#page=217

Torres, R. M., Lawver, R. G., & Lambert, M. D. (2009). Job related stress among secondary agricultural education teachers: A comparison study. *Journal of Agricultural Education, 50*(3), 100–111. https://doi.org/10.5032/jae.2009.03100

Torres, R. M., Ulmer, J. D., & Aschenbrener, M. S. (2008). Workload distribution among agriculture teachers. *Journal of Agricultural Education, 49*(2), 75–87. https://doi.org/10.5032/jae.2008.02075

Traini, H. Q., Haddad, B., Stewart, J., & Velez, J. J. (2021). Adjusting, appeasing, and rearranging: How agriculture teachers reconcile the demands of the profession. *Journal of Agricultural Education, 62*(2), 167–184. https://doi.org/10.5032/jae.2021.02167

Traini, H. Q., Yopp, A. M., & Roberts, R. (2020). The success trap: A case study of early career agricultural education teachers' conceptualizations of work-life balance. *Journal of Agricultural Education, 61*(4), 175–188. https://doi.org/10.5032/jae.2020.04175

Twenter, J. P., & Edwards, M. C. (2017). Facilities in school-based, agricultural education (SBAE): A historical inquiry. *Journal of Agricultural Education, 58*(3), 275–292. https://doi.org/10.5032/jae.2017.03275

United States Department of Education (2019, September). *Bridging the skills gap: Career and technical education in high school*. https://www2.ed.gov/datastory/cte/index.html

United States Department of Education (2021). *Education in a pandemic: The disparate impacts of COVID-19 on America's students.* https://www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf

United States Department of Education (2022). *Teaching and learning international survey (TALIS)*. https://sites.ed.gov/international/files/2022/05/TALIS_handout_4pg.pdf

Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal, 44*(3), 519–558. https://doi.org/10.3102/0002831207306859

Von der Gracht, H. A. (2012). Consensus measurement in Delphi studies: Review and implications for future quality assurance. *Technological Forecasting and Social Change 79*(8), 1525–1536. https://doi.org/10.1016/j.techfore.2012.04.013.

Walker, W. D., Garton, B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary agriculture teachers. *Journal of Agricultural Education, 45*(2), 28–38. https://doi.org/10.5032/jae.2004.02028

Warner, W. J., & Washburn, S. G. (2009). Issues facing urban agriscience teachers: A Delphi study. *Journal of Agricultural Education, 50*(1), 105–115. https://doi.org/10.5032/jae.2009.01105

Wells, T., Smalley, S. W., & Rank, B. D. (2018). Early field experience course students' perceptions of school-based agricultural education laboratory environments. *Journal of Agricultural Education, 59*(3), 243–257. https://doi.org/10.5032/jae.2018.03243

West, K. L. (2014). New measures of teachers' work hours and implications for wage comparisons. *Education Finance and Policy, 9*(3), 231–263. https://doi.org/10.1162/EDFP_a_00133

Wicklein, R. C. (1993). Identifying critical issues and problems in technology education using a modified-Delphi technique. *Journal of Technology Education, 5*(1), 1045–1064. https://files.eric.ed.gov/fulltext/EJ475346.pdf

Wirth, A. G. (1972). Charles A. Prosser and the Smith-Hughes Act. *Educational Forum 36*(3), 365–371. https://doi.org/10.1080/00131727209338992

APPENDICES

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

Approval of Exempt IRB Application IRB-22-347

IRB Office <irb@okstate.edu>
Wed 9/7/2022 3:10 PM

To: Robinson, Shane <shane.robinson@okstate.edu>;Best, Ryan <ryan.best@okstate.edu>;Best, Ryan <ryan.best@okstate.edu>

Dear Ryan Best,

The Oklahoma State University Institutional Review Board (IRB) has approved the following application:

Application Number: IRB-22-347
PI: Ryan Best
Title: Roles and Responsibilities of School-Based Agricultural Education Teachers: A Modified Delphi Study
Review Level: Exempt

You will find a copy of your Approval Letter in IRBManager. Click IRB - Initial Submission to go directly to the event page. Please click attachments in the upper left of the screen. The approval letter is under "Generated Docs." Stamped recruitment and consent documents can also be found in this location under "Attachments". Only the approved versions of these documents may be used during the conduct of your research.

As Principal Investigator, it is your responsibility to do the following:

- Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted for IRB approval before implementation.
- Submit a request for continuation if the study extends beyond the approval period.
- Report any adverse events to the IRB within 5 days. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
- Notify the IRB office when your research project is complete by submitting a closure form via IRBManager.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB office at 405-744-3377 or irb@okstate.edu.

Best of luck with your research,

Sincerely,

OSU IRB Office

Oklahoma State University
Institutional Review Board
Office of University Research Compliance
223 Scott Hall, Stillwater, OK 74078
Website: https://irb.okstate.edu/
Ph: 405-744-3377 | Fax: 405-744-4335| irb@okstate.edu

APPENDIX B

INFORMED CONSENT

CONSENT FORM

Tasks Associated with Teaching School-Based Agricultural Education: A Modified Delphi Study

Background Information

You are invited to be in a research study of the tasks associated with teaching school-based agricultural education. We ask that you read this form and ask any questions you may have before agreeing to be in the study. Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time. The purpose of the study is to identify the tasks associated with the roles and responsibilities of school-based agricultural education teachers.

This study is being conducted by: Ryan W. Best, Agricultural Education, Communications and Leadership, Oklahoma State University, under the direction of Dr. J. Shane Robinson, Agricultural Education, Communications and Leadership, Oklahoma State University.

Procedures

If you agree to be in this study, we would ask you to do the following things: Participate in all three rounds of the Delphi study by responding to the survey instrument delivered through Qualtrics links.

Participation in the study involves the following time commitment: Round 1 will take approximately 30 minutes to complete, Round 2 will take approximately 30 minutes to complete, and Round 3 will take approximately 10 minutes to complete.

Compensation

You will receive no payment for participating in this study. However, your insight into the tasks associated with the roles and responsibilities of school-based agricultural education teachers in invaluable to the study.

Confidentiality

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report

We will collect your information through an online survey facilitated through Qualtrics. This data will be stored on a secure server protected by password and firewall. When the study is completed and the data have been analyzed, the code list linking names to study numbers will be destroyed. This is expected to occur no later than one year from date of completion.

The research team works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves risks similar to a person's everyday use of the internet. If you have concerns, you should consult the survey provider privacy policy at https://www.qualtrics.com/privacy-statement/

Contacts and Questions

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at 254-459-9221, or ryan.best@okstate.edu. If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or irb@okstate.edu. All reports or correspondence will be kept confidential.

Statement of Consent

I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study. **If you agree to participate in this research, please click I agree to continue**.

APPENDIX C

UNIVERSITIES OFFERING DOCTORAL PROGRAM

IN AGRICULTURAL EDUCATION

Universities Offering Doctoral Programs in Agricultural Education (N = 22)

Universities
Auburn University
Iowa State University
Louisiana State University
Mississippi State University
North Carolina State University
Ohio State University
Oklahoma State University
Oregon State University
Penn State University
Purdue University
Texas A&M University
Texas Tech University
University of Arkansas
University of California, Davis
University of Florida
University of Georgia
University of Minnesota
University of Missouri
University of Nebraska-Lincoln
Utah State University
Virginia Tech University
West Virginia University

APPENDIX D

ROUND 1 INITIAL EMAIL

To: [Study Participants]

From: Ryan Best <ryan.best@okstate.edu>

Subject: Assistance with Thesis Study—Tasks of SBAE Teachers

Good afternoon,

I hope this email finds you well and that your semester has gotten off to a great start. My name is Ryan Best, and I am a graduate student at Oklahoma State University pursuing a Master's in Agricultural Education and Leadership. I am reaching out to you to ask for your assistance with my thesis study. I am seeking to identify tasks related to the roles and responsibilities of school-based agricultural education teachers. To do so, I will be utilizing a modified Delphi method consisting of three rounds. The criteria for assisting with the study includes being enrolled in a doctoral program with an emphasis in agricultural education and being a previous or current school-based agricultural education teacher. The department head of your university identified you as someone meeting these criteria.

Participation in this study is voluntary. If you agree to participate in this study, you will be asked to answer a series of questions through the use of the Qualtrics survey system. All answers will be confidential and all names/identifiable information will be removed prior to the presentation of the findings. The study will consist of a modified Delphi research method including three rounds of questioning at different points between September and November. Each round of questions will take approx. 10-30 minutes to answer. You may skip any questions you do not wish to answer and may refuse to continue in the study at any time. The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study.

I would greatly appreciate your contribution to this study. If you are willing to participate, please follow the Qualtrics link below. If you have any questions, comments, or concerns regarding the study, please feel free to reach out to me via email or phone (located below). **The first round of the instrument will close on Friday, October 7, 2022.**

https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_4OrNT78gOiCt5uC

Again, thank you so much for your help with my study. I look forward to sharing these results soon.

Regards,

Ryan W. Best
Graduate Teaching Assistant
Department of Agricultural Education, Communications and Leadership
Oklahoma State University

APPENDIX E

ROUND 1 INSTRUMENT

Consent

You are invited to participate in a research study examining the tasks associated with the roles and responsibilities of school-based agricultural education teachers. The end goal of this study is to identify a validated list of tasks as they relate to teaching school-based agriculture. The study is being conducted by Ryan Best, a graduate student at Oklahoma State University, in preparation for a thesis defense.

Participation in this study is voluntary. If you agree to participate in this study, you will be asked to answer a series of questions through use of the Qualtrics survey system. All answers will be confidential and all names/identifiable information will be removed prior to the presentation of the findings. The study will consist of a modified Delphi research method including three rounds of questioning at different points between September and November. Each round of questions will take approx. 10-30 minutes to answer. You may skip any questions you do not wish to answer and may refuse to continue in the study at any time.

The research team works to ensure complete confidentiality with all participants. It is possible, however unlikely, that unauthorized individuals could gain access to your responses because of the online survey format. However, your participation in this survey involves risks similar to a person's everyday internet usage. If you have concerns, please consult the Qualtrics privacy policy here. Participation in this study may not benefit you directly, however, the goal of this research is to be able to identify tasks related to the roles and responsibilities of school-based agricultural education teachers. This data will be used to aid in the development of potential professional development resources, effective teaching strategies, and recruitment and retention materials based on the findings.

Your time and answers to the questions are of great value to the research individual(s). If you wish to participate in this study, please follow the link to the Qualtrics survey. If you do not wish to participate in this study, you may exit out of this, or, click "no" on the first question of the survey to take you directly to the end without answering any other questions.

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the study, please contact Ryan Best or Dr. Shane Robinson using the contact information below. If you have questions about the IRB process or concerns regarding the safety of the study, please contact the IRB at (405)-744-3377 or irb@okstate.edu. All reports and correspondence will be kept confidential.

Ryan Best: ryan.best@okstate.edu or (254)-459-9221
Dr. Shane Robinson: shane.robinson@okstate.edu or 405-744-3094

Do you consent to participate in this study?

- ◯ Yes
- ◯ No

Filter Question

Have you taught school-based agricultural education?

- ◯ Yes
- ◯ No

Demographics

Name

Email

Gender

- ◯ Female

- ◯ Male
- ◯ Prefer not to answer

What is your age?

What is your race?

- ◯ White
- ◯ Black or African American
- ◯ American Indian or Alaska Native
- ◯ Asian
- ◯ Native Hawaiian or Pacific Islander
- ◯ Other

What is your ethnicity?

- ◯ Hispanic or Latino
- ◯ Not Hispanic or Latino
- ◯ I choose not to respond

Please identify your teacher certification pathway.

- ◯ Traditionally certified
- ◯ Alternatively certified
- ◯ Emergency certified

Do you currently teach school-based agricultural education?

- ◯ Yes
- ◯ No

In what year did you last teach school-based agricultural education?

How many years, including the current year (if applicable), have you taught school-based agricultural education?

Indicate the state where you currently or most recently serve(d) as a school-based agricultural education teacher.

How many teachers (including yourself) taught at your most recent school's agricultural education program?

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7
- ◯ 8
- ◯ 9
- ◯ 10 or more

Approximately how many students were enrolled in the most recent school-based agricultural education program in which you taught?

What was the total approximate enrollment of the school at which you most recently taught?

What is the approximate population of the community in which you most recently taught?

Delphi Questions

This study is seeking to identify tasks as they relate to the roles and responsibilities of school-based agricultural education teachers. There are no right or wrong answers. For the following four questions, please provide as many tasks and as much detail as you like. Tasks can be listed in a bullet format or described in more detail.

For the purposes of this study, **"tasks"** refer to any activities related to the roles and responsibilities of a school-based agricultural education teacher.

What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding **Classroom/Laboratory Instruction** in a typical year?

What tasks are associated with the roles and responsibilities of a school-based agricultural education teacher regarding **FFA advisement** in a typical year?

As a school-based agricultural education teacher, what tasks are associated with your roles and responsibilities regarding students' **Supervised Agricultural Experiences (SAEs)** in a typical year?

What **other tasks** are associated with the roles and responsibilities of a school-based agricultural education teacher in a typical year (*aside from classroom/laboratory instruction, FFA, and SAEs*)?

APPENDIX F

ROUND 1 FOLLOW-UP EMAIL

To: [Study Participants]

From: Ryan Best <ryan.best@okstate.edu>

Subject: Assistance with Thesis Study—Tasks of SBAE Teachers

Good afternoon,

I wanted to follow up with you regarding the email I sent last Thursday (9/29) asking for your assistance with my thesis study. I am trying to compile a validated list of tasks associated with the roles and responsibilities of school-based agricultural education teachers. Your perspective is invaluable to my research objective. As a former or current SBAE teacher, your experiences and perceptions of the required tasks of the profession are important and should be noted. I would love to include your perspective in my study. The instrument for the first round of the study will close this Friday, October 7, 2022. Please see the below email for a complete description of the study. To access the instrument please use the following link:

https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_4OrNT78gOiCt5uC

Again, I would greatly appreciate your feedback for my study. I look forward to receiving your input.

Regards,

Ryan W. Best
Graduate Teaching Assistant
Department of Agricultural Education, Communications and Leadership
Oklahoma State University

APPENDIX G

ROUND 2 INITIAL EMAIL

To: [Study Participants]

From: Ryan Best <ryan.best@okstate.edu>

Subject: Assistance with Thesis Study—Tasks of SBAE Teachers—Round 2

Good afternoon,

I hope this email finds you well and that your semester is winding down nicely. Thank you so much for the response to Round 1 of my Delphi study regarding tasks associated with teaching school-based agricultural education. I sincerely appreciate the seriousness with which each of you took my Round 1 instrument. This was apparent in the 865 original statements I received back from the panel. For this, I thank each of you. After careful analysis, it was determined that Round 1 yielded 348 unduplicated statements. The next step of the study will be to determine consensus for these 348 statements from the panelists. This step is crucial to the validity of my study.

The instrument for Round 2 is comprehensive and will take approximately 30 minutes to complete. I know this is a busy time of year for each of you as you celebrate the holidays and wrap up your semester, but I really appreciate you being willing to complete this instrument at your earliest convenience. The instrument will be open until Wednesday, December 7, 2022. As always, your participation in this study is voluntary, however, your perspective is invaluable to my research objective. As a former or current SBAE teacher, your experiences and perceptions of the required tasks of the profession are important and should be noted. I would love to include your perspective in my study.

Please access the Round 2 instrument at the following link:

https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_bw4uYWP8CxPMLuC

Thank you so much for assisting with my thesis study! If I can answer any questions, or if you have any trouble with the link, please don't hesitate to contact me. Happy Thanksgiving!

Regards,

Ryan W. Best
Graduate Teaching Assistant
Department of Agricultural Education, Communications and Leadership
Oklahoma State University

APPENDIX H

ROUND 2 INSTRUMENT

Default Question Block

In Round One, panelists were asked to identify tasks associated with teaching school-based agricultural education (SBAE). The researcher identified themes in the following areas of SBAE: Classroom/Laboratory Instruction, FFA, Supervised Agricultural Experiences (SAE), and Other Professional Responsibilities from the responses provided by the Round One questionnaire. Below is a list of tasks identified as a result of Round One in no particular order. Round Two seeks to identify consensus of the tasks resulting from Round One. To establish consensus, panelists are asked to identify their level of agreement using the summated scale found below.

Please rate each item from 1 to 4 using the following summated scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. Space is provided at the end of each section to share additional tasks you believe may have been overlooked in Round One.

Thank you for participating in this research.

Please enter your email address below.

In the area of **Classroom/Laboratory Instruction,** 14 themes and 84 tasks were identified from round one results. Please rate your level of agreement for each task as it relates to teaching SBAE.

Classroom/Laboratory Instruction: **Authentic Skill Development**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Obtain industry-based certification (IBC) for teachers	○	○	○	○
Assist students in obtaining industry-based certification (IBC)	○	○	○	○
Teach students practical skills	○	○	○	○
Stay current with industry trends	○	○	○	○
Teach laboratory skills	○	○	○	○
Provide hands-on learning experiences	○	○	○	○
Provide inquiry-based learning opportunities for all courses	○	○	○	○
Provide content area expertise	○	○	○	○
Provide academic service learning opportunities	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Instructional Design**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Develop instructional curriculum	○	○	○	○
Align curriculum to appropriate standards	○	○	○	○
Create a curriculum map across AFNR pathways	○	○	○	○
Modify existing curriculum	○	○	○	○
Apply curriculum concepts to real-world situations/scenarios	○	○	○	○
Develop instructional visual aids	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Classroom Management**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage the learning environment	○	○	○	○
Provide clear instruction	○	○	○	○
Vary instruction	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Teaching and Learning Resources**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage teaching and learning facilities (classroom, shop, greenhouse, land lab, project facility, etc.)	○	○	○	○
Repair school equipment	○	○	○	○
Maintain school equipment	○	○	○	○
Manage animals housed at school facilities	○	○	○	○
Manage greenhouse	○	○	○	○
Maintain school project center (land lab, school farm, ag barn, etc.)	○	○	○	○
Conduct annual inventory of equipment/supplies	○	○	○	○
Purchase laboratory equipment	○	○	○	○
Handle laboratory equipment	○	○	○	○
Landscape school grounds	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Student Evaluation**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Grade student work (summative evaluations, outcome assessments, standardized tests, etc.)	○	○	○	○
Assess student learning (formative assessments, feedback, check for understanding, etc.)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Lesson Preparation**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Prepare lesson plans for substitute teachers	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Prepare daily lesson plans	○	○	○	○
Align lessons with AFNR standards	○	○	○	○
Organize teaching materials/resources	○	○	○	○
Prepare facilities for instruction	○	○	○	○
Prepare for field trips	○	○	○	○
Prepare for guest speakers	○	○	○	○
Manage time	○	○	○	○
Practice labs ahead of time	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **School Safety**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Follow safety/security protocol	○	○	○	○
Serve as an armed school guardian to provide campus security	○	○	○	○
Manage laboratory safety	○	○	○	○
Model safety	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Inclusive Teaching**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Attend individualized educational plan (IEP)/504 meetings	○	○	○	○
Follow student individualized educational plan (IEP)/504 modifications	○	○	○	○
Create an inclusive learning environment	○	○	○	○
Ensure equitable student access to resources	○	○	○	○
Scaffold content to meet individual students' needs	○	○	○	○
Create culturally competent students	○	○	○	○
Engage students from non-agricultural backgrounds	○	○	○	○
Establish a community/safe space within the classroom	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Teaching and Learning Supplies**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Obtain classroom/laboratory	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
supplies				
Maintain classroom/laboratory supplies inventory	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Relationships and Rapport**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Communicate with students' parents/guardians	○	○	○	○
Communicate with administrators	○	○	○	○
Communicate with students	○	○	○	○
Communicate with advisory council	○	○	○	○
Build relationships with students	○	○	○	○
Serve as mentor for students	○	○	○	○
Build relationships with the community	○	○	○	○
Coordinate community volunteers	○	○	○	○
Promote program	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Lifelong Learning**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Attend professional development	○	○	○	○
Implement feedback from administrative evaluations	○	○	○	○
Collaborate with other agricultural education teachers in Professional Learning Communities (PLC)	○	○	○	○
Coordinate with all school staff to facilitate learning	○	○	○	○
Develop leadership abilities	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Teaching and Instruction**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Teach students across all AFNR pathways	○	○	○	○
Take students on educational field trips	○	○	○	○
Supervise students in the laboratory	○	○	○	○
Serve on various committees	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Adapt content for hybrid instruction	○	○	○	○
Serve as the agricultural content expert	○	○	○	○
Follow school instructional policies	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Clerical Work**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage classroom budget	○	○	○	○
Secure funding for the learning environment	○	○	○	○
Write grants	○	○	○	○
Complete required school-wide paperwork	○	○	○	○
Submit instructional lesson plans	○	○	○	○
Enter student grades	○	○	○	○
Manage student recordbooks	○	○	○	○
Use learning management system (LMS) competently	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Classroom/Laboratory Instruction: **Student Motivation**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Motivate students to learn	○	○	○	○
Recruit students to program	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Please provide any additional tasks related to **Classroom/Laboratory Instruction** that were not included above.

In the area of **FFA,** 13 themes and 99 tasks were identified from round one results. Please rate your level of agreement for each task as it relates to teaching SBAE.

FFA: **Clerical Work**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Complete the chapter roster along with dues/fees	○	○	○	○
Establish a charter for the FFA chapter	○	○	○	○
Register students for events/contests	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Plan chapter trips (field trips, competitions, camps, conferences, etc.)	○	○	○	○
Book lodging for chapter events	○	○	○	○
Purchase supplies/materials for chapter events and activities	○	○	○	○
Complete required school-wide paperwork (travel requests, POs, annual reports, etc.)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Write letters of recommendation	○	○	○	○
Develop chapter newsletter	○	○	○	○
Monitor student grades for eligibility to leave school	○	○	○	○
Work with program report forms	○	○	○	○
Complete nominations for livestock exhibition	○	○	○	○
Complete entries for livestock exhibition	○	○	○	○
Recruit volunteers to work FFA events	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Plan meetings	○	○	○	○
Secure transportation for organizational events	○	○	○	○
Gain school/administration support/approval	○	○	○	○
Submit student contest materials (ag issues portfolio, statements of originality, agriscience fair reports, etc.)	○	○	○	○
Complete state/national mandated paperwork	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Awards and Applications**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist students in developing proficiency award applications	○	○	○	○
Assist students in developing state degree applications	○	○	○	○
Assist students in developing American degree applications	○	○	○	○
Assist students in developing chapter degree applications	○	○	○	○
Assist students in developing National Chapter award applications	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist students in developing star award applications	○	○	○	○
Edit student award applications	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Motivate students to apply for awards	○	○	○	○
Assist students in applying for scholarships	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Community Engagement**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Engage with local community	○	○	○	○
Foster connections within local community	○	○	○	○
Establishing program culture within school/community	○	○	○	○
Manage alumni relations	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as booster club liaison	○	○	○	○
Communicate with FFA alumni/supporters	○	○	○	○
Communicate with students' parents/guardians	○	○	○	○
Volunteer for community service activities	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Advertise FFA activities to the community	○	○	○	○
Delegate program management to alumni	○	○	○	○
Plan fall community gatherings	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Chapter Advisement**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Organize chapter meetings	○	○	○	○
Oversee the election of FFA chapter officer team	○	○	○	○
Plan FFA events	○	○	○	○
Manage FFA officer team	○	○	○	○
Develop chapter Program of Activities	○	○	○	○
Promote FFA Chapter	○	○	○	○
Provide leadership training for chapter officers	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Provide leadership training for chapter members	○	○	○	○
Recruit future FFA members	○	○	○	○
Manage FFA official dress materials	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Plan chapter officer retreat	○	○	○	○
Organize FFA officer meetings	○	○	○	○
Resolve conflicts between FFA members	○	○	○	○
Delegate chapter tasks to members	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Conduct annual review of FFA chapter	○	○	○	○
Manage service projects	○	○	○	○
Manage student-teacher relationships regarding missing classwork	○	○	○	○
Serve as FFA advisor above chapter level	○	○	○	○
Serve as FFA advisor	○	○	○	○
Attend chapter meetings	○	○	○	○
Provide retention acivities for FFA members	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist FFA officer team with meetings	○	○	○	○
Coordinate chapter chaos	○	○	○	○
Motivate students to participate in FFA activities	○	○	○	○
Budget for chapter Program of Activities	○	○	○	○
Provide agricultural literacy events	○	○	○	○
Teach FFA unit to all freshmen	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Fundraising**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Raise funds for FFA chapter	○	○	○	○
Manage funds for FFA chapter	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Competitive Student Events**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Prepare students for Career and Leadership Development Events (CDEs, LDEs, Speaking, Agriscience, etc.)	○	○	○	○
Identify volunteers to prepare students for Career and Leadership Development Events (CDEs, LDEs, Speaking, Agriscience, etc.)	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Attend Career and Leadership Development Events (CDEs, LDEs, Speaking, Agriscience, etc.)	○	○	○	○
Set up materials for Career and Leadership Development Event (CDEs, LDEs, Speaking, Agriscience, etc.) practices	○	○	○	○
Selecting members to participate in Career and Leadership Development Events (CDEs, LDEs, Speaking, Agriscience, etc.)	○	○	○	○
Assess Career and Leadership Development Event (CDEs, LDEs, Speaking, Agriscience, etc.) skill development	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Student Recognition**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Plan FFA chapter banquet	○	○	○	○
Plan FFA degree ceromonies	○	○	○	○
Facilitate award recognition for FFA success	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Student Conventions, Conferences, and Camps**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Plan trip to FFA convention (district, area, state, national, etc.)	○	○	○	○
Attend FFA convention (district, area, state, national, etc.)	○	○	○	○
Attend FFA student conferences (WLC, COLT, MFE, ALD, New Century Farmer, etc.)	○	○	○	○
Attend FFA camp (district, area, state, national, etc.)	○	○	○	○
Attend agricultural education teacher meetings (district, area, state, national, etc.)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Supervised Agricultural Experiences (SAE)**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Visit student SAE projects	○	○	○	○
Assist students in keeping records	○	○	○	○
Supervise students at livestock shows	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage students' livestock projects	○	○	○	○
Apply for National FFA Service Learning Grants	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Advisor Expectations**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve on various FFA committees	○	○	○	○
Host FFA contests	○	○	○	○
Judge FFA contests	○	○	○	○
Participate in professional organizations (NAAE, state agricultural education teachers association, etc.)	○	○	○	○
Attend state FFA degree review	○	○	○	○
Attend professional development	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Student Transportation**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Transport students to FFA events	○	○	○	○
Supervise students on away FFA trips	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Student Relations**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as mentor for FFA chapter members	○	○	○	○
Serve as parent for FFA chapter members	○	○	○	○
Serve as counselor for FFA chapter members	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

FFA: **Hospitality**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Cook food for FFA events	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Please provide any additional tasks related to **FFA** that were not included above.

In the area of **Supervised Agricultural Experience (SAE),** 12 themes and 80 tasks were identified from round one results. Please rate your level of agreement for each task as it relates to teaching SBAE.

Supervised Agricultural Experience (SAE): **SAE Supervision**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Conduct SAE student project visits off campus	○	○	○	○
Conduct SAE student project visits on campus	○	○	○	○
Work with students, parents, and supervisors to establish clear expectations	○	○	○	○
Supervise student SAE projects (advising, coaching, managing, etc.)	○	○	○	○
Assess student SAE projects regularly (project development and progress)	○	○	○	○
Ensure safe student working conditions	○	○	○	○
Assist students with creating a SAE presentations/showcase	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Document time/place traveled to supervise student SAE projects	○	○	○	○
Remind students of SAE deadlines	○	○	○	○
Provide technical support for student SAE projects	○	○	○	○
Facilitate all plant science placement SAE projects	○	○	○	○
Facilitate all plant science entrepreneurship SAE projects	○	○	○	○
Facilitate all agriscience fair projects	○	○	○	○
Provide assistance with non-livestock SAEs	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Transport students and their livestock projects to shows/fairs	○	○	○	○
Facilitate students' purchase of livestock projects	○	○	○	○
Select animals for students' livestock projects	○	○	○	○
Coach student showmanship	○	○	○	○
Serve as the animal health and nutrition expert for student projects	○	○	○	○
Facilitate all animal science placement SAE projects	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Facilitate all animal science entrepreneurship SAE projects	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage entries for livestock shows	○	○	○	○
Book hotels for livestock shows	○	○	○	○
Check in livestock at shows	○	○	○	○
Assist students with livestock preparation at shows	○	○	○	○
Provide weight and feed management for student livestock projects	○	○	○	○
Advise students regarding best grooming practices for livestock projects	○	○	○	○
Supervise students at livestock shows	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as livestock show coordinator	○	○	○	○
Make feed store runs	○	○	○	○
Manage camaraderie among feeders	○	○	○	○
Supervise the growth and development of all livestock projects	○	○	○	○
Manage clear and consistent communication for all livestock show projects	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Data Management**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage a recordbook system	○	○	○	○
Train students how to use a recordbook system	○	○	○	○
Evaluate student recordbooks	○	○	○	○
Attend record book training for teachers	○	○	○	○
Track SAE data	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **SAE Instruction**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Teach students about SAEs	○	○	○	○
Teach students recordkeeping skills	○	○	○	○
Facilitate every student's SAE presentation as part of a class	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Establish SAE expectations in class	○	○	○	○
Create cohesive connections between SAEs, classroom instruction, and FFA	○	○	○	○
Provide hands on opportunities for students	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Community Development**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Provide community development for work-based learning placements	○	○	○	○
Connect students to community members	○	○	○	○
Provide experiential learning opportunities to students and parents/stakeholders	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Committee Service**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve on county livestock validation committee	○	○	○	○
Serve on advisory committee (above individual school level)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Relationships and Rapport**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Work to develop trust with family/student	○	○	○	○
Serve as mentor for students	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **SAE Development**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist students in obtaining SAE job placements	○	○	○	○
Assist students/parents/guardians in identifying an SAE	○	○	○	○
Assist all students in developing an SAE	○	○	○	○
Assist all students in planning an SAE	○	○	○	○
Ensure the completion of foundational SAEs	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Ensure each student has a viable SAE project	○	○	○	○
Challenge students to start an SAE project	○	○	○	○
Facilitate parent nights to introduce SAE opportunities, expectations, and fair rules and deadlines	○	○	○	○
Guide students' reflection on personal and career goals to develop SAE plans	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Student Success**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist students with award applications (proficiency, degree, etc.)	○	○	○	○
Assist students with SAE contests	○	○	○	○
Assist students with proficiency planning	○	○	○	○
Review student award applications	○	○	○	○
Provide opportunities for student success within SAEs	○	○	○	○
Facilitate award recognition for SAEs	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Grants and Funding**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Connect students to available funding for SAE projects	○	○	○	○
Manage student funds for projects	○	○	○	○
Manage barn funds	○	○	○	○
Develop SAE grants	○	○	○	○
Budget money for maintaining school-based projects (livestock and plants)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Teaching and Learning Resources**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Provide a location for school-based enterprise projects	○	○	○	○
Manage school project center (land lab, school farm, ag barn,	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
etc.)				
Maintain school project center (land lab, school farm, ag barn, etc.)	○	○	○	○
Maintain school SAE equipment	○	○	○	○
Maintain school vehicle	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Student Career Preparation**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Expose students to possible careers	○	○	○	○
Take students on college trips	○	○	○	○
Help students connect SAEs to their future goals	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Supervised Agricultural Experience (SAE): **Hospitality**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as cook for SAE events	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Please provide any additional tasks related to **Supervised Agricultural Experience (SAE)** that were not included above.

In the area of **Other Professional Responsibilities,** 15 themes and 85 tasks were identified from round one results. Please rate your level of agreement for each task as it relates to teaching SBAE.

Other Professional Responsibilities: **Grants and Funding**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist with fundraising	○	○	○	○
Apply for grants	○	○	○	○
Conduct grant reporting	○	○	○	○
Conduct grant budgeting	○	○	○	○
Conduct grant spending	○	○	○	○
Organize the County Buyer's Gala	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Student Recruitment**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Recruit students to your program	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Community Relations**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Integrate local community into the program	○	○	○	○
Coordinate alumni	○	○	○	○
Manage parents	○	○	○	○
Develop public relations	○	○	○	○
Work with booster clubs	○	○	○	○
Participate in the local community (i.e. civic organizations)	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Professional Development**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Attend school-wide professional development	○	○	○	○
Attend state-wide agricultural education professional development	○	○	○	○
Lead professional development workshops	○	○	○	○
Maintain professional development plan	○	○	○	○
Document professional development to maintain licensure	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Local School Expectations**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Perform regular school-wide duties (gate, lunch, hall, etc.)	○	○	○	○
Attend faculty/staff meetings	○	○	○	○
Attend school-wide events	○	○	○	○
Attend school board meetings	○	○	○	○
Cover other teachers' classes as needed	○	○	○	○
Serve as test facilitators/proctors for standardized testing	○	○	○	○
Serve as a class sponsor/advisor	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as prom/homecoming chaperone	○	○	○	○
Attend Individualized Education Plan (IEP)/504 meetings	○	○	○	○
Attend Professional Learning Community (PLC) meetings	○	○	○	○
Serve as lead teacher for agricultural education department	○	○	○	○
Analyze school-wide discipline data	○	○	○	○
Develop data-informed recommendations to change/manage behaviors	○	○	○	○
Improve teachers' practice of Positive Behavior Interventions and Supports (PBIS)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Facilitate school-wide culture building events and activities	○	○	○	○
Develop County curriculum mapping resources	○	○	○	○
Align semester exams to State standards for Ag courses	○	○	○	○
Collaborate with other teachers to compile educational resources	○	○	○	○
Chaperone trips for other CTE teachers	○	○	○	○
Serve as the community/school agricultural expert	○	○	○	○
Support students in their extracurricular activities	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as an organizational coach	○	○	○	○
Construct mums for homecoming	○	○	○	○
Oversee fair displays	○	○	○	○
Serve as Hunter Safety Course Instructor	○	○	○	○
Manage time	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Facilities Management**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Manage school facilities	○	○	○	○
Repair school equipment	○	○	○	○
Landscape school grounds	○	○	○	○
Manage animals	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Committee Service**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as member of state livestock committee	○	○	○	○
Serve as member of state fair education committee	○	○	○	○
Serve as member of agricultural education teacher association committee for professional development	○	○	○	○
Serve as Committee Chair for Positive Behavior Interventions and Supports (PBIS)	○	○	○	○
Serve on school-wide committees (School Improvement Team, etc.)	○	○	○	○
Serve on agricultural education committees (State FFA Board of Directors, NAAE committees, Curriculum revision, etc.)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Student Competitive Events**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Assist with regional and state level CDE/LDE competitions	○	○	○	○
Serve as National FFA SAE proficiency room host	○	○	○	○
Lead summer livestock clinic for students	○	○	○	○
Lead summer agriculture tour for students	○	○	○	○
Proctor contest for students at state fair	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Teacher Mentorship**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Mentor early-career agricultural education teachers	○	○	○	○
Serve as cooperating teacher for university student teacher	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Professionalism**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Participate in professional organizations (NAAE, state ag teacher association, etc.)	○	○	○	○
Serve as a leader in professional organizations	○	○	○	○

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
(NAAE, state ag teacher association, etc.)				
Demonstrate professionalism at work	○	○	○	○
Demonstrate professionalism in the community	○	○	○	○
Assist with teacher professional activities	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Student Transportation**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as a school bus/van driver	○	○	○	○
Transport students to state FFA convention	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Clerical Work**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Gain program approval with Department of Education	○	○	○	○
Submit Perkins reports	○	○	○	○
Manage the total program budget	○	○	○	○
Take inventory	○	○	○	○
Submit state reports	○	○	○	○
Order FFA t-shirts	○	○	○	○
Complete grade verification reports	○	○	○	○
Complete attendance verification reports	○	○	○	○
Write student letters of recommendation	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Student Relations**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve as counselor/life coach for students	○	○	○	○
Be like a mom/dad for some students	○	○	○	○
Develop rapport with students	○	○	○	○
Assist students with college scholarship/admission paperwork	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Volunteerism**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Serve on county fair board	○	○	○	○
Serve as a livestock show volunteer	○	○	○	○
Volunteer with community agricultural groups (fair board, at the fair, with Farm Bureau, with local farmers, etc.)	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Other Professional Responsibilities: **Colleague Relations**

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Collaborate with fellow school staff	○	○	○	○
	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)

Please provide any additional tasks related to **Other Professional Responsibilities** that were not included above.

APPENDIX I

ROUND 2 FOLLOW-UP EMAIL

To: [Study Participants]

From: Ryan Best <ryan.best@okstate.edu>

Subject: Assistance with Thesis Study—Tasks of SBAE Teachers—Round 2

Good afternoon,

I wanted to follow up with you regarding the email I sent last Tuesday (11/22/22) asking for your assistance with Round 2 of my thesis study. I know this is a busy time of year, and I apologize for contributing the busyness. I'd like to reiterate that your perspective is invaluable to my research objective. As a former or current SBAE teacher, your experiences and perceptions of the required tasks of the profession are important and should be noted. Responses to Round 2 will help to establish consensus among the panel of experts. The instrument for the second round of the study is comprehensive and will take approximately 30 minutes to complete. The instrument **will close Wednesday, December 7, 2022**. Please see the original email (included below) for a complete description of Round 2 of the study. To access the instrument please use the following link:

https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_bw4uYWP8CxPMLuC

Again, I thank you for your assistance with this study. I hope your week is going well!

Regards,

Ryan W. Best
Graduate Teaching Assistant
Department of Agricultural Education, Communications and Leadership
Oklahoma State University

APPENDIX J

ROUND 3 INITIAL EMAIL

To: [Study Participants]

From: Ryan Best <ryan.best@okstate.edu>

Subject: Assistance with Thesis Study—Tasks of SBAE Teachers—Round 3

Good afternoon,

I hope you are well. Thank you so much for the response to Round 2 of my Delphi study regarding tasks associated with teaching school-based agricultural education. I sincerely appreciate you dedicating the time to complete Round 2. I know it was a long instrument, and I am so grateful you took the time to complete it. Based on Round 2 results, it was determined that 216 tasks achieved consensus (80% agreement) among the panel and 81 tasks reflected agreement of at least 51% but less than 80%. The next step of the study will be to refine consensus by offering these 81 tasks back to the panelists for further consideration. This will be the final round of my study, and it is important to the validity of the study.

The instrument for Round 3 consists of 81 items and will take between 5-10 minutes to complete. The instrument will be open until Tuesday, December 27, 2022. As always, your participation in this study is voluntary, however, your perspective is invaluable to my research objective. As a former or current SBAE teacher, your experiences and perceptions of the required tasks of the profession are important and should be noted. I would love to include your perspective in my study.

Please access the Round 3 instrument at the following link:

https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_1GtPyaNJgTPqFDw

Thank you so much for assisting with my thesis study! If I can answer any questions, or if you have any trouble with the link, please don't hesitate to contact me.

Regards,

Ryan W. Best
Graduate Teaching Assistant
Department of Agricultural Education, Communications and Leadership
Oklahoma State University

APPENDIX K

ROUND 3 INSTRUMENT

Default Question Block

The third and final round of the modified Delphi focuses on refining consensus. The following items from Round Two reached a level of agreement reflecting at least 51% but less than 80%. Therefore, they are presented here for another review by the panel. Please identify whether these tasks should or should not be included as tasks associated with the roles and responsibilities of teaching school-based agricultural education (SBAE) by selecting: 1) No, or 2) Yes.

Thank you for participating in my thesis research. If you have questions regarding this study please email me at ryan.best@okstate.edu.

Please enter your email address below to continue participating in this study.

In the area of **Classroom/Laboratory Instruction,** 9 tasks were identified as reaching a level of agreement reflecting at least 51% but less than 80%. Please identify whether following tasks should or should not be included as tasks associated with the roles and responsibilities of teaching school-based agricultural education (SBAE).

Classroom/Laboratory Instruction: **Authentic Skill Development**

	No (1)	Yes (2)
Obtain industry-based certification (IBC) for teachers	○	○
	No (1)	Yes (2)

Classroom/Laboratory Instruction: **Instructional Design**

	No (1)	Yes (2)
Create a curriculum map across AFNR pathways	○	○
	No (1)	Yes (2)

Classroom/Laboratory Instruction: **Teaching and Learning Resources**

	No (1)	Yes (2)
Manage animals housed at school facilities	○	○
Maintain school project center (land lab, school farm, ag barn, etc.)	○	○
	No (1)	Yes (2)

Classroom/Laboratory Instruction: **Lifelong Learning**

	No (1)	Yes (2)
Coordinate with all school staff to facilitate learning	○	○
	No (1)	Yes (2)

Classroom/Laboratory Instruction: **Teaching and Instruction**

	No (1)	Yes (2)
Serve on various committees	○	○
Adapt content for hybrid instruction	○	○
	No (1)	Yes (2)

Classroom/Laboratory Instruction: **Clerical Work**

	No (1)	Yes (2)
Secure funding for the learning environment	○	○
Write grants	○	○
	No (1)	Yes (2)

If "No" was selected on any of the items above, please provide rationale as to why in the space below.

In the area of **FFA**, 27 tasks were identified as reaching a level of agreement reflecting at least 51% but less than 80%. Please identify whether following tasks should or should not be included as tasks associated with the roles and responsibilities of teaching school-based agricultural education (SBAE).

FFA: **Clerical Work**

	No (1)	Yes (2)
Establish a charter for the FFA chapter	○	○
Complete entries for livestock exhibition	○	○
	No (1)	Yes (2)

FFA: **Community Engagement**

	No (1)	Yes (2)
Manage alumni relations	○	○
Serve as booster club liaison	○	○
Volunteer for community service activities	○	○
Delegate program management to alumni	○	○
	No (1)	Yes (2)

FFA: **Chapter Advisement**

	No (1)	Yes (2)
Organize chapter meetings	○	○
Plan FFA events	○	○
Develop chapter Program of Activities	○	○

	No (1)	Yes (2)
Manage service projects	○	○
	No (1)	Yes (2)
Manage student-teacher relationships regarding missing classwork	○	○
Coordinate chapter chaos	○	○
Provide agricultural literacy events	○	○
Teach FFA unit to all freshmen	○	○
	No (1)	Yes (2)

FFA: **Student Recognition**

	No (1)	Yes (2)
Plan FFA degree ceremonies	○	○
	No (1)	Yes (2)

FFA: **Student Conventions, Conferences, and Camps**

	No (1)	Yes (2)
Attend FFA student conferences (WLC, COLT, MFE, ALD, New Century Farmer, etc.)	○	○
	No (1)	Yes (2)

FFA: **Supervised Agricultural Experiences (SAE)**

	No (1)	Yes (2)
Supervise students at livestock shows	○	○
Manage students' livestock projects	○	○
Apply for National FFA Service Learning Grants	○	○
	No (1)	Yes (2)

FFA: **Advisor Expectations**

	No (1)	Yes (2)
Serve on various FFA committees	○	○
Host FFA contests	○	○
Judge FFA contests	○	○
	No (1)	Yes (2)

FFA: **Student Relations**

	No (1)	Yes (2)
Serve as counselor for FFA chapter members	○	○
	No (1)	Yes (2)

FFA: **Hospitality**

	No (1)	Yes (2)
Cook food for FFA events	○	○
	No (1)	Yes (2)

If "No" was selected on any of the items above, please provide rationale as to why in the space below.

In the area of **Supervised Agricultural Experiences (SAE)**, 22 tasks were identified as reaching a level of agreement reflecting at least 51% but less than 80%. Please identify whether following tasks should or should not be included as tasks associated with the roles and responsibilities of teaching school-based agricultural education (SBAE).

Supervised Agricultural Experience (SAE): **SAE Supervision**

	No (1)	Yes (2)
Assist students with creating a SAE presentation/showcase	○	○
Coach student showmanship	○	○
Assist students with livestock preparation at shows	○	○
Advise students regarding best grooming practices for livestock projects	○	○
	No (1)	Yes (2)
Supervise students at livestock shows	○	○
Supervise the growth and development of all livestock projects	○	○
Manage clear and consistent communication for all livestock show projects	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Data Management**

	No (1)	Yes (2)
Manage a recordbook system	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **SAE Instruction**

	No (1)	Yes (2)
Facilitate every student's SAE presentation as part of a class	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Community Development**

	No (1)	Yes (2)
Provide community development for work-based learning placements	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Committee Service**

	No (1)	Yes (2)
Serve on advisory committee (above individual school level)	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **SAE Development**

	No (1)	Yes (2)
Assist students in obtaining SAE job placements	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Student Success**

	No (1)	Yes (2)
Assist students with SAE contests	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Grants and Funding**

	No (1)	Yes (2)
Manage barn funds	○	○
Develop SAE grants	○	○
Budget money for maintaining school-based projects (livestock and plants)	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Teaching and Learning Resources**

	No (1)	Yes (2)
Provide a location for school-based enterprise projects	○	○
Maintain school project center (land lab, school farm, ag barn, etc.)	○	○

	No (1)	Yes (2)
Maintain school SAE equipment	○	○
	No (1)	Yes (2)

Supervised Agricultural Experience (SAE): **Student Career Preparation**

	No (1)	Yes (2)
Take students on college trips	○	○
	No (1)	Yes (2)

If "No" was selected on any of the items above, please provide rationale as to why in the space below.

In the area of **Other Professional Responsibilities**, 30 tasks were identified as reaching a level of agreement reflecting at least 51% but less than 80%. Please identify whether following tasks should or should not be included as tasks associated with the roles and responsibilities of teaching school-based agricultural education (SBAE).

Other Professional Responsibilities: **Grants and Funding**

	No (1)	Yes (2)
Conduct grant reporting	○	○
Conduct grant budgeting	○	○
Conduct grant spending	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Community Relations**

	No (1)	Yes (2)
Coordinate alumni	○	○
Manage parents	○	○
Participate in the local community (i.e. civic organizations)	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Local School Expectations**

	No (1)	Yes (2)
Attend school board meetings	○	○
Cover other teachers' classes as needed	○	○
Serve as test facilitators/proctors for standardized testing	○	○
Serve as a class sponsor/advisor	○	○
Serve as lead teacher for agricultural education	○	○

	No (1)	Yes (2)
department		
	No (1)	Yes (2)
Facilitate school-wide culture building events and activities	○	○
Align semester exams to State standards for Ag courses	○	○
Collaborate with other teachers to compile educational resources	○	○
Serve as the community/school agricultural expert	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Facilities Management**

	No (1)	Yes (2)
Manage school facilities	○	○
Manage animals	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Committee Service**

	No (1)	Yes (2)
Serve as member of agricultural education teacher association committee for professional development	○	○
Serve on school-wide committees (School Improvement Team, etc.)	○	○
Serve on agricultural education committees (State FFA Board of Directors, NAAE committees, Curriculum revision, etc.)	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Student Competitive Events**

	No (1)	Yes (2)
Lead summer agriculture tour for students	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Teacher Mentorship**

	No (1)	Yes (2)
Serve as cooperating teacher for university student teacher	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Professionalism**

	No (1)	Yes (2)
Serve as a leader in professional organizations (NAAE, state ag teacher association, etc.)	○	○
Assist with teacher professional activities	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Clerical Work**

	No (1)	Yes (2)
Gain program approval with Department of Education	○	○
Submit Perkins reports	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Student Relations**

	No (1)	Yes (2)
Be like a mom/dad for some students	○	○
	No (1)	Yes (2)

Other Professional Responsibilities: **Volunteerism**

	No (1)	Yes (2)
Volunteer with community agricultural groups (fair board, at the fair, with Farm Bureau, with local farmers, etc.)	○	○
	No (1)	Yes (2)

If "No" was selected on any of the items above, please provide rationale as to why in the space below.

APPENDIX L

ROUND 3 FOLLOW-UP EMAIL

To: [Study Participants]

From: Ryan Best <ryan.best@okstate.edu>

Subject: Assistance with Thesis Study—Tasks of SBAE Teachers—Round 3

Good morning,

I wanted to follow up with you regarding the email I sent last Monday (12/12/22) asking for your assistance with Round 3 of my thesis study. I appreciate you participating in my study thus far, and I am once again asking for your assistance with the *final round* of my Delphi study. As a former or current SBAE teacher, your experiences and perceptions of the required tasks of the profession are important and should be noted. Responses to Round 3 will help to refine consensus among the panel of experts. The instrument for the third round of the study is composed of 81 yes/no items and will take 5-10 minutes to complete. The instrument **will close Tuesday, December 27, 2022**. Please see the original email (included below) for a complete description of Round 3 of the study. To access the instrument please use the following link:

https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_1GtPyaNJgTPqFDw

Again, I thank you for your assistance with this study. I hope you have a wonderful break!

Regards,

Ryan W. Best
Graduate Teaching Assistant
Department of Agricultural Education, Communications and Leadership
Oklahoma State University

APPENDIX M

ROUND 2 QUALITATIVE RESPONSES

Round 2 Qualitative Responses to the Question: "Please provide any additional tasks related to [Classroom and Laboratory Instruction; FFA; SAE; Additional Roles and Responsibilities] that were not included above."

Response
SAE
"SAE Supervision - while you do facilitate SOME plant and livestock projects, you don't facilitate ALL of them. This would be better worded with advising all plant and livestock projects. No mention of ag mechanics or natural resources project advising or supervision."
"A lot of districts are not letting money move from student hands to AST hands for the purchase of SAEs. Using the AET app is a great way to document SAE visits and print out a summary for admin at the end of the school year. ASTs should also form relationships with livestock dealers because they might know an appropriate feed program for specific animals living in different regions (i.e., a lamb from Iowa living in south Texas)."
Additional Tasks
"I really don't like the 'lead teacher' mentality. I feel like that is toxic and calls for a power struggle and bad power plays/ tactics. I prefer to use the term 'experienced teacher/teachers'. All of the diversity that each teacher can bring to a program is what makes the program flourish and be a beautifully ran program."

APPENDIX N

ROUND 3 QUALITATIVE RESPONSES

Round 3 Qualitative Responses to the Question: "If 'No' was selected on any of the items above, please provide rationale as to why in the space below."

Response
FFA
"Complete entries for livestock exhibition is a 'no' because it is not applicable to all SBAE teachers. Not all SBAE teachers have animal science programs (plenty of mechanics, horticulture, agriscience, & natural resources programs) and I believe this is much more of a regional job expectation instead of a national job expectation for SBAE teachers. Supervise students at livestock shows is also a 'no' because of the same reasoning above. For teachers taking students to livestock shows they should be supervising students, but this is not applicable to all SBAE teachers across the country. Manage student livestock projects is a 'no' for similar reasons above. Management of projects should be the responsibility of the students. For programs with animals on campus or on a SBAE program's farm facility, the SBAE teacher should be very connected, but overall, this is not applicable to all SBAE teachers across the country. Cook for FFA events is a 'no' mainly for the use of the word 'cook'. Plan, organize, purchase, and prepare for food at FFA events, absolutely. But personally, cooking the food is not universally the correct presentation of this responsibility."
"FFA items- it's a student-led organization. Those items should be done by student members, overseen, or advised by an adult."
"Alumni should provide advice and suggestions, but not manage the program. Local events should be planned and organized by students with the supervision of the advisor, not planned and organized by the advisor. Ag teachers should transport students, but no be required to attend the student conferences. Supervise and advise, not manage project for students. Hosting and/or judging is optional for the Ag teacher per their programs financial/regional/and teacher skill set situations. Should only cook if you are comfortable doing so."
"Clerical Work: I have never completed livestock entries for livestock shows for FFA members; this is entirely completed by the member if they are entering an FFA associated livestock show. Chapter Advisement: Students are responsible for their missing work; this is unnecessary for an advisor to micro-manage. I never got involved with other teachers and the missing work of students. Coordinate chapter chaos: I hate the wording of this, and would never suggest this as a responsibility. Why is chaos the status quo? Student Conventions, Conferences, and Camps: These are all beyond the state level, and unnecessary responsibility for a local FFA advisor to attend or use funds to attend. This might be going above the responsibilities and advantageous to attend, but I don't believe it should be communicated as a standard responsibility. Supervised Agricultural Experiences (SAE): Perhaps at an FFA sponsored FFA livestock show, but this doesn't specify... FFA livestock exhibition culture in the upper Midwest is unlike southern states. Manage students' livestock projects: absolutely not, this is the student's responsibility to manage. I believe supporting or assisting students with this is a responsibility, but the verb suggests the possessor of responsibility to be the advisor. Host FFA contests / Judge FFA contests: The word host might be throwing me off, but I never had the resources to host any contest. I did, however, coordinate and organize contests in conjunction with other programs

for regional competition. I got hung up on the language of judging contests, as my primary experiences are with tabulated results and facilitating contests, not judging them... we brought in folks not associated with schools to judge students to reduce conflicts of interest/bias. Serve as counselor for FFA chapter members: no. counselor is a loaded term. This role should be trusted to trained individuals like guidance counselors/school psychologists. We are not trained for this role as much as folks might want to be this kind of person, it is crossing a line of training and responsibility. Cook food for FFA events: Food preparation is not an advisor's responsibility; leave this to alumni, or order already prepared food from licensed food vendors."

"Livestock Entries - The parents should also be involved in this. Delegating program management - The alumni should not be managing the program so it's an inappropriate task. Livestock supervision - teachers should only help with this if it is the students FFA SAE and they should not be the ones supervising students at livestock shows - family members should also be involved in this. Counselor - Teachers do not have the professional training to serve in this role to students."

SAE

"Livestock SAE items are a 'no' because not ALL SBAE teachers across the country are involved in animal projects with their students."

"All SAE Supervision- these may not be relevant to all programs but can be generally associated with SBAE teacher responsibilities."

"Where would the showcase/presentation occur and to who? Is this valuable use of class time? If the teacher has a specific account for a 'barn,' then yes it should be managed by the Ag teacher. But to manage a fund for all using the barn, no. National FFA already has SAE grants; no need to develop new."

"From my experience the student and their family are in charge of their livestock and all aspects of showing, not the teacher."

"SAE Supervision: the stock-show element of FFA/SAE is not a universal phenomenon. Yes, supervision of project development, but beyond that I see this purely as the student's application and personal venture with a project. Parents are the primary supervisor for wherever their child exhibits. I have a hard time accepting these as responsibility when it is not an expectation or norm with the programs I have worked in. SAE Instruction: While I find it a responsibility to facilitate the development of SAEs with each student, I don't believe it should be a responsibility that every student present on this for class... it could be beyond, like the prior response 'SAE showcase'. Student Success: I have never heard of an SAE contest. Grants and Funding: I cannot name a single program where I taught that had a barn. Develop SAE grants; I'm confused on this. Developing SAE grants for students to apply for locally, or is writing a grant the same as developing a grant?"

"Livestock show items - the parents/guardians need to be heavily involved with this. Facility maintenance - the teachers should not be the only person doing this."

"It is not an ag teacher's job to maintain and help students show livestock. Too much emphasis is put on this part of agriculture, and I think it is toxic. Also, it is not my job to help students get jobs. It is also not ag teachers' job to maintain all barns and such. It is not fair to ask ag teachers to have a farm on school they oversee."

"All the things listed as no's should not be required of any teacher. These things can happen to support the growth of your program, but depending on location and resources many of these are not feasible."

"Did not have an advisory committee above the school level"

"Again, I feel that many of these are above and beyond the requirements of an agriculture teacher. Sure, it is nice when the ag teacher does these things, but I do not feel that a teacher that doesn't do these is insufficient at his/her job. Also, I am not from a big livestock showing state."

"I didn't have access to AET or a formal advisory committee"

"AFNR teachers should manage SAEs for every student in every class as part of the course. The remaining items are not applicable to every program in the country. I don't know what an 'SAE Contest' is."

"Manage clear and consistent communication for all livestock show projects - very vague. Does this include all communication at the shows as well as prior to and after shows? If so, then no, at the shows/after should be on the students/families for communication about show progress, classes, etc. Teachers should, however, inform students of upcoming show opportunities within their announcements. Facilitate every student's SAE presentation as part of a class - facilitating all presentations may become too cumbersome once program becomes too large. May only want to showcase a few SAEs to students. Serve on advisory committee (above individual school level) - should teachers wish to do so, they may. However, shouldn't be a required task. Provide a location for school-based enterprise projects - if current space is available, student needs to come up with plan to utilize school current facilities with advisor. Advisor shouldn't take instructional space away to provide SAE opportunity(ies)."

"Livestock shows are beyond the scope of my responsibility. If a student wants to show, they need to be responsible for showing livestock."

Additional Tasks

"Attend School Board Meetings: Not regularly done, only when needed (usually for student/program recognition or requesting something for the program) Facilitate school-wide culture building events and activities: Could be asked by administration for this, but not a universal expectation. Serve as member of agricultural education teacher association committee for professional development: Statement is too specific, there are more committees than just the one for professional development. Clerical work statements: The format of how these two items is done depends on the state and school board. Some LEAs don't let teachers personally manage Perkins funding and Departments of Education expectations vary between states and LEAs as well."

"Lead summer agriculture tour for students- not always required, but not uncommon- may not be limited to summer Be like a mom/dad for some students- while this certainly can happen, I believe it does fall beyond the scope of what can be reasonably expected as a professional responsibility of a SBAE teacher"

"Perkins reports should be compiled and submitted by the districts federal funds clerk."

"Many of these are 'could do' and not 'must do'"

"Local School Expectations: standard alignment, this is highly context bound. There are not state standards where I taught. Facilitating school-wide culture building... maybe through FFA, but beyond this no not merely by assignment as the ag teacher. community/school expert... this is double-barreled. I think one can serve as a school expert but not the community expert. These are different contexts. Facilities Management: beyond the agricultural classroom? This is the responsibility of facilities management/custodial staff. Committee

Service: there are many different committees to be involved with; suggesting professional development committee specifically should not be a defined responsibility. Professionalism: I don't believe our teachers should be expected to take on leadership roles in the professional organizations; this would be useful and beneficial but shouldn't be the general expectation. Student Relations: No, absolutely not. This is not our job and is crossing an inappropriate boundary of relationship; Parenting/fostering children is a designation beyond the responsibilities of a teacher and should not be a unique expectation for ag teachers. We can establish developmentally appropriate relationships with our students, but at the end of the day we are not to parent them... this is legally problematic to assume as a responsibility."

"Community Involvement - the alumni should be separate from the teacher's task list and teachers should not be forced to be in other, outside organizations, it's not part of the job. Teachers should not have to lead other organizations or attend board meetings - it's not necessary to effective at the job. Managing the school facilities should not solely be on the teacher. Teachers, outside of involving students, should not be forced to volunteer."

"They are not my kid, that could get to personal and inappropriate. It is okay to attend some school board meetings but not all of them. It is not our job to manage animals. It is not our job to have another farm."

"Did not do those activities"

"Teachers must comply with state/federal guidelines. The remaining items may be nice but are not required. We shouldn't force the expectation of volunteering, hosting student teachers, or joining a professional organization."

"Coordinate alumni - Alumni should be its own entity and the advisor should only be a liaison to the alumni and chapter. Cover other teachers' classes as needed - only if teacher has the desire/want to cover. Shouldn't be expected. Serve as test facilitators/proctors for standardized testing - have never heard of or seen this in a job description for an agricultural educator. Serve as a class sponsor/advisor - with managing an FFA program and assisting students in FFA and SAEs, class sponsor is only if you (advisor) feel like being a sponsor, shouldn't be required. Facilitate school-wide culture building events and activities - should be the responsibility of the school administration. Serve as the community/school agricultural expert - direct community members to extension specialists. Manage animals - student animals = student responsibility. Serve on committee (all three responses) - only if the teacher feels self-efficacious enough to o so, should not be required. Lead summer ag tour - only if it was an activity planned on the POA for the chapter. Serve as a leader in professional organizations (NAAE, state ag teacher association, etc.) - Takes years to accomplish this. Should only be done if teacher/advisor feels self-efficacious enough to take on the task. Be like a mom/dad for some students - way too many potential red flags/issues could happen. Absolutely should keep all professional relationships at all costs."

"The alumni are not the FFA, I cannot do both. I have a role in school culture, but it is not my responsibility. I do not need program approval from the Department of Education. I have my own kids-there is a line between being a teacher and a parent-I cannot be both."

VITA

Ryan W. Best

Candidate for the Degree of

Master of Science

Thesis: TASKS ASSOCIATED WITH TEACHING SCHOOL-BASED AGRICULTURAL EDUCATION: A MODIFIED DELPHI STUDY

Major Field: Agricultural Education and Leadership

Biographical:

Education:

Completed the requirements for the Master of Science in Agricultural Education and Leadership at Oklahoma State University, Stillwater, Oklahoma in May, 2023.

Completed the requirements for the Bachelor of Science in Agricultural Education at Tarleton State University, Stephenville, Texas in 2014.

Experience:

Graduate Research and Teaching Assistant, Agricultural Education, Communications and Leadership, Oklahoma State University, 2021 to present.

Agricultural Education Teacher, Stephenville High School, Stephenville, TX, 2015–2021.

Career & Technical Education Director, Stephenville Independent School District, Stephenville, TX, 2015–2021.

Professional Memberships:

American Association for Agricultural Education, Member, 2021–present.