

**MENTORING PROGRAMS: A STUDY OF PERCEPTIONS, NEEDS, AND CONCERNS  
OF AGRICULTURE MENTORING PROGRAMS IN THE STATE OF GEORGIA**

by

Calahan Sarah Kendrick

A dissertation submitted to the Graduate Faculty of  
Auburn University  
in partial fulfillment of the  
requirements for the Degree of  
Doctor of Philosophy

Auburn, Alabama  
December 13, 2025

Keywords: mentoring programs, school-based agricultural education

Copyright 2025 by Calahan Sarah Kendrick

Approved by

Christopher Clemons, Ph.D., Chair, Associate Professor, Agricultural Education,  
Communications and Leadership

Jason McKibben, Ph.D., Assistant Professor, Agricultural Education, Communications and  
Leadership

James Lindner, Ph.D., Alumni Professor, Agricultural Education, Communications and  
Leadership

Jillian Ford, Ed.D., Assistant Clinical Professor, Agricultural Education, Communications and  
Leadership

Adam Cletzer, Ph.D., Professor of Practice, Agricultural Education, Communications and  
Leadership

## **Abstract**

This study aimed to identify the perceptions of mentoring programs, as well as the needs and concerns of early-career agriculture educators in Georgia, and to outline best practices for an effective mentoring program. The participants in this study were middle and high school agricultural education teachers teaching in the Central and South regions of Georgia. This study used a quantitative research design. The data was analyzed and reported using Spearman and Pearson correlations, frequencies, means, standard deviations, percentages, and personal demographic characteristics such as years of experience, degree completion, gender, and certification route. Participants in this study were agriculture educators with teaching experience ranging from one year to less than ten years. Most female respondents had completed a traditional preparatory program to become agriculture educators. Most participants reported involvement in a formal mentoring program. Identified needs for agricultural educators include time management, stress management, and navigating school politics. Concerns include FFA chapter activities, student motivation, and mental health. The data reveals a notable association between the formality of the mentoring program and school or county-mandated participation. However, there is no statistically significant correlation between the formality of mentoring and the concerns expressed by respondents. A significant relationship exists between the program's formality and the respondents' need to "develop rapport with students" and "understand school politics." Participants regard a successful FFA chapter as a reflection of the overall success of the agricultural program.

### **Artificial Intelligence (AI) Use Disclosure Statement**

In preparation for this dissertation, the following Artificial Intelligence (AI) tool was used: Grammarly. This tool was primarily used to correct spelling and simple grammar errors. The author acknowledges full responsibility for the intellectual content of this work and has ensured that all AI-assisted sections have been reviewed and revised for accuracy and appropriate academic style. All AI-generated content was reviewed and validated for relevance, appropriateness, and accuracy before incorporation into the final document to maintain scholarly integrity of this research.

## Acknowledgments

It has always been my aspiration to excel in higher education. This opportunity is truly a blessing for me. Everything has unfolded exactly as intended, and I am profoundly grateful for the prospects this opens. This experience has demonstrated that I am capable of achieving anything I set my mind to.

This dissertation is dedicated to my most cherished loved ones—Will, Houston, and Elliott. This research and dissertation would not have been possible without the unwavering love and support of my steadfast companion, Will Kendrick. I sincerely appreciate the countless hours and efforts he dedicated, as well as his willingness to shoulder the many additional responsibilities. My mother, Kelly Clayton “G,” also deserves special acknowledgment; her unwavering belief in me, encouragement, and support in all my endeavors have been invaluable.

To my committee chair, Dr. Clemons, I extend my deepest gratitude. Your support and motivating words have been instrumental in my perseverance. Through phone calls, text messages, and in-person meetings on the plains, I always had a guiding voice helping me navigate the challenges. Although the path was often difficult, your presence was a constant source of light. I could not have completed this chapter of my journey without you. Your confidence in my abilities has meant a great deal.

To my esteemed committee members, I express my sincere gratitude for your invaluable support. Dr. McKibben — thank you for your assistance with all matters related to data, as well as for your encouragement and listening ear. You have also fostered a confidence within me that I didn’t know existed.

Finally, I wish to express my gratitude to God for the numerous blessings and opportunities bestowed upon me throughout my life. He has accompanied me every step of the way, and I pray that I am living in accordance with His will. I hope to always trust in His plan.

## Table of Contents

Abstract.....	2
Artificial Intelligence (AI) Use Disclosure Statement.....	3
Acknowledgments.....	4
List of Tables.....	9
List of Abbreviations.....	10
Chapter 1 Introduction.....	11
Problem Statement.....	14
Purpose of the Study.....	16
Research Objectives.....	17
Theoretical Framework.....	18
Significance of the Study.....	19
Delimitations.....	21
Definition of Terms.....	21
Assumptions.....	23
Limitations of the Study.....	24
Chapter Summary.....	25
Chapter 2 Literature Review .....	26
Kathy Kram’s Mentoring Theory.....	26
Introduction to Mentoring.....	28
Core Components of an Effective Mentoring Program.....	34
The Mentoring Dyad: Participants, Roles, and Relationships.....	46
Mentoring in Agriculture Education.....	53

Argument of the Present Study.....	58
Chapter Summary.....	59
Chapter 3 Methods.....	61
Introduction.....	61
Research Approach and Design.....	61
Population and Sample.....	63
Pilot.....	64
Instrumentation and Data Collection.....	65
Data Analysis.....	68
Measures of Validity and Reliability.....	68
Chapter Summary.....	69
Chapter 4 Findings.....	70
Chapter Summary.....	84
Chapter 5 Summary, Conclusions, and Recommendations.....	85
Introduction.....	85
Summary of the Study.....	86
Conclusions and Discussions.....	87
Recommendations.....	91
Chapter Summary.....	93
References .....	95
Appendix 1: Correspondence with Georgia FFA Executive Secretary.....	109
Appendix 2: Program of Work (POW).....	110

Appendix 3: Pilot Study Research Invitation.....	113
Appendix 4: Pilot Study Thank you Email.....	114
Appendix 5: Georgia Agriculture Education Map.....	115
Appendix 6: Instrument Alignment Table.....	116
Appendix 7: Official Research Instrument.....	137
Appendix 8: Initial Research Invitation Email.....	160
Appendix 9: Follow-up Email.....	161
Appendix 10: IRB Approval Documentation.....	162

## List of Tables

Table 1 Subgroup Characteristics of Participants in Formal and Informal Mentoring Programs .....	71
Table 2 Participant Characteristics.....	72
Table 3 Self-rating for those participants who did not participate in a mentoring program .....	73
Table 4 Self-rating for those participants who participated in an informal and formal mentoring program, and those who did not participate in any mentoring program.....	73
Table 5 Participants' experience with mentoring programs.....	74
Table 6 Item of “needs” means, and SD.....	77
Table 7 Items of Concerns means and SD .....	78
Table 8 Formality of the program and its relationship to the description of the program.....	80
Table 9 Formality of the program and its relationship to the Concerns.....	81
Table 10 Formality of the program relationship to the Needs.....	82
Table 11 The relationship between the perceived success of participants’ FFA program and the perceived success of their overall agriculture program.....	84

## **List of Abbreviations**

AAAE	American Association for Agricultural Education
AFNR	Agriculture, Food, and Natural Resources
CDE	Career Development Event
FFA	The National FFA Organization
GVATA	Georgia Vocational Agriculture Teachers Association
NAAE	National Association of Agricultural Educators
POW	Program of Work
SAE	Supervised Agricultural Experience
SBAE	School- Based Agricultural Education
USDA	United States Department of Agriculture

# CHAPTER 1

## INTRODUCTION

Educational professionals are leaving the classroom at unprecedented rates (Haynes, 2014). The reasons for their departure include inadequate leadership, perceived lack of support from administrative authorities, and ineffective communication. According to Haynes (2014), prior research indicates that approximately 500,000 teachers transition or leave the profession each year, with an estimated 41% departing within their first five years (Solomonson et al., 2019). Agricultural educators bear responsibilities that extend beyond those of conventional academic instructors. In addition to standard contractual obligations such as designing curricula, maintaining accurate grade records, and effectively managing modern classrooms, agriculture teachers often engage in extended-day and extended-year contracts. These commitments require additional hours and days of work throughout the academic year to facilitate engagement with students, stakeholders, and the community (McKibben et al., 2022). Post-2020, a notable shift occurred in education, marked by declines in student learning. Teaching strategies learned over the years were forced to change in response to COVID-19, and the stress of that event has been suggested as affecting teacher retention in a post-pandemic environment (Clemons et al., 2021). Concurrently, mental health issues among students and educators increased, affecting the agricultural education sector as well. Educators in agriculture, like their counterparts in other disciplines, face significant emotional, physical, and mental challenges. The teaching profession is inherently demanding. Educators may be susceptible to mental health concerns such as depression and may experience adverse physical effects, potentially prompting them to exit the profession (Madigan et al., 2023). Educational systems are in urgent need of effective teacher retention strategies now more than ever. Some systems are offering substantial sign-on bonuses

to attract both non-traditional and traditional educators. However, these signing bonuses and retention initiatives entail significant costs, and among agriculture educators, financial incentives have not been shown to play as large a factor in well-being as social and personal time away from work (McKibben et al., 2022). According to the National Commission on Teaching and America's Future, the average national expenditure to replace a single educator surpasses \$8,000 (Callahan, 2016). Callahan (2016) further elaborates on the expenses related to teacher replacement, noting that the hiring process is costly, involving recruitment, training, and the time commitment of new teachers, ultimately costing school systems over \$2 billion. Presently, the educational landscape consists of a mixture of novice and experienced teachers seeking alternative career pathways to utilize their teaching talents.

The education sector presents a challenging career path characterized by various internal and external stressors impacting educators. Nevertheless, shortages of teachers are not a recent phenomenon. Historical data indicates shortages in disciplines such as mathematics, science, and special education dating back to the early 1950s (Sutcher et al., 2019). Additionally, the shortage of agriculture educators in the United States is not a novel concern; agricultural education has been impacted by this enduring issue for numerous decades (Sorensen et al., 2016). Historical records of the agriculture teacher shortage trace back to the 1960s, with sources documenting a deficiency in the supply of agriculture teachers (Barwick, 1967). To address the chronic problem of agriculture teacher shortages, this study operationalizes Kram's (1988) mentoring theory, providing the empirical foundation to tailor a statewide mentoring program.

Historically, initiatives undertaken by the agricultural education community have failed to effectively resolve the teacher shortage crisis, resulting in a continual gap of unfilled positions year after year. Indeed, several organizations actively support the field of agricultural education.

Organizations such as the National Association of Agricultural Educators (NAAE) and certain state organizations, like the Georgia Vocational Agriculture Teachers Association (GVATA), have been established to provide support to agriculture educators, thereby contributing to the ongoing support framework. These organizations provide professional development opportunities for both experienced and novice educators in the field of agriculture; however, this has not been sufficient to address the ongoing shortage of agriculture teachers and the attrition of educators from the profession (Croom et al., 2023). A deficit of 10-20 agriculture teachers, varying by region and state, can impact thousands of students. Consequently, students residing in regions with unfilled positions may face limited access to essential agricultural literacy and skills, primarily due to the shortage of qualified educators.

The state of Georgia is not exempt from the agriculture teacher shortage. The most recent research indicates that Georgia continues to experience a shortage of agriculture teachers, a trend that has persisted for the past 30 years. Norris et al. (2024) report that nearly 300 agricultural educators in the state of Georgia leave the profession for various reasons, including retirement, transitioning to teaching other subjects, opting to stay at home, and accepting industry positions. Georgia has more than 530 agricultural education teachers, and each year the demand outreaches the supply. Currently, there are three public higher education institutions in the state of Georgia that provide programs focused on agriculture education. These institutions are strategically situated across different regions of the state, which is advantageous for students statewide interested in pursuing careers in agricultural education. Specifically, Fort Valley State University in Fort Valley, Abraham Baldwin College in Tifton, and the University of Georgia, in both Athens and Tifton, are among the establishments dedicated to preparing future educators in the field of agriculture education. Despite decades of efforts by professional organizations, the

persistent shortage of teachers in agricultural education necessitates targeted research into contextually specific retention strategies. Although the benefits of mentorship are widely recognized, a significant gap remains in the literature concerning the particular, contextually dependent needs and concerns of early SBAE teaching in Georgia. To date, no research has systematically collected teachers' perceptions to inform the development of a statewide, theory-based mentorship program tailored to their unique challenges. Investigations focused on delineating teachers' needs through high-quality mentoring initiatives will provide additional support mechanisms to systematically improve the retention of SBAE teachers in Georgia.

### **Problem Statement**

The shortage of agricultural educators, coupled with high demand, threatens agricultural education in Georgia. An estimated 48,000 students lacked access to a highly qualified local agricultural educator during the 2016-2017 school year. This lack of exposure to potential careers in agriculture, often the largest employer in rural communities, negatively affects both local communities and the broader agricultural sector (Toombs & Ramsey, 2020). According to the National Supply and Demand Study for agricultural education teachers, it was reported that in 2017, 122 programs remained unfilled because of teacher shortages, and the National FFA Organization highlighted the lack of qualified teachers as the biggest challenge in agricultural education (Eck et al., 2021). States have considered alternative routes to fill unfilled positions using alternative teaching certificates. This has alleviated some of the problems, but alternative certifications have been proven to be an issue related to teacher quality (Eck et al., 2021).

Early-career agricultural educators require support and collaboration. State agricultural leaders can provide assistance and cooperation to internal administrators by implementing a mentoring program designed for agricultural educators. Without sufficient backing, agriculture

teachers will likely persist in leaving the profession at an increasingly concerning pace. Support from the state's agriculture leaders could involve implementing effective mentorship programs and professional development opportunities for teachers in the agriculture education field for five years or less (Moser & McKim, 2020). Previous studies have shown that the importance of administrative support is well known in School-Based Agriculture Education (SBAE) work. Multiple studies have previously found that support from within the school, starting with colleagues and administrators, has directly affected the longevity and success of agriculture educators (Clemons & Lindner, 2019; Moser & McKim, 2020).

The inability to bridge the gap through effective recruitment and staffing often results in desperate circumstances. This challenge pertains to all academic subjects, with particular emphasis on agriculture. School administration prioritizes excellence in their institution and, more significantly, the welfare of their students. As agriculture is an elective course, administrators are frequently compelled to employ teachers to fill these positions, even without teaching experience. However, candidates may possess agricultural expertise and relevant backgrounds that enable them to incorporate real-world experiences into their teaching, thereby exposing students to practical applications. High-quality educators are regarded as among the most critical determinants of student success, and the loss of such skilled professionals undermines instructional quality, ultimately adversely affecting overall student performance (Crutchfield et al., 2013).

Implementing an effective mentorship program can mitigate resignations among new and experienced agricultural educators. For the success of statewide agricultural education initiatives and the educators engaged within them, it is essential to maintain a teaching staff dedicated to enhancing student achievement for every learner. A high-quality mentoring program that

effectively aligns with the standards and expectations of agriculture educators, who generally possess higher standards than those of subject-based teachers, to retain and attract qualified agriculture educators across Georgia constitutes a viable solution. Such a program could serve as a model for other states. A viable approach involves establishing a comprehensive, research-based mentorship program to assist newly appointed agriculture educators. This initiative aims to enhance retention and attract high-caliber teachers throughout Georgia, thereby securing the robustness of the agricultural education system. This effort ultimately seeks to address the longstanding thirty-year shortage of agriculture teachers.

### **Purpose of the Study**

This research aims to ascertain educators' perceptions and experiences concerning informal and formal mentoring initiatives. Additionally, the accumulated data encompasses the needs and concerns of agricultural educators in Georgia. The need to investigate this topic aligns with the priorities of the Georgia Vocational Agriculture Teachers Association (GVATA) tactical plan. The Research and Development Committee's purpose is to "promote and develop the GVATA program through the recruitment and retention of Agricultural Educators" (Georgia Vocational Agriculture Teachers Association, 2019) specifically, for teachers within their first year of teaching agriculture to provide "a mentor program that connects new teachers/ programs with similar programs, to answer/ assist" (Georgia Vocational Agriculture Teachers Association, 2019). This investigation sought to identify agriculture teachers' perceptions and experiences with mentoring programs and to identify the needs and concerns of early agriculture education teachers. This study concentrates on agriculture teachers teaching in Georgia's central and southern regions. This program could be adapted and refined to meet the needs of agricultural programs across the southeastern region of the United States, with the goal of national

implementation. Given the ongoing teacher shortages in agricultural education, developing an effective support program is essential and critical.

### **Research Objectives**

Six objectives were identified to guide the study:

1. Analyze the personal characteristics of agricultural education teachers in the State of Georgia.
2. Analyze participants' former experience with both formal and informal mentoring programs.
3. Analyze the specific components within mentoring programs that were needed and could be helpful in future mentoring programs.
4. Analyze the specific components within mentoring programs that are perceived to be concerns and would be helpful in future mentoring programs by Agriculture Education teachers.
5. Examine whether the formality of the mentoring program (formal, informal, or no mentoring program) is significantly correlated with (a) the description and structure of the program, (b) the concerns reported by first-year teachers, and c) the identified needs of first-year teachers.
6. Determine the relationship between participants' perceived success ratings of the FFA program and the overall agricultural program.

This quantitative study aims to identify teachers' needs and concerns during their initial year of teaching agriculture, which could be alleviated through a mentoring program.

Furthermore, this research may lay the groundwork for creating a mentoring program for agricultural educators across Georgia. Each objective will directly contribute to informing the

development of such a mentoring program. Objectives one and two will help tailor the program to the specific population of Georgia teachers and their previous experiences with mentoring programs. These objectives will also collect information and deeper insight for mentor-mentee matching. Objectives three and four will gather data on the needs and concerns of early-career agriculture teachers. This will shape the content and structure of the program's curriculum. The findings from Objective Six will identify what new teachers consider markers of success, guiding what the mentoring program should support. Previous endeavors to establish mentoring programs for agriculture educators at the state level in Georgia have been unsuccessful (Appendix 1).

### **Theoretical Framework**

The field of education has historically incorporated mentoring programs into school systems; similarly, agricultural education has adopted such initiatives. Kathy Kram's mentoring theory (1988) offers a framework that delineates the fundamental components of effective mentoring programs. Psychosocial and career functions constitute essential elements to be included in a comprehensive mentoring program. Psychosocial functions involve mentor role-modeling, acceptance, counseling, and friendship. Career functions pertain to the mentee's engagement and development within their career, facilitated by the mentor through protection, coaching, and increased organizational visibility. The survey instrument will include items designed to measure participant perceptions of psychosocial support (friendship, counseling) and career support (coaching, protection) in past mentoring experiences. Research questions three and four will examine the mentoring components using Kram's (1988) psychosocial and career functions to pinpoint which elements are most crucial for early-career agriculture education

teachers. This theory will guide the research by following a research-based mentoring program protocol and emphasizing the necessity of incorporating these functions within the program.

### **Significance of the Study**

Agricultural education offers a unique educational experience that combines academic knowledge, practical application, and real-world relevance. Students enrolled in agricultural programs are supported in career development, leadership skills, and personal growth.

Agricultural literacy is crucial for society and consumers nationwide to remain informed and comprehensively understand food and fiber systems. An increasing number of society members are becoming more disconnected from production agriculture, influenced by various factors such as a growing global population, urbanization trends, and an aging farming community (Clemons et al., 2018). Integrating agricultural education into the school curricula can assist in reducing the percentage of disconnection to address the widening gap.

An increasing number of highly qualified and effective agricultural educators depart from the classroom, consequently impacting agricultural literacy throughout the United States (Clemons et al., 2018), including Georgia. Agriculture teachers are exiting the profession at an alarming rate to pursue alternative opportunities utilizing their teaching experience and skills.

Agriculture constitutes the primary industry in Georgia, contributing more than \$91 billion to the state's economy (Georgia Farm Bureau, 2025). One out of every seven inhabitants of Georgia is employed in agriculture, and more than 9.9 million acres of land are under cultivation.

According to the Georgia Farm Bureau (2025), agriculture is the oldest industry within the state and has maintained its dominance for over three centuries. Agricultural education offers students, who may lack exposure to agriculture outside of the classroom, the opportunity to acquire

knowledge on food cultivation and to explore careers related to agriculture, thereby supporting the future expansion of the state's industry.

The solution to the agricultural attrition problem is critical to advancing agricultural education and research values established by the American Association of Agricultural Educators (AAAE). The agricultural industry must address the current problems arising within it, and this need leads to developing research priorities for the organization and its members to focus on. The development of these priorities occurred in 2006 and has since been renamed "Research Values." The most recent version of the AAAE research values was published in 2023. Before the research values were formed and published in 2023, AAAE research was guided by a National Research Agenda. The current "Research Value Statements" was proposed to be created and is considered a living document, open to suggestions from the AAAE members (American Association for Agricultural Education, 2023). The 2023 version delineates nine AAAE Research values, with the particular focus of this study being Research Value number one.

**Research Value #1:** Advancing Public Knowledge of ANFR Systems emphasizes educational instruction to help consumers make informed decisions as AFNR consumers and to prepare individuals for the agricultural workforce (American Association for Agricultural Education, 2023). Education is vital for the future of the Agriculture, Food, and Natural Resources (AFNR) sector and the agriculture industry, and it will be indispensable for the ongoing adoption of emerging technologies and innovations. Education plays a significant role in effectively communicating the sector's importance, and engaging and informing the public is essential for advancing AFNR systems—research Value #1 functions as the guiding principle for this study.

The findings of this study assist scholars in comprehending the needs, concerns, and experiences of agricultural educators involved in mentoring programs. Such insights can be used to develop a mentoring initiative that may be deployed statewide, aimed at optimization before eventual dissemination to the southeastern region of the United States, to decrease attrition rates within agricultural education. The landscape of public education has undergone considerable transformation over the years, making it essential for stakeholders and programs to remain cognizant of agricultural educators' present needs and concerns. This study's findings directly support the AAAE's research values and will help ensure agriculture education remains a sustainable and appealing career.

### **Delimitations**

Agricultural education in Georgia is segmented into three regions and six distinct areas. The study concentrates on male and female agricultural instructors in the Central and South regions of Georgia. It specifically targets educators with a minimum of one year of experience teaching middle or high school agriculture, and who have not exceeded ten years of teaching experience.

### **Definition of Terms**

1. Agriculture Educator: An individual who provides a variety of educational experiences within the field of agricultural education (Phipps et al., 2008).
2. American Association for Agricultural Education (AAAE): The AAAE is a professional society for faculty and graduate students with a specific research interest in agricultural communications, education, engagement, and leadership. These individuals work closely together to conduct social science research in food, agriculture, and natural resources (American Association for Agricultural Education, 2023).

3. American Association for Agricultural Education Research Values: The AAAE periodically establishes research priorities regarding contemporary issues in agricultural education. Today, these priorities are commonly referred to as values. The AAAE Research Values guide social science researchers for the complex problems within agriculture, food, and natural resource (AFNR) systems (American Association for Agricultural Education, 2023).
4. Beginning Teacher: A certified teacher in their first contract teaching position. Synonyms include: first-year teacher, beginning teacher, and novice teacher.
5. Career Functions: Behaviors that help protégés "learn the ropes" to prepare them to advance within their organizations. Behaviors include coaching, sponsoring, protecting, and challenging protégés (Ragins & Kram, 2007).
6. Competencies: Knowledge, skills and abilities (Dooley & Lindner, 2002; Harder, et al., 2013; Lindner, et al. 2001)
7. Mentor: A person who is older and more experienced, who is assigned to guide a protégé. Ragins & Cotton (1999) describe a mentor as "individuals with advanced experience and knowledge committed to progressive upward support and mobility to their protégés' careers". This support comes in two functions: psychosocial and career.
8. Mentoring: Defined by Kram (1983), is a relationship between a more experienced, older mentor and a younger, less experienced protégé, aimed at helping and developing the protégé's career.
9. Mentoring Program: An induction program for beginning teachers that includes mentor preparation and purposeful interaction with beginning teachers.

10. **Mentoring Relationships:** Relationships that build between a mentor and protégé. There are two types of mentoring relationships: formal and informal. Informal mentoring relationships occur naturally and spontaneously, whereas formal mentoring relationships are facilitated through organizational intervention, such as matching mentors and protégés (Ragins & Cotton, 1999).
11. **Professional Learning:** A process where educators acquire new knowledge, skills, and strategies to enhance their practice and effectiveness in the field. A synonym for this study is professional development (PD).
12. **Protégé:** A person who receives mentor support, guidance, and training. Kram (1983) defines a protégé as "a recipient of career and psychosocial support from a more experienced mentor" to help the protégé's career develop. A synonym for this study is a mentee.
13. **Psychosocial Functions:** Behaviors that enhance protégés' personal and professional growth. These behaviors include building trust and connection between the mentor and protégé, which increases the protégé's self-worth and self-efficacy. (Ragins & Kram, 2007).
14. **School-Based Agricultural Education (SBAE):** School-Based Agricultural Education (SBAE): Formal agriculture instruction offered within a public school setting. Instruction provides learning opportunities for students in each area of agricultural education, including classroom and laboratory instruction, FFA, and SAE (Phipps et al., 2008).

### **Assumptions**

The assumptions of this study align with those typically associated with research that employs questionnaires to collect data from a specific population. It is presumed that all participants responded to each item with honesty and appropriateness. Clear and detailed

instructions were given to all questionnaire respondents, reducing misunderstandings and increasing the likelihood of obtaining accurate responses from all participants. Furthermore, it is assumed that all educators who completed the questionnaire possess a minimum of one year of teaching experience in middle or high school agriculture and have not exceeded ten years of teaching experience. Additionally, all participants are presumed to be employed in the Central and South regions of Georgia. It is assumed that the sample drawn for this study accurately reflects the entire population. The assumptions outlined in this section are inherent to the specific problem and population under review. However, each has been carefully analyzed and addressed to ensure that the data collected accurately reflects the population and contributes to the resolution of the research problem.

### **Limitations of the Study**

Specific limitations could affect the study and the ability to generalize findings to the entire population under study. Most of these limitations are inherent to using a questionnaire format and were monitored and addressed as needed to ensure reliable data collection. Many factors can limit any study; however, the following were identified as limitations for this study, particularly in terms of impacting data quality and the ability to answer the overall research question.

1. Non-response error could limit the study by negatively affecting the internal validity of the questionnaire. The limitation was addressed by providing participants a clear rationale for the study, and follow-ups were used as necessary to encourage all sample members to participate.
2. Many unknown conditions or issues at the schools selected to participate in this study may affect the data collected.

3. All participants in this study are agricultural educators from Georgia who have taught school-based agriculture education with a minimum of one year of experience teaching middle or high school agriculture, and who have not exceeded ten years of teaching experience and teach in the central or south regions. This limits the findings of this study to teachers who meet these requirements; however, the same methods and instrument design can be used.
4. Low response rates impact the capacity to generalize these findings.
5. Low response rates hinder the reliability of statistical analysis and any resulting interpretations.

### **Chapter Summary**

Chapter 1 provides a rationale for the importance and objectives of the research. Agricultural education promotes widespread agricultural literacy and develops an informed consumer demographic (Chapman, 2017). Agricultural educators are a vital component of this system, and the retention of qualified agricultural teachers is imperative for maintaining efforts to improve agricultural literacy and understanding. Mentoring programs offer a practical solution, both within agricultural education and broader educational settings, to retain educators and support the training of future professionals. This study focuses on mentoring programs and investigates teachers' perceptions and experiences associated with such initiatives. Implementing a well-designed, research-driven mentoring program in Georgia, tailored to meet the needs and concerns of novice teachers, could aid in retaining agricultural educators, reduce workload pressures, and ultimately eliminate shortages of agricultural teachers across the state. Having established the problem, the purpose, and the significance of the study, Chapter Two provides a comprehensive analysis of existing literature about mentoring programs.

## **CHAPTER II**

### **LITERATURE REVIEW**

This study aims to identify the needs and concerns of Georgia's early-career agriculture educators and to outline effective practices for a successful mentoring program. The literature review provides an in-depth understanding of the history of mentoring and mentoring programs, their efficacy in implementation, the dynamics of mentoring relationships, and the role of mentoring within agricultural education (Lindner, et al., 2002). Teaching is a complex profession wherein novice educators often experience feelings of being overwhelmed and discouraged. These sentiments originate from the high expectations imposed by the administration and the challenging circumstances teachers regularly encounter. Mentoring programs can serve both as sources of support and as opportunities for professional development. This chapter begins by establishing the theoretical framework for the study. It then examines the fundamental components of mentoring programs, the elements of mentoring relationships, and evaluates the roles and characteristics of effective mentors and mentees. The review further analyzes the structure of successful mentoring programs, with particular emphasis on models within agricultural education, before concluding with an identification of the specific gaps that the study endeavors to address. This study examines the demographics of agriculture teachers and their previous involvement with mentoring programs. Additionally, the study highlights the identification of the needs and concerns of agriculture teachers, as well as their self-assessment of the FFA program and the overall agricultural program they oversee.

#### **Kathy Kram's Mentoring Theory**

Kram's Mentoring Theory forms the basis for this study. Kram is known for her expertise in workplace mentoring programs, especially regarding the mentor-protégé relationship and its

growth in professional settings. Ragins & Kram (2007) suggest that mentoring is a type of relationship, but it differs by emphasizing relationship development within a career context. Kram's Mentoring Theory identifies two main functions of mentor relationships: career and psychosocial development. These functions occur in both the mentor and the protégé. Career functions include sponsorship, exposure and visibility, coaching, protection, and challenging assignments, all aimed at advancing the protégé's career. Psychosocial functions support a sense of competence, clear identity, and effectiveness (Kram, 1988). These include role modeling, acceptance and confirmation, counseling, and friendship.

Kram's Mentoring Theory outlines four distinct phases that mentor-protégé relationships typically go through: Initiation, Cultivation, Separation, and Redefinition. These phases occur sequentially at different stages of mentoring. Kram (1983) explains that each phase is marked by emotional experiences, developmental roles, and interaction styles, all influenced by the needs of the individuals involved and the organizational environment. This study focuses on the experiences of agricultural educators in mentoring programs, along with the needs and concerns they faced during their first year of teaching. Additionally, the research examines the dynamics of the relationships between mentors and mentees.

Agricultural educators interact with a diverse range of individuals daily. Kram (1988) elucidates career functions that relate to agricultural education by supporting each component of the profession. Sponsorship, exposure, coaching, and protection serve to enhance various daily activities associated with agriculture within the community. When engaging with a community member in need of assistance from the agriculture program, sponsorship within this career function enables the mentee to access guidance and ideas from the mentor. This also establishes a contact point for the agriculture teacher within the community, thereby facilitating potential

SAE placements for students. The psychosocial function, which includes role modeling, acceptance, counseling, and friendship, is vital for the teaching and classroom segments of agricultural education. Often, a listening ear suffices after a challenging day involving interactions with administration, school, community politics, and students. Such support provides the mentor with an opportunity to share perspectives and personal experiences, thereby aiding the agriculture teacher in building relatability and fostering a trusting relationship. These relationships require time to develop, and Kathy Kram's (1983) phases of mentor-mentee relationships may not be fully realized, depending on the duration of the mentoring program. Defining mentoring, identifying its various types, and understanding the substantial impact these programs can have on both mentors and mentees are crucial steps in assessing the appropriateness of implementing a mentoring initiative for Georgia's agriculture educators.

### **Introduction to Mentoring**

The term "mentor" has been in use for centuries. Historical evidence suggests that the term 'mentor' first appeared in Homer's *Odyssey* between the eighth and ninth centuries (Irby & Boswell, 2016). According to Weisberg et al. (2023), the word 'mentorship' derives from the character Mentor in Homer's *Odyssey*, whom Ulysses appointed as a tutor and advisor to his son Telemachus. The mentor's role was to guide his son during his service in the Trojan War. From this origin, the term mentor has come to be known as a reliable counselor and guide. The term 'mentoring' was first used in America in 1778. Ann Murray authored one of the earliest published works on mentoring, pioneering the concept and establishing its foundational principles. Following the publication of her book, *Mentoria: The Young Ladies' Instructor*, other authors began to explore various forms of mentorship across different groups, including men, women, youth, and in diverse professional and career settings (Irby & Boswell, 2016). These publications

contributed to the development of formal mentoring organizations. The first mentoring group noted in the United States was the Big Brothers Organization (Irby & Boswell, 2016). Mentoring for the youth continued to expand and was integrated into educational institutions following the establishment of Junior Achievement in 1918 (Irby & Boswell, 2016). Up until 1980, mentorship and related publications were relatively scarce. Subsequently, there was a notable increase in research and scholarly articles concerning mentoring, mentors, and mentoring relationships, encompassing not only youth but also extending into the workplace, the arts, medicine, and the humanities (Irby & Boswell, 2016). Due to this surge in research, publications, and discussions regarding mentoring, most universities, schools, businesses, organizations, and government entities have adopted some form of mentoring program (Irby & Boswell, 2016). This trend can be attributed to the findings from research on such programs and the recognized positive impact of mentoring across various professional domains.

The term 'mentor' signifies a relationship in which an older, more experienced individual provides knowledge and support to a young adult mentee (Summers-Ewing, 1994). The mentor offers guidance, facilitating the development of a professional relationship commonly referred to as mentoring between the young adult and the senior individual (Summers-Ewing, 1994). Such a relationship aids the mentee in navigating various challenges, frustrations, and successes that may arise. The concept of mentoring encompasses actions such as support, respect, collaboration, listening, and trust. These characteristics are deemed essential according to Kram's theory (1988) on mentoring. It involves entrusting a mentee, an individual seeking assistance, to a knowledgeable and competent person capable of providing formal and confident guidance (Mathipa & Matlabe, 2016).

### *Types of Mentoring*

There are two types of mentoring: formal and informal. Formal and informal mentoring programs differ in the way the mentoring relationship develops over time. Kathy Kram (1988) observes that informal mentoring arises from perceived competence and rapport between two professionals and occurs when participants self-select, gradually forming a bond. Conversely, formal mentoring is not an inherently spontaneous process; it is task-oriented, with participants completing specific tasks to meet deadlines and submitting meeting notes and other materials discussed during scheduled sessions. Participants in formal mentoring programs are deliberately paired.

Both varieties of mentoring demonstrate clear distinctions. Informal mentoring is characterized as an organic relationship between a mentor and a mentee, often rooted in friendship, distinguished by mutual respect for both personal and professional dimensions (Inzer & Crawford, 2005). Due to the foundation of friendship, mentors often select protégés who have similar interests and work methodologies (Chao et al., 1991). Informal mentoring relationships fulfill the early career needs of protégés, providing guidance, support, and affirmation (Ragins et al., 2000). Ragins et al. (2000) further clarify that such relationships evolve through mutual identification: mentors select protégés they perceive as younger counterparts, while protégés choose mentors they regard as role models. This mutual selection fosters a strong connection between the parties. Recognition in informal relationships may be based on shared attributes such as gender, ethnicity, personality, or values (Deng et al., 2022). Conversely, formal mentoring involves an assignment or pairing arranged by a third entity. In formal contexts, the relationship does not emerge organically; rather, the parties are matched for specific objectives. Criteria such as working within the same scholastic environment, building, subject, or grade

typically influence mentor-mentee pairing. Consideration of personalities and backgrounds also plays a role in the matching process.

Informal mentorships develop spontaneously and are not structured or controlled by the organization (Chao et al., 1991). The partners meet as often as needed, based on their specific needs, with the relationship typically lasting between three and six years (Ragins et al., 2000). Informal mentoring feels more natural and grows over time. In contrast, formal mentoring is a short-term, organized process within a specific program that guides the mentoring experience. This type of mentoring typically concludes within one year to maintain an active relationship between the mentor and mentee. Formal mentoring lasts from six months to a year. Formal programs often require scheduled meetings and professional development, with a mentor assigned explicitly to the mentee based on program criteria. The contact mode, frequency, and location may be inconsistent or specified within a contractual agreement (Ragins et al., 2000). These variables will vary based on the goals set for the individual mentoring program. Due to the shorter period, the relationships formed in these programs may diminish the mentor's influence on the mentee's career and attitude towards it (Ragins et al., 2000).

Formal mentoring programs require the recruitment of mentors to participate. Agriculture educators frequently carry a multitude of additional responsibilities, which impair their ability to assume the role of potential mentors. The purpose of mentor recruitment is to ensure that employees selected as formal mentors are suitably paired with their designated protégés, thereby facilitating effective mentoring (Weinberg & Lankau, 2011). Methods employed by organizational committee members to pair mentors and protégés include either random selection or designated assignment of each pair (Chao et al., 1991).

Given the substantial relational component inherent in informal mentoring, which often enhances its overall effectiveness, coordinators of formal mentoring programs frequently adopt specific matching strategies to promote program success (Ragins et al., 2000). A distinction exists between informal and formal mentoring programs regarding their fundamental objectives. Informal mentoring relationships generally focus on long-term career development and personal aspirations. The mentor in such informal arrangements endeavors to assist the protégé in achieving a balanced and successful career, as well as increased satisfaction. Teacher satisfaction has been positively linked with career longevity (Clemons et al., 2019). Conversely, coordinators oversee formal mentoring initiatives within organizations. It is less probable for informal mentors to intervene on behalf of their protégés, as their primary concern tends to be their own future rather than that of the protégés (Ragins et al., 2000). Induction programs are frequently integrated with formal mentoring and are typically oriented towards first-year orientations or job training rather than long-term career objectives (Ragins et al., 2000). In agricultural education, an informal mentoring relationship may commence at a state or local FFA event, a meeting, or a conference.

Formal and informal mentoring programs exhibit variability in their duration. Some are concluded within a single academic year, whereas others extend over two years or more. The duration is regarded as a fundamental aspect of mentoring programs. A principal determinant of the length is intrinsically linked to the objectives of the program. Many mentoring initiatives commence during the initial year of a new teacher's employment within the school system, while other educational institutions perceive the mentoring process as a two-year or longer undertaking, aligning it with professional development (Villani, 2002). According to Kathy Kram's mentoring theory (1988), the process includes distinct phases. Kram (1983) explains that

the mentor-mentee relationship develops over time through four stages: initiation, cultivation, separation, and redefinition. Each stage aligns with the psychosocial and career functions described in the theory of mentoring. Given that many formal, school-based mentoring programs are designed to last only one academic year, it is crucial to consider that these relationships may only exist within the initiation phase, potentially limiting the development of the deeper career and psychosocial functions that emerge during cultivation.

In some cases, the relationship may not progress through all four stages; thus, it might not reach certain milestones. This is a crucial factor to consider when evaluating the duration of the mentoring program. The initiation stage occurs within the first 6 to 12 months of the relationship. During this phase, the mentor is often regarded with admiration and respect for their competence and ability to offer support and guidance (Kram, 1983). The mentor typically sees the mentee as someone with potential and someone who is teachable (Kram, 1983). This stage can also motivate and boost the mentee's confidence to work on a project with the mentor, effectively setting the relationship in motion (Kram, 1983). The second stage is cultivation. This begins when both the mentor and mentee recognize a meaningful purpose in the relationship, and if it feels significant enough, they continue (Daniel et al., 2019). This stage usually lasts between two and five years.

During cultivation, both psychological and career functions reach their peak. Career functions tend to emerge first, with the mentor providing challenging work, coaching, exposure, visibility, as well as sponsorship and projection within the organization (Kram, 1983). The changes experienced by both during this phase range from obvious to subtle (Kram, 1983). The mentoring process has a positive impact on both parties involved. Kram (1983) states that the benefit that surpasses all others for the mentor is "empowerment" (p. 617). This primarily results

from the support the mentor offers and the influence they hold over the mentee, which can also impact the organization (Kram, 1983). The cultivation stage also helps establish clear boundaries for the mentor-mentee relationship, clarifying its scope for both. The third stage is separation. This phase, lasting from two to five years, signals a significant shift for both individuals. This period is often marked by confusion, anxiety, and feelings of loss within the mentoring relationship (Kram, 1983). This stage is crucial for the mentee as they become more independent and demonstrate to the organization that the mentor has successfully nurtured their talent. The final stage is redefinition. During this phase, the relationship can evolve into a friendship. The mentee often expresses gratitude and appreciation toward the mentor. The mentee begins to see the mentor more as an equal rather than someone on a pedestal. If a friendship does not develop during this phase, the relationship often ends, with this phase marking its conclusion. Kram's explanation of the mentoring stages and the events that occur during each stage underscores the importance for mentoring program organizers to study and consider the duration of the program carefully.

Recognizing the differences among the mentoring program types and their duration is crucial for determining the most suitable program for Georgia agricultural educators. Identifying components of effective mentoring programs, examining successful initiatives, and analyzing the foundational elements that contribute to their success will be essential considerations in the implementation of a mentoring program.

### **Core Components of an Effective Mentoring Program**

#### *Designing Effective Mentoring Programs*

High rates of teacher attrition, with some estimates as high as 44% within the first five years, represent a critical challenge for the educational system (Boyle et al., 2023). In response,

mentoring has become a primary strategy for induction and support, aiming to reduce the professional isolation common among novice teachers and improve retention (Yirci, 2017; Callahan, 2016; Roby, 2012). Mentorship programs are longstanding elements within the domains of education and agricultural education. The integration of such programs in schools dates to the 1970s. The implementation of mentoring initiatives is particularly vital for novice educators. Over time, mentoring programs have evolved to meet the changing needs of educational institutions and to safeguard their teachers. Such participation can significantly influence their decision to remain in the profession. Furthermore, newly inducted teachers are twice as likely to exit the profession if they experience a stressful year. In agricultural education, the numbers are just as critical. During the 2021-2022 school year, there were over 1,500 vacancies in agricultural education, and only 789 graduates of agricultural education teacher preparation programs (Norris et al., 2024). The shortage of qualified agricultural educators has significantly contributed to teacher attrition. The demand for agricultural educators exists, yet the supply of agricultural educators has decreased (Clemons et al., 2021).

Proper implementation of training programs for educators can foster professional growth, enhance acceptance, and garner overall support. Research indicates that mentoring programs facilitate the professional development of novice teachers, enabling them to become more effective more rapidly, thereby improving student learning outcomes and reducing attrition rates among new teachers (Callahan, 2016). Yirci (2017) describes mentoring as the professional support provided by a teacher sharing the same occupation to a less experienced colleague, aimed at promoting progress in planning, implementation, and evaluation. Mentoring constitutes a process of mutual learning and teaching, which aids novice teachers in comprehending the complexities of their profession and cultivating a sense of belonging (Yirci, 2017). Typically, a

mentor is assigned to a mentee who is new to the profession, school, or school system. The initial period for new educators within a school or profession is commonly referred to as the induction period. The induction process is characterized as a transitional phase during which novice teachers shift from student status to experienced educators (Camp & Heath, 1988). During this period, support and guidance are crucial for fostering confidence and developing competencies in knowledge, skills, and values (Peiter et al., 2005). Teachers must experience a positive and robust induction phase, during which they feel adequately supported. This support can come in different forms, including written forms, instructional planning time, training sessions, orientation programs, and mentorship opportunities (Toombs & Ramsey, 2020).

Mentoring programs should support and develop novice teachers throughout their time in the program. Research suggests that teachers who continue in the profession experience different stages. The stages grow from an initial period of survival and discovery, through experimentation and consolidation, leading finally to mastery and stabilization (Pan et al., 2000). It typically takes five to seven years to achieve the third stage of mastery in the curriculum. (Pan et al., 2000). Mentoring programs implemented in school districts focus on the stages of survival and discovery. This stage is crucial for novice teachers to feel supported. In this stage of teacher development, the goal is to offer intensive support to new teachers as they tackle immediate needs, adjust to teaching demands, and become part of the school community organization (Pan et al., 2000). This stage of the teaching profession would fall under the initiation phase of Kram's mentoring theory.

Two types of support are essential for teachers to develop during the survival and discovery stage: emotional and instructional support (Stansbury & Zimmerman, 2000). Emotional support is imperative because novice teachers typically encounter a rollercoaster of

emotions throughout the day and must manage a multitude of tasks during the week, which can often leave them feeling less than successful. These tasks include managing classroom discipline, communicating with parents and administrators, understanding the diverse personalities within their grade-level teams, familiarizing themselves with school policies and procedures, and, in the case of agriculture educators, advising an FFA chapter and overseeing an agriculture program. During this period, experienced colleagues and mentors can provide guidance and support from two perspectives: as first-year teachers and as more seasoned professionals. In agricultural education, emotional support is like a mentor advising the mentee on how to get involved within the community or manage the FFA chapter. As most often being former FFA members themselves, the first professional mentors' agricultural educators have are often their former high school teachers (McKibben et al., 2022) but the relationship could be less advantageous for young teachers attempting to be seen as professionals rather than students. Psychological support addresses the need for new teachers not to feel isolated by offering moral support and proposing strategies to manage the new demands and expectations of students, parents, and the entire school community (Pan et al., 2000). The second type of support is instruction-related support. This type of support involves utilizing new technologies, communicating with parents and students, developing curriculum, locating materials and resources, and implementing new instructional strategies in daily lessons (Pan et al., 2000).

Kram's Mentoring Theory (1988) is highly valued in the development of mentoring programs. Kram's theory emphasizes mentoring and relationship building. The theory focuses on two key types of functions in the overall development of the mentoring relationship: psychosocial and career functions (Lambert et al., 2010). Each function addresses different aspects of mentorship. The psychosocial functions help develop the identities, competence, and

effectiveness of protégés and mentors in their professional roles (Lambert et al., 2010). Career functions in mentoring relationships involve the mentor leading by example and offering guidance and support related to the mentee's career (Lamm et al., 2017). According to Kram (1988), the career functions almost always develop first, followed by the psychosocial function. In addition to including these functions, there are key elements that contribute to the success of mentoring programs.

### *Successful Mentoring Programs*

A successful mentorship program must encompass the following elements: first, mentors who are experts and/or proficient in their respective fields; second, support from the administrative body; and third, mentors who receive adequate training to guide and coach their mentees effectively (Barnett, 2022; Callahan, 2016; Odell, 1990). Effective mentoring programs usually include choosing mentors who have demonstrated expertise and are in the same grade and subject area (Barnett, 2022). This is particularly important for agriculture teachers. Core-subject teachers are not held to the same expectations or requirements as agriculture teachers; therefore, mentoring by agriculture teachers represents the most favorable scenario. An effective mentoring program underscores the significance of the educational institution providing high-quality training and continuous support to mentors, thereby enhancing their knowledge and coaching competencies. To fulfill this, the administration must provide comprehensive support and understanding for the mentoring program. Consequently, mentorship initiatives should be meticulously planned and thoughtfully organized by the administration to effectively support both mentors and mentees. Additionally, this research framework may be applied to the development of agricultural mentoring programs.

Mentorship programs within educational institutions and school systems often fail due to inadequate support. Mentors and mentees may operate on incompatible schedules, thereby hindering effective collaboration; mentors frequently have other commitments, which can result in the mentee being neglected amid the complexities. These challenges can be alleviated by prioritizing mentoring initiatives. Successful mentoring programs necessitate the allocation of resources throughout the program, provided by all active participants and stakeholders, from the Board of Education to the school administration; moreover, the mentor must share the same vision and objectives for the program. When the vision and objectives are aligned, the likelihood of the program's success is greatly increased.

#### *Foundations of Mentoring Programs*

Given the diverse challenges faced by various districts, it is evident that a singular program design cannot comprehensively address the needs of every district nationwide. Agriculture education programs exhibit considerable diversity in their size, focus areas, and available opportunities. Consequently, a mentoring program that proves effective in one state may not attain similar success in another. When analyzing suburban, urban, and rural school districts, it is evident that each presents distinct challenges. Numerous studies demonstrate that a meticulously planned follow-up to mentoring initiatives can significantly enhance teacher retention, elevate teaching proficiency, and boost overall self-efficacy. It was widely assumed that effective teaching automatically qualified an individual as an effective mentor; however, this is not invariably the case. Mentoring often constitutes a transformative experience for master teachers who remain passionate about classroom instruction and are prepared to undertake additional challenges (Villani, 2002). While the foundational structures of mentoring programs may vary, essential

considerations include objectives, funding sources, supporters, evaluation methods, confidentiality protocols, and the duration of the program.

Funding is an essential consideration in the implementation of a mentoring program. It incurs costs for school districts, ranging from \$5,000 to \$50,000, to orient new teachers, contingent upon the professional development activities provided by the district (Villani, 2002). Grants from the local board of education, the state board of education, and allocations for professional development can be effectively employed to support the funding of the mentoring initiative. Financial resources are the fundamental basis for the program's establishment. Additionally, mentors within the program should receive monetary compensation, time, and effort through stipends. Villani (2002) further recommends that districts extend support to mentors beyond monetary remuneration by facilitating activities such as joint planning with mentees, supporting further professional development, and providing reduced responsibilities. Funding through the Georgia Department of Education and the agricultural education program must be considered when developing a program for agriculture teachers in Georgia. This support for mentoring and planning is echoed by Ray et al. (2022) in the context of agricultural education in Georgia.

The foundations of mentoring programs can only be thoroughly understood by considering the program's supporters. In educational settings, these supporters typically include administrators, mentors, and the mentoring program coordinator(s). Supporters play a crucial role in distinguishing between a program that is effective and successful and one that is failing. It is therefore vital to consider the supporters when establishing the foundational elements of the program. Supporters are inherently present to support the program; they influence its success. Administrators impact the program by facilitating scheduling between mentors and mentees, engaging as necessary, and encouraging novice teachers throughout their development.

Additionally, administration can support mentees by alleviating feelings of being overwhelmed, for example, by allowing them to set specific professional development objectives or by promoting focused attention on a single theme per grading period (Stansbury & Zimmerman, 2000). Mentors are committed to supporting the mentee throughout the process. Through both success and challenges, the mentor supports both the professional and personal development of the mentee's life. Research indicates that individuals appointed as mentoring program coordinators should be specifically designated to that role exclusively. A building administrator is typically not considered the most suitable candidate for overseeing the mentoring program, owing to confidentiality issues (Villani, 2002). The assistant superintendent of curriculum and instruction should oversee the program; nevertheless, the most appropriate approach would be to establish a dedicated position within the school district solely focused on the mentoring program (Villani, 2002). In Georgia, the agriculture education leaders would be the administrative body and support for the mentoring program.

Mentors are regarded as a vital part of the overall mentoring program. Mentor preparation should be viewed as part of the support foundation and must be in place to run an effective program. Mentoring programs have evolved to incorporate specialized training for mentors (Sparks, 2020). Mentors need to understand their roles, and one way to ensure this is through mentor training. Training, ongoing support, and continued guidance are essential for the success of the mentoring process (Villani, 2002). Research indicates that educators necessitate comprehensive training as mentors across various domains, including: (1) the fundamental objectives of teacher induction programs; (2) the philosophies, needs, and priorities pertinent to the district; (3) district policies and procedural guidelines; (4) collaboration with colleagues, stages of teacher development; (5) the needs and concerns of novice educators; (6) classroom observation

protocols and the cultivation of skills in conducting conferences and supervision; and ultimately (7) reflective practices and the enhancement of self-esteem among novice teachers (Odell, 1990). The absence of dedicated training for mentors may pose a significant obstacle to the effectiveness and success of the mentoring program. Research indicates that collaborative training spanning five months has been successful for mentor teachers (Albert, 2020). Gaining a comprehensive understanding of the training requirements for mentors would strengthen the implementation of a mentoring initiative designed for agricultural educators in the state of Georgia. A mentorship workshop scheduled during the summer season would constitute an exemplary element of the program.

Evaluation represents a vital component of mentoring programs. The assessment criteria are frequently shaped by the employment policies of the respective state and the frequency with which evaluations are conducted. When designing a mentoring program, it is essential to consider whether mentors are tasked with evaluating mentees and the degree to which the program and its administration prioritize these evaluations. Certain mentoring programs heavily depend on peer evaluations to determine the ongoing employment status of newly hired teachers (Villani, 2002). Conversely, some programs do not include peer evaluations performed by mentors, due to factors such as the necessary training or the perception that mentors may lack the requisite experience to carry out accurate and fair assessments of mentees. Ultimately, the approach and outcomes are dependent upon the specific program and the overarching objectives for mentees who participate.

Confidentiality constitutes a fundamental element of mentoring programs, as it safeguards the integrity of the environment and promotes a secure and trusting relationship for both the mentor and the mentee. When establishing mentor-mentee relationships, it is essential for the mentee to feel valued and to be assured that information shared during meetings and discussions will not be

disclosed to the administration. New educators need to understand whether their openly expressed concerns will be maintained as confidential when assessing the scope of disclosure to their mentors. (Villani, 2002). Confidentiality is recognized as a key aspect of the mentor-mentee relationship (Villani, 2002). Mentors are advised never to discuss the mentee's concerns, challenges, or performance evaluations with other colleagues, but to maintain professionalism in conversations about their mentees. This approach assists the novice teacher in building confidence and fostering positive relationships with their mentor colleagues.

### *Proven Success*

Research has demonstrated that mentorship programs are effective in retaining new teachers. Callahan (2016) explains that when teachers who participated in a mentoring program showed greater commitment to their jobs, experienced higher job satisfaction, and were more likely to remain in the teaching profession. These programs provide mentees with a sense of belonging by offering an immediate ally within the school. New teachers often receive considerable attention within educational institutions, and at times, their colleagues may not be as welcoming as expected. Prior research has indicated that the mentoring process reduces stress and anxiety, enhances self-esteem, improves vocational skills, increases awareness of various approaches, familiarizes individuals with the culture and practices of the workplace, creates opportunities to network, and enhances job satisfaction (Yirci, 2017). Annually, the number of novice teachers entering the education sector exceeds that of experienced educators. State Departments of Education must invest in their novice teachers to retain them as effective and influential leaders within their classrooms. Ultimately, the focus remains on the students, ensuring their safety, and fostering effective learning each day when the students enter the school. Within the context of agricultural education, several studies have been conducted that

have highlighted the importance and success of mentoring programs. Eastman and Williams (1993) found that mentoring was, in fact, closely linked to a person's overall satisfaction with their career. Research has shown that successful student teaching opportunities are indeed connected to appropriately implemented and supported mentoring relationships and programs (Lamm et al., 2017) The extent to which this type of support is available or desired by new agriculture educators in Georgia, however, remains unexplored.

### *Challenges of Mentoring Programs*

Mentoring programs face numerous challenges. Stansbury and Zimmerman (2000) and Pan et al. (2000) identified four critical components of mentoring programs, each with its own set of difficulties. These include mentor teacher selection and support, time management, teacher evaluation, and resource allocation. Recruiting teachers to serve as mentors remains a consistent challenge, particularly in the absence of incentives (Stansbury & Zimmerman, 2000). Even if teachers are recognized as exemplary classroom instructors, it does not necessarily ensure they will become effective mentors, nor are they always the most suitable candidates to support novice teachers. An additional important consideration is the availability of appropriate mentor-mentee pairings, such as pairing teachers who teach the same content or are at the same grade level. Various forms of preparation should also be considered. Some programs emphasize coaching skills; others focus on collecting and analyzing evidence of teaching (Stansbury & Zimmerman, 2000). Time constraints constitute another significant challenge for mentoring initiatives, especially when coordinating activities. Incorporating activities into the regular school day can be advantageous but also introduces logistical and financial challenges (Stansbury & Zimmerman, 2000). The absence of dedicated time for collaboration and training can act as a substantial barrier, hindering the development of positive relationships and

successful outcomes among mentoring program participants, which is crucial according to Kram's (1988) mentoring theory.

Teacher evaluation can be a complex and challenging process to manage within mentoring programs. Although assessments of novice teachers have the potential to enhance instructional practices, fairness should be the primary consideration. Mentors may lack the necessary training or qualifications to evaluate new educators effectively, which could result in evaluation responsibilities being shifted to the administration, who generally oversee such assessments. Evaluating fellow agriculture teachers presents additional challenges, particularly when mentors and mentees are not in proximity. Consequently, they might need to allocate time away from their classrooms and personal programs to conduct evaluations. Some successful mentoring initiatives incorporate both support and evaluation; however, others maintain a separation between the two. This division is often based on the premise that evaluation may interfere with support mechanisms (Stansbury & Zimmerman, 2000). When mentors undertake evaluations, it is essential to uphold confidentiality and foster a trusting relationship between the mentor and mentee. Trust within the mentor-mentee relationship is crucial to move from the initiation phase to the cultivation phase. The administration and the mentor's intentions must prioritize the mentee's development for assessments to be genuinely practical.

Resource allocation for beginning educators remains a notable challenge. Providing essential support to new teachers varies, as individual needs differ significantly. Some educators may require more extensive assistance than others, and certain mentors may be unable to fulfill all specific needs. In the context of agricultural education, research has been undertaken concerning the difficulties in pairing mentors and mentees, as well as the dynamics of these relationships. Burris et al. (2006) conducted a study on the satisfaction levels of both mentors

and mentees regarding the mentoring process and their relationships. The findings indicated that mentors exhibited greater satisfaction with the process than the mentees. Additionally, mentees expressed less satisfaction and perceived the mentor-mentee relationship as less similar to the one described by the mentors. The study found that other factors, such as location, availability, and convenience-related aspects, played a role in the pairing of the mentor-mentee relationship; therefore, the pairings may not have been as effective had those factors not been present.

### **The Mentoring Dyad: Participants, Roles, and Relationships**

The mentor is widely regarded as the cornerstone of any successful mentoring program, with decades of research devoted to identifying the qualities and competencies that characterize an effective guide for novice professionals. Great mentors are prevalent in the history of humanity (Dunn et al., 1996). These mentors have left their mark on human history and have profoundly influenced the society we know today. An essential part of the mentoring program is the participation of the mentors. Influential mentors must be adequately trained and possess qualities beyond being experienced teachers. Influential mentors are those who have specific skills and receive training and support before entering the program as mentors (van Tonder, 2021). Mentors must guide beginning teachers through the induction process, offer scaffolded opportunities to engage with effective pedagogy with learners, demonstrate effective instruction, and show beginning teachers how to manage the many responsibilities a teacher is expected to fulfill (van Tonder, 2021).

As previously discussed in the development of effective mentoring programs, mentors should undergo comprehensive training, especially on foundational teaching practices and ongoing professional growth, and have opportunities to evaluate and improve their teaching skills to boost their effectiveness (van Tonder, 2021). Mentors are more than just instructors.

They are assigned roles to provide emotional support and possess many other valuable qualities. There are five key functions of mentors: teaching, sponsoring, encouraging, counseling, and befriending (Anderson & Shannon, 1988). To further the discussion on mentor characteristics, mentors must be open to different teaching styles that are not their own, have a listening ear, communicate effectively, and understand that beginning teachers are doing their best. Jonson (2008) identified the following traits of what a good mentor embodies. Effective mentors must attentively address the needs of novice teachers, possess the ability to share effective teaching strategies, and demonstrate exemplary listening skills. They should communicate transparently with early-career educators and acknowledge that teachers may employ diverse styles different from their own. Furthermore, it is essential for mentors to abstain from being judgmental, whilst exemplifying the conviction that education is an ongoing process of learning and development. As such, they should be supportive of novice teachers, serve as conduits of hope and optimism, and be committed to the mentoring process. The capacity of a skilled mentor to listen attentively and communicate openly and effectively forms a fundamental skill that fosters the psychosocial functions of counseling and friendship, which Kram (1988) regards as vital for the development of mentees. These characteristics are indispensable for effective mentoring.

Mentors must sincerely possess a desire to serve in their capacity to be effective.

Educators are constantly acquiring new instructional tools and technological innovations to incorporate into their classrooms (Hancock et al., 2024), and mentors should be professionals eager to advance their careers. Furthermore, an effective mentor must maintain a positive attitude toward teaching. The education sector has experienced significant transformations in recent decades, with some professionals finding it challenging to keep pace. A mentor must sustain an optimistic perspective on the profession to make a meaningful contribution. Teaching involves

both favorable and challenging days, high and low points, and both novice and experienced teachers must learn to adapt to be effective. Teacher mentoring is an essential and pragmatic strategy to address the difficulties and emotional challenges encountered by novice teachers (Garza & Harter, 2016). Overall, mentors contribute a wealth of experience and perspective to the mentor-mentee relationship.

### *Roles within Mentorship Programs*

Mentorship programs encompass various roles. Administrators, mentors, and mentees each serve a vital function in guaranteeing the program's success. Administrators assume a critical role throughout the entire mentoring process (Albert, 2020). They must be adequately trained not only to identify competent mentors but also to ensure their proper preparation. Additionally, they are responsible for managing issues related to scheduling and providing support to both mentors and mentees. Consequently, administrators should allocate sufficient time and effort to meticulous planning of the program, and it should never be a task undertaken at the last minute. The responsibilities placed on mentors are more substantial than those on teachers who do not serve as mentors. The expectations for mentors to enhance the development of their mentees surpass the standard duties of typical classroom instructors (Albert, 2020). Often, mentors are compensated for the additional workload involved in effective mentoring. Specifically, within agriculture education, the term 'administration' may refer to the state's agriculture education program directors. When focusing on mentoring programs specifically designed for agriculture educators, the program director must possess a clear vision and objective for these initiatives and actively promote them throughout the public school system via the Department of Education. In Georgia, the Agriculture FFA Program director operates under the

auspices of the Georgia Department of Education, with the primary role of advocating for the agriculture program and supporting agriculture educators.

### *Responsibilities of Mentors and Mentees*

Mentors also play a vital role within mentorship programs. Callahan (2016) defines a mentor as an individual who is a seasoned educator—more experienced and wiser—who guides a novice teacher through the probationary period, providing observation, instructional support, and constructive feedback during the critical learning curve of the mentee's early teaching career. Not all experienced teachers are suitable to serve as mentors. Yirci (2017) characterizes exemplary mentors as individuals who possess traits such as excellent listening abilities, strong interpersonal skills, motivational capacity, persuasive power, and effective time management. Kram (1988) portrays mentors as role models for mentees, offering supplementary support through coaching, visibility, and camaraderie. The influence of effective mentors is pivotal to the success of a mentoring program. One method to ensure program efficacy is to select mentors who are influential, a goal attainable through comprehensive mentor training. Training requires adequate time; when schools delay training until the last moment for both mentors and administrators, the programs tend to falter. Callahan (2016) observes that mentors who are highly qualified and well-trained are potentially associated with enhanced student achievement, improved student conduct, and increased enthusiasm among teachers.

Mentors play different roles in mentor-mentee relationships, often depending on the specific mentoring program and the needs of the mentee. Different mentor styles affect these relationships and the types of activities mentors provide (Leidenfrost et al., 2011). Langhout et al. (2004) studied mentoring styles and identified four types: moderate, unconditionally supportive, active, and low-key mentoring styles, which vary in the level of support provided.

Mentors with a *moderate* style provide conditional support and engage in moderate activity levels structure (Leidenfrost et al., 2011). *Unconditionally supportive* mentors offer moderate levels of both activity and structure. The *active* mentoring style features mentors who deliver a high level of activities but the lowest degree of structure. A *low-key* mentoring style provides high levels of support but typically involves the lowest amount of activity. Langhout et al. (2004) found that the most significant benefits for mentees are associated with moderate mentoring relationships (Leidenfrost et al., 2004). Leidenfrost et al. (2011) explain that the mentor's investment is more likely to be higher because more activities are provided within the moderate mentoring style.

Mentors and mentees should exhibit specific qualities to enhance their experience and success in the mentoring program. A study by Peter Hudson (2013) asked mentors about the desirable traits they look for in mentees. The study found that mentees should show enthusiasm, be open to building relationships, demonstrate a commitment to children and their learning, be lifelong learners, welcome feedback, and take responsibility for their actions. A mentee, also known as a 'protégé,' should be prepared to communicate effectively with their mentor and understand that the mentor may not know all the answers to questions of the field (Inzer & Crawford, 2005). Mentors are an integral part of the program, supporting mentees and helping them access resources. Even experienced mentors may not have solutions for every issue that arises. In many programs, the mentee is responsible for selecting their mentor and should actively participate as a partner in the professional relationship (Inzer & Crawford, 2005). Without these qualities, the individual mentee's success in the program may be limited. Mentoring programs cannot succeed if roles and responsibilities are not clearly defined and outlined for both the mentor and mentee to review and follow. This research-based

understanding of the roles and responsibilities of mentors and mentees will be essential when implementing a mentoring program for agriculture teachers in Georgia.

### *The Perfect Match*

A strong relationship between mentors and mentees is a key foundation of mentoring programs; therefore, finding a suitable mentor to match with a mentee is essential (Haas et al., 2018). Formal mentoring programs involve pairing mentors with mentees, which is a crucial step. According to Deng et al. (2022), how matches are made can establish the tone for the working relationship between mentors and proteges, potentially influencing whether mentoring succeeds or fails programs. There are different methods that program coordinators can use when pairing mentors with mentees. The approach depends on the program's goals and desired outcomes for participants. Research shows that two factors influence the mentor-protégé matching process: the matching method itself and individual characteristics.

The matching process constitutes the methodology employed to connect mentors and protégés (Deng et al., 2022). Coordinators may select matches randomly, solicit input from mentors and proteges, or establish criteria for pairing individuals. Research indicates that obtaining input from both mentors and proteges regarding their matches may enhance perceptions of the quality of the mentoring relationship, satisfaction with mentorship, and views on the effectiveness of the formal mentoring program (Deng et al., 2022). Additionally, input from mentors and proteges contributes to the improvement of mentorship quality and role modeling functions (Deng et al., 2022). Moreover, seeking input from participants positively impacts their commitment to the mentoring program and the relationship. The criteria for matching can be based on individual characteristics. Deng et al. (2022) further examined three surface-level traits: experiential characteristics, surface-level characteristics, and deep-level

characteristics, as well as the overall effects each subgroup had when considering these traits during matching. Research has demonstrated a link between mentoring relationships and overall mentoring outcomes when individuals are matched based on specific traits. Experiential characteristics include educational background, experience, and location (Deng et al., 2022). Deng et al. (2022) discovered that possessing similar experiential characteristics is positively correlated with the provision of instrumental support. Surface-level characteristics pertain to observable physical features, such as gender and race. Conversely, deep-level characteristics are not immediately apparent; they encompass interests, attitudes, values, beliefs, and personality traits (Deng et al., 2022). These attributes necessitate time and interaction to be fully revealed. Research indicates that aligning mentors and mentees based on deep-level characteristics and personal values can enhance the mentoring process and improve its outcomes.

When aligning mentors with protégés, it is imperative to carefully evaluate the characteristics of both parties, with particular emphasis on their core traits. This process can be facilitated through the utilization of personality and personal value assessments during the pairing procedure. Additionally, it is crucial to consider the specific needs of the protégé. The pairing should also reflect the mentor's skills, experience, and expertise. When executed appropriately, this approach ensures that the protégé's needs are met and that meaningful learning occurs. The mentor's advanced knowledge and skill set can significantly enhance the protégé's experience within the program. The process should incorporate assessments completed by both the mentor and the protégé. Evaluating the mentor's deep-level traits, knowledge, background, skills, and expertise is of paramount importance. Content knowledge holds fundamental significance in specialized fields, such as agricultural education, thereby rendering the alignment based on subject-matter expertise particularly critical. Upon completion

of the matching process, research indicates that soliciting input from program participants yields beneficial outcomes. The establishment of compatible mentor-mentee relationships is essential within the educational context. van Ginkel et al. (2018) assert that successful mentoring relationships are regarded as vital for novice teachers to withstand their initial teaching experiences, develop their instructional skills, and define their professional identity. Understanding these evidence-based matching strategies is imperative for addressing research question three which aims to identify the specific components necessary for the development of future mentoring programs in Georgia.

### **Mentoring in Agriculture Education**

Agriculture education is currently facing a nationwide shortage of qualified educators. According to the National Agricultural Education Supply and Demand Study, over 1,000 new agricultural teachers were employed across the country in 2018 (Disberger et al., 2022). Some of these educators held certification, while others did not. This statistic underscores a substantial need for support for novice teachers. The challenges encountered by agricultural educators can and should be identified and mitigated through targeted training and induction programs designed explicitly for agriculture teachers. Rising rates of retention and attrition among SBAE teachers are driven by both internal and external factors affecting their mental and physical health (Queen et al., 2025). Factors such as burnout, stress, and exhaustion, which may lead educators to contemplate leaving the profession, are prevalent within this sector.

Administrative issues, salary concerns—some agricultural educators advocate for increased compensation —and the demands of extended contracts for advising FFA chapters and supervising SAE projects all significantly influence teachers' decisions to remain in or depart from their positions (Queen et al., 2025). Hanangriff et al. (2010) found SAE projects had

positive economic impacts on the communities they were performed. Attaining a healthy work-life balance is another vital element in agricultural education. The profession is demanding, complicating teachers' efforts to maintain balance. The expectations for agriculture educators generally exceed forty hours weekly, and implementing the three-ring model of agricultural education constitutes a considerable challenge. This is yet another reason why some teachers leave the profession. The state of Georgia is no exception to the shortage of agriculture educators. The Program of Work (POW) is a key document that guides agriculture teachers' planning for the year. To qualify for fully funded extended day and extended year contracts, Georgia agriculture teachers must meet POW standards (Appendix 2). Middle school and high school educators are held to the same standards. Norris et al. (2024) investigated why agriculture educators leave the profession and explored specific factors contributing to career dissatisfaction. Dissatisfaction stems from various sources, including work-life balance issues, better career opportunities, student discipline challenges, workplace conditions, and administrative interference. Norris et al. (2024) reported that of the 297 agriculture teachers who left the profession between 2009 and 2019, reasons included accepting jobs within the agriculture industry, choosing to stay home with their children, transitioning to teaching other subjects, and retirement. The perceptions of an SBAE teacher regarding the FFA chapter they supervise, as well as their overall view of the agriculture program they oversee, may be positively influenced by an enriching mentoring program experience. A mentoring program based on Kram's (1988) mentoring theory may serve to alleviate the challenges associated with work-life balance, stress, and workplace difficulties. Mentoring programs dedicated to agricultural education are indeed present in the United States, and there are exemplary programs from which to draw inspiration.

### *Major Influences*

Many states have established mentoring programs as part of agriculture education. Missouri has played a key role in developing these mentor programs within agricultural education. Under the 1985 Excellence in Education Act, passed by the Missouri state legislature, school systems were required to implement a formal mentoring program for all beginning teachers by fall 1988. Due to this policy, school systems had to pair mentors with mentees outside the teaching field, and agriculture educator mentees could not obtain targeted programmatic guidance on agricultural education topics from mentors (Lambert et al., 2010). This led, in 2003, to the Career and Technical Education division being mandated to provide structure and support for CTAE programs (Burriss et al., 2006). This addition to the law significantly strengthened the mentoring program for CTAE teachers.

Furthermore, in 2007, specific guidelines were established for the selection of mentors. Lambert et al. (2010) describe them: (a) they must be from the same area of the state; (b) they must not be a cooperating teacher during that year; (c) they should advise a superior FFA chapter; (d) they must have buy-in from the protege; (e) they should attend the same professional meetings as their protege; (f) they must fulfill the SAE requirements for cooperating teaching centers in the state; (g) a maximum of two proteges may be assigned per mentor. The Missouri mentoring program is organized by the month, outlining what mentors and mentees should discuss at meet-ups and which topics should be the focus. The Missouri Mentoring Program incorporates active learning into its two-year structure. According to the Missouri Department of Elementary and Secondary Education's Mentoring Handbook (n.d.), mentors and mentees should observe each other at least once a year and reflect on their observations.

Along with active learning, duration, collective participation, and coherence are key components of the program. The mentoring program heavily centers on FFA activities and the advisor side of agricultural education. Through government legislation and requirements, Missouri has established a robust model for what an agricultural education mentoring program should look like. The state of Missouri offers a strong model of a mentoring program and a valuable framework; it prompts the question of which components would be most applicable and practical within Georgia's unique agricultural education landscape.

California is another state that demonstrates a strong mentoring program for agriculture teachers. The California Agricultural Teachers' Induction Program (CATIP) was created in 2013 to address the need for support for new California agriculture teachers. The CATIP is an accredited program for agriculture teachers in their first two years of service, offering inductive services to participants. Facilitators are located throughout the state, and there are specific admission requirements for both mentors and mentees. The program aims to model the California Standards for the Teaching Profession and incorporate the Agriculture Education three-ring model. It emphasizes reflection, evaluation, and growth throughout its process.

The Agriculture Teachers Association of Texas sponsors a Mentor Program for new teachers entering their first year as agriculture educators. The program was launched in fall 2017 due to the increasing demand for agriculture teachers in Texas and the factors that affect teacher retention. This mentor program involves retired master teachers working with mentees who join the program. Unlike most agriculture mentoring programs that rely on peer-to-peer mentoring, this approach is different. Like other programs, there is a designated process for both mentors and mentees, and an administrative agreement is required. Clear expectations are also set for both mentors and mentees within the program.

Agriculture teachers come from a diverse array of backgrounds and experiences. Some complete teaching certifications, while others start in agriculture without expertise or accreditation. Agricultural educators must fulfill additional responsibilities and fulfill specific requirements beyond those of conventional teachers. They are anticipated to facilitate practical laboratories, oversee a prominent and active student-led organization, and collaborate diligently with their communities. They are often called on to educate a highly variant range of student abilities and backgrounds with little to no formal training or theoretical knowledge of how to incorporate those diverse learners (Miller, Clemons, McKibben, Cletzer & Lindner, 2025; Miller, Clemons, McKibben & Lindner, 2025; Smith et al., 2024). According to Burris et al. (2006), the inception of mentoring programs for agricultural educators was initially motivated by the need to address issues related to induction, teacher support, and retention. While the primary challenges faced by agriculture teachers have evolved over time, research conducted by Myers et al. (2005) reported that managing classrooms, advising the FFA chapter, developing curricula, and planning lessons remain among the most significant challenges encountered by novice educators. Consequently, mentoring programs tailored for agriculture teachers should incorporate these essential elements.

### *Current Programs and Theories*

Research on mentoring programs in agricultural education has been ongoing for years. Industry leaders should be aware of and learn about the needs of agricultural educators. Tummons et al. (2016) examined the relationship between their expectations, interaction, and psychosocial support received by agricultural teachers in a formal mentoring and induction program. Another study by Disberger et al. (2022) examined the program structure needs of beginning teachers. Researchers found that the program should be longer than one year to keep

pace with the phases of a beginning teacher. This aligns with Kram's (1983) theory on the phases of the mentoring relationship, which states that within the first year, a mentoring relationship typically only reaches the initiation phase. Feedback must be provided and utilized for the program to remain effective, and peer mentorship should also be incorporated. Idaho was also studied in a research project completed by Touchstone (2015). Touchstone (2015) identified professional development needs among Idaho agriculture educators. Peiter et al. (2005) further examined the Missouri teacher induction program for first-year agricultural education teachers. The research concluded that further studies are necessary to better understand the needs of beginning teachers, particularly through qualitative methods, in order to focus on the overall experience of first-year teachers. All this research has helped highlight the important issue of teachers leaving agricultural education. The challenges faced by agriculture educators, along with the programs designed to support new teachers, will help address this problem; however, more research is still needed to better understand agriculture education in Georgia.

### **Argument of the Present Study**

The literature confirms that structured mentoring is a vital strategy for retaining educators, with successful models seen in Missouri, California, and Texas. However, there is a notable lack of understanding regarding the specific needs and concerns of new agricultural educators, particularly in Georgia. The deficiency of agriculture educators has persisted for over fifty years (Barwick, 1967), and the absence of targeted research to mitigate this educator shortage could directly resolve the issue in Georgia. Without a current mentoring program for agriculture teachers, Georgia's agriculture education system is missing a valuable opportunity to enhance the success of its programs. Such mentoring programs benefit both the educators and the students they serve.

## Chapter Summary

The chapter provides a comprehensive overview of mentoring and pertinent literature, offering an in-depth examination of the subject. The literature reviewed emphasizes mentoring, mentoring programs, and the role of mentoring within agricultural education. This chapter adopts a broad perspective in defining mentoring programs and analyzes the various types of programs available in professional environments. It also evaluates existing programs and the key characteristics embedded within them, highlighting essential traits of exemplary mentors and mentees. Within mentoring programs, mentors and mentees assume specific roles, which are detailed in this chapter. The process of pairing mentors with mentees is critical to the success of these programs, and the chapter thoroughly reviews this matching process. Given that no two professional settings are identical, the agricultural education sector requires a specialized type of program due to its unique nature. This chapter outlines mentoring programs that have achieved success in agriculture education, providing examples from programs in Missouri, Texas, and California. Several states have implemented effective mentoring initiatives explicitly tailored for agriculture teachers. Implementing these effective models into a program for Georgia agriculture educators could directly support the agricultural instructors in Georgia and potentially contribute to reducing the current attrition rate. Despite these efforts, gaps and unmet needs persist in enhancing the agricultural profession. Kathy Kram's Mentoring Theory (1988) forms the theoretical foundation of this study, emphasizing the vital importance of relationships in mentoring. Her theory identifies two primary functions for mentees: career and psychosocial, each providing distinct benefits. Additionally, she outlines four stages that occur throughout the mentoring process. This area of research is crucial due to the necessity of retaining agricultural teachers in the education sector. When mentoring programs are purposefully designed and

thoroughly implemented, they prove to be an effective tool within the educational realm. Having established the theoretical importance of career and psychosocial functions, the effect of mentoring programs, and identified the gap in understanding the specific needs of Georgia teachers, Chapter Three details a quantitative methodology designed to capture those perceptions.

## **Chapter 3**

### **METHODS**

Chapter two established the necessity for effective teacher support and identified gaps in the comprehension of mentoring programs for SBAE teachers in Georgia. To address these deficiencies, this study employed a quantitative methodology to examine perceptions concerning mentoring programs, as well as the identification of the needs and concerns of Georgia agriculture teachers. The research objectives focused on the analysis of personal characteristics of Georgia agriculture teachers, participants' experience with mentoring programs, identified the needs and concerns of early career agriculture teachers, investigated whether the level of formality in the mentoring program (formal, informal, or none) is significantly linked to a) the program's description and structure, b) concerns reported by first-year teachers, and c) the needs identified by first-year teachers, and explored the connection between participants' perceived success ratings of the FFA program and the overall agricultural program.

#### **Research Approach and Design**

The study used a quantitative methodology. Quantitative research is an investigative approach that utilizes operational definitions to collect numerical data aimed at addressing specific, predetermined inquiries (Ary et al., 2018). The research employed a descriptive and correlational design for the purpose of descriptive and correlational research to characterize the relationships among variables and establish the connections between them (Creswell, 2018). Descriptive and correlational research techniques were used to gather data from Georgia SBAE teachers regarding their experiences with participating in mentoring programs during the first year of teaching agriculture. Data was collected using an online questionnaire. This method was selected based on the nature of the data being collected, its intended application, the objectives of

the study, and the characteristics of the study population. The researcher opted for this method due to its efficiency in collecting data from a large, geographically dispersed population of agriculture teachers; a qualitative approach, such as interviews, would not be feasible on this scale. A quantitative approach was deemed appropriate to generate data that can be generalized across a broad population, thereby enabling statistical analyses of relationships, such as correlations, that are not typically supported by qualitative methods.

Participants completed a questionnaire concerning their experiences with mentoring programs. The questionnaire was divided based on whether the participant engaged in a formal mentoring program, an informal mentoring program, or no mentoring program at all. The researcher utilized the Program of Work (POW) when constructing the instrument. The POW is a verification document that Georgia agricultural educators are mandated to complete annually. Georgia agricultural teachers must be validated by either school administration or state personnel for an annual POW review. If teachers are found not to have met their standards for the year, it is probable that their funding may be reduced from their annual salary. Furthermore, the researcher integrated Kram's (1988) concepts of "psychosocial functions" and "career functions" into the survey items related to mentoring programs. These concepts were incorporated throughout the questionnaire. For psychosocial needs, the categories of acceptance, friendship and counseling were included; for career functions, coaching, exposure/visibility and protection were incorporated. Each question on the instrument corresponds to a standard on the POW and also aligns with Kram's (1988) mentoring theory concepts. For questions that address career functions, the participant is positively influenced in areas such as sponsorship, exposure, coaching, perception, and being given challenging assignments. For questions related to psychosocial functions, the participant has been positively influenced in the areas of acceptance,

friendship, and counseling. Appendix 6 provides this information along with the rationale and justification for each question included in the final instrument.

Each participant was assigned to a specific section based on their experience with mentoring programs, whether they had participated in a formal mentoring program, an informal mentoring program, or no mentoring program. After the introductory question, participants answered specific questions about their mentoring experience. The focus then shifted to FFA and participants' sentiments regarding questions related to the FFA, as well as FFA tasks in which the participant is directly involved. Subsequent questions addressed teaching and the support received for teaching. The following section examined mentor/mentee relationships and participants' perceptions of them. Next, the instrument turned to participants' sentiments concerning professionalism and their careers. The subsequent section covered concerns, requesting participants to rank the frequency of experiencing specific concerns during their first year of teaching. The final section concentrated on the needs of participants during their initial year of teaching and included additional questions pertaining to mentor/mentee relationships. The study was designed to collect data necessary to evaluate current mentoring programs, the needs and concerns of agriculture teachers, and the demographics of agriculture teachers.

### **Population and Sample**

The study's population comprised all middle and high school agriculture education instructors operating within the central and south regions of Georgia, possessing a minimum of one year and a maximum of 10 years of experience teaching middle or high school agriculture. The regions represent two-thirds of the agriculture teachers in Georgia. Appendix 5 delineates the specific regions and areas of Georgia designated for sampling. These regions were

deliberately chosen based on the accessibility of informational data (i.e., contact information) necessary for the distribution of the research instrument.

A comprehensive list of all middle and high school agricultural education teachers within the Central and South regions of Georgia was compiled, and a structured spreadsheet was developed, including details such as the teachers' names, respective schools, areas, regions, and email addresses. A refined list was generated of the final cohort of participants, consisting of educators ( $N = 170$ ), for inclusion in the study.

### **Pilot**

A pilot study was conducted with 22 agricultural educators from the Central and South regions of Georgia. Their responses were excluded from the final analysis, and the participants were selected purposively. The pilot participants were chosen due to their extensive teaching experience, familiarity with mentorship roles (potentially serving as mentors themselves), and their ability to identify any missing or necessary statements in the survey instrument. These participants are experts in the field of agricultural education and are qualified to evaluate the mentoring instrument. The purpose of the panel evaluating the piloted instrument was to address the clarity, relevance, and comprehensiveness of the instrument. The pilot study participants provided feedback regarding the clarity, relevance, and comprehensiveness of the questions.

The pilot was initiated in mid-December and remained active until mid-January. The teachers asked to participate in the pilot questionnaire were contacted via the Qualtrics platform. Prior to the distribution of the questionnaire, these educators received an email that outlined the rationale behind the pilot (Appendix 3) and described the study. Follow-up emails were subsequently generated and sent through the Qualtrics platform. Due to low participation during the initial three days of distribution via school emails, the researcher issued a separate email

containing a direct link to the questionnaire. This issue was likely caused by the school's cybersecurity system, which frequently blocks emails sent through school email addresses via Qualtrics, as the platform is not recognized as secure. Conversely, emails sent from alternative school email addresses directly to recipients are more likely to be received, since these addresses are recognized as "legitimate". Thank-you emails (Appendix 4) were sent to the participants in an attempt to help correct the trust imbalance suggested by McKibben et al. (2025) between researchers and agriculture educators.

### **Instrumentation and Data Collection**

Qualtrics was utilized in this study to gather data (Appendix 7). This approach permitted educators to provide the requisite information to address the research questions. The data collection process extended March 2025, April 2025, and May 2025. Educators could complete the 8-10 minute questionnaire on any computer or device, with responses being collected instantaneously. The online format eliminated the need for mailing questionnaires, as responses were automatically stored electronically. An initial email was dispatched via the researcher's Auburn email on Thursday, February 27, 2025, to announce the invitation to participate in the research study and to inform recipients to anticipate the instrument email, scheduled for the following Tuesday, March 4, 2025 (Appendix 8). A reminder email was subsequently sent on Thursday, March 6, 2025. The researcher observed a bounce-back from the school email spyware; all emails were school-based, and therefore, the spyware may have erroneously flagged legitimate emails from Qualtrics as spam (Appendix 9). It was concluded that employing an anonymous link via the Auburn email would be the most appropriate method to potentially improve response rates. All responses remained anonymous. The responses remain anonymous because there is no method of identifying the respondents through Qualtrics. The platform solely

provides response numbers and the responses themselves; it does not include any information about the individuals who answered the questionnaire. Follow-up emails were discontinued, and the link was deactivated once it was determined that responses should no longer be collected ( $n = 69$ ). Upon commencing data analysis, the final valid responses numbered  $n = 48$ . Usable data in this case is defined as that from respondents who completed the questionnaire in its entirety, answering all sections and questions based on their experiences with mentoring programs. Twenty-three responses were excluded due to incompleteness. This reduction is likely attributable to survey fatigue or insufficient attentiveness among participants. The decrease in the final sample size constitutes a limitation of the study. Nonresponse error exists to the extent that people included in the sample do not provide usable responses (Lindner et al., 2001). Due to the low response rate and the potential for non-response bias (Lindner, 2002), the findings cannot be generalized to the larger population of SBAE teachers in the state of Georgia. The research protocol was reviewed and approved by the Office of Research on Human Subjects.

Agriculture education teachers in Georgia are evaluated according to the POW. The POW details the requirements for Georgia agriculture educators. The questionnaire was created based on the 2024-2025 Georgia POW. The 2024-2025 POW for middle and high school teachers (Appendix 2). The web-based questionnaire, comprising of multiple sections, was created and administered using Qualtrics. The importance section was organized according to Borich's Needs Assessment Model (Borich, 1980), using Likert-type scales (Lindner & Lindner, 2024) and mirrored similar work with agricultural education teacher assessment in Georgia (Ray et al, 2022) and Alabama (Faulk et al., 2024). Participants chose their responses from options ranging from "strongly agree" to "strongly disagree," based on their experiences with mentoring programs. Some questions were designed for participants to answer on a scale from "not at all"

to “large extent” and from “never” to “considerable extent,” depending on the section and the specific question. The needs assessment sought to identify needs, concerns, and experiences associated with FFA, classroom and instruction, and professionalism. The researcher examined the POW of both the middle school and secondary agriculture teachers and reviewed each line item to determine the expectations of agriculture teachers. Both the middle and secondary POWs are identical in terms of the expectations of the teacher. The researcher categorized the POW expectations and Kram’s (1988) mentoring theory functions to develop the questionnaire. The Needs Assessment Model guided the development of the questionnaire to ensure the collection of data on teacher perceptions and discrepancies.

Content and face validity were employed in the development of the instrument. The foundation of the instrument was based on the POW and Kram’s (1988) mentoring theory functions. In the state of Georgia, all middle and high school agriculture instructors are mandated to fulfill the minimum standards of the POW annually. The purpose of utilizing the POW was to align the requirements of all agriculture educators to identify the needs and concerns related to the standards outlined in the POW. This information could directly inform the development of mentoring programs and curricula. To establish content validity, a systematic mapping process was created between the source development documents and the instrument. Each item from the instrument originated from specific components of the 2024-2025 POW and from the theoretical construct of Kram’s (1988) mentoring functions: psychosocial and career. This alignment (Appendix 6) ensured that the instruction’s content directly reflected the professional standards and expectations of Georgia agriculture teachers and the theoretical framework guiding this study. The pilot study of the instrument with participants from the selected expert panel, along

with evaluations of comprehensiveness, clarity, and relevance, served as an assessment of face validity.

### **Data Analysis**

This study utilized a combination of analysis procedures to properly interpret the data collected from each section of the questionnaire. Each objective was analyzed and reported based on the type of data collected and the most suitable method for its analysis. Objective one was investigated and reported using frequencies, percentages, mean, and standard deviation. Objectives two, three, and four were reported using mean and standard deviation. Upon completion of the scaled analysis, objectives two, three, and four were given qualifiers based on research conducted by Lindner & Lindner (2024). Objective five was analyzed using Spearman's rho, and objective six was analyzed using Pearson correlation. The results were displayed in various tables appropriate to the information being reported for each objective.

### **Measures of Validity and Reliability**

The researcher conducted a reliability test using Cronbach's alpha. Cronbach's alpha reliability coefficient ranges from 0 to 1, with results closer to 1 indicating greater internal consistency (Gliem & Gliem, 2003). The overall instrument reliability is .974. By convention, an alpha of .65 to .80 is often considered "adequate" for a scale used in human dimensions research (Clemons & Lindner, 2025). Reliability scoring within the upper limits imposes irregularities within the instrument (Clemons & Lindner, 2025). According to Vaske et al. (2017) validity pertains to the degree to which an instrument aligns with its intended purpose, and reliability pertains to an instrument's capacity to measure consistently. The researcher refined the instrument based on the pilot study and reliability analysis. The researcher acknowledges the high alpha and its potential implications, suggesting the instrument has a high degree of internal

consistency. The commonly accepted upper and lower limits for reliability coefficients depend on different factors, including correlations between individual items and the overall instrument score, the total number of items in the instrument, and reverse-phrased items (Clemons & Lindner, 2025). Future studies should consider refining the instrument by removing potentially redundant items to increase its efficiency.

### **Chapter Summary**

Chapter three identified the methods used in this study. This chapter included a detailed description of the research design, population sample, instrumentation, data collection, data analysis, and measures of validity. The design of this study was discussed in detail, along with the rationale for the method selection. The methods outlined in this chapter were followed to collect the data necessary for the best possible outcome of the study and to provide insight into the research objectives.

Teachers completed sections tailored to the initial answer to the first question in the web-based questionnaire, which was designed using the Qualtrics platform. A variety of analysis procedures were used to analyze and report on the collected data, including frequencies, percentages, means, standard deviations, Spearman's rho, and Pearson correlation analysis. Appropriate steps were taken to ensure the validity of the collected data. Chapter Four provides a summary of the research findings.

## **Chapter 4**

### **FINDINGS**

Chapter three detailed the quantitative methodology used to collect data on the needs, concerns, and mentoring experiences of Georgia's agricultural educators. This chapter delineates the findings organized by the six research objectives that guided the study. These objectives were established in Chapter One, which sought to analyze the personal characteristics of agricultural education teachers in Georgia, their experiences with mentoring programs, the perceived needs and concerns of early-career agricultural educators, as well as the correlations between the formality of the mentoring program with a) the description and structure of the program, b) the concerns reported by first-year teachers, and c) the identified needs of first-year teachers, and the relationships between self-ratings of participants' FFA chapters and the overall agricultural program. These findings are the result of a comprehensive data analysis undertaken to address each research question and objective. The analysis and reporting were conducted utilizing SPSS software. The conclusions drawn are based upon the research questions and objectives that guided the study.

***Objective One: Analyze the personal characteristics of agricultural education teachers in the State of Georgia.***

Georgia's agriculture teachers are spread throughout the state, which is divided into three regions: North, Central, and South. Each region is further split into two areas, totaling six areas. Areas 1 and 2 are in the North Region, Areas 3 and 4 are in the Central Region, and Areas 5 and 6 are in the South Region. The demographics of agriculture teachers in Georgia have changed over time, with a noticeable increase in the number of female agriculture teachers entering the field compared to previous years. Agriculture teachers are also pursuing additional education and

returning to school to earn higher degrees. The typical respondent was a female high school agriculture teacher who teaches in the South region, followed the traditional pathway to become an agriculture teacher, and holds a specialist degree. The final usable sample was  $n = 48$ . Data from the additional two nonrespondents to the characteristics questions were excluded from the analysis.

The demographic information from this study is presented in Tables 1, 2, 3, and 4. Respondents participating (75.56%,  $n= 34$ ) in a formal mentoring program within the first three years of teaching agriculture. Of the 48 potential respondents, three participants did not answer the characteristics questions completely, and three did not answer the question on mentoring program type participation. Of the participants, 20% ( $f = 9$ ) took part in an informal mentoring program, and 4.44% ( $f = 2$ ) did not participate in any mentoring at all. Note that the final usable data for this study were  $N = 48$ . Data from an additional three nonrespondents to the characteristics questions were excluded from the analysis (see Table 1).

**Table 1**

*Subgroup Characteristics of Participants in Formal and Informal Mentoring Programs.*

Program Type	<i>f</i>	%
Respondents who have participated in a formal mentoring programs.	*34	75.56
Respondents who have participated in an informal mentoring programs.	9	20.0
Respondents who have not participated in a mentoring programs.	2	4.44

*Note:* \*Three nonrespondents ( $n = 45$ ).

Characteristics of the participants (see Table 2) included those who had not participated in any mentoring program, participants in informal mentoring programs, and participants in formal mentoring programs ( $N = 48$ ). Female teachers represented the largest gender group of participants ( $f=35$ , 72.92%). Males represented 27.08% ( $f= 13$ ). The mean age of participants is

$M = 29.85$ . The subgroups include informal mentoring program participants ( $n = 9$ ),  $M = 30.5$ ; formal mentoring program participants ( $n = 34$ ),  $M = 29.85$ ; and participants who reported not participating in a mentoring program ( $n = 2$ ), with ages of 26 and 27. The results for participants who responded to the question regarding the highest level of education ( $n = 45$ ) are as follows. Those who earned a specialist degree represented the majority at the highest level of education ( $f = 21$ , 46.7%), followed by a bachelor's degree ( $f = 12$ , 26.7%), a master's degree ( $f = 11$ , 24.4%), and a doctorate ( $f = 1$ , 2.2%). Participants represented two of the three agricultural education areas in the state: central ( $f = 22$ , 47.82%) and south ( $f = 24$ , 52.17%), 54.35% ( $f = 25$ ) of participants reported teaching agriculture at the high school level, and 45.65% ( $f = 21$ ) reported teaching middle school agriculture.

**Table 2**

*Participant Characteristics*

Baseline Characteristics		<i>f</i>	%
Gender	Female	35	72.92
	Male	13	27.08
Teacher Preparation	Traditional	37	82.22
	Non- Traditional	8	17.78
Level of Education teach	High School	25	54.35
	Middle School	21	45.65
Region Teach In	South	24	52.17
	Central	22	47.82
Education Level	Specialist	21	46.70
	Bachelor's	12	26.70
	Master's	11	24.40
	Doctorate	1	2.20

*Note:* Of the 48 potential respondents, some did not complete the questions regarding their characteristics.

Participants were asked to rate themselves on the success of their FFA program and their overall agriculture program. Participants rated on a scale of 1-10 (a rating of 1 being the lowest and a rating of 10 being the highest). As reported (see Table 3), participants who did not participate in a mentoring program ( $n = 2$ ) rated their FFA success as 5 and 6, and their overall agriculture program as 6 and 7.

**Table 3**

*Self-rating for those participants who did not participate in a mentoring program.*

	FFA Success 1-10	Overall Agriculture Program 1-10
No mentoring program	5 and 6	6 and 7

The mean rating for participants who participated in an informal mentoring program for FFA success was  $M = 6.78$  ( $SD = 1.39$ ), and the overall rating for agricultural program success was  $M = 6.44$  ( $SD = 1.51$ ). The mean rating for FFA success was  $M = 6.34$  ( $SD = 1.51$ ), and the overall agricultural program rating was  $M = 7.11$  ( $SD = 1.68$ ) for participants who reported having participated in a formal mentoring program (see Table 4). The average for total participants was 6.39 ( $SD = 1.51$ ), FFA success rating, and  $M = 6.96$  ( $SD = 1.62$ ) for overall agriculture program success.

**Table 4**

*Self-rating for those participants who participated in an informal and formal mentoring program, and those who did not participate in any mentoring program.*

Mentoring Program	FFA Success		Total Agriculture Program	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	6.78	1.39	6.44	1.51
	6.34	1.57	7.11	1.68
	6.39	1.51	6.96	1.62

***Objective two: Analyze participants' former experience with both formal and informal mentoring programs.***

Objective two aims to identify participants' previous experiences with both formal and informal mentoring programs. Participants were asked specific questions about the mentoring programs they had participated in and whether they believed their experiences had been beneficial both professionally and personally. Participants were also asked about mentor/mentee relationships and the details of those relationships. This helped to connect Kram's mentoring theory with participants' experiences.

Teachers who participated in both formal and informal mentoring ( $N = 43$ ) were asked specific questions about their experiences with mentoring programs. The information on their experiences is presented in Table 5.

**Table 5**

*Participants' Experience With Mentoring Programs.*

Item	<i>M</i>	<i>SD</i>
Mentoring program was required by my system/ county.	4.43	1.09
I developed a positive relationship with my mentor.	4.30	1.01
The mentoring program was beneficial to my personal goals.	3.67	1.06
Mentoring program was beneficial to my professional goals.	3.54	1.32
I was assigned a mentor with SBAE certification.	3.50	1.74
Mentoring program was designed specifically for SBAE teachers.	2.57	1.57
I chose my mentor regardless of SBAE certification.	2.57	1.39

Note.  $N = 43$ , respondents both formal and informal mentoring programs

Note. The scale used was 1=Strongly Agree, 2=Somewhat Agree, 3=Neither Agree nor Disagree, 4=Somewhat Disagree, 5=Strongly Disagree.

Participants responded that they “somewhat disagree” with the fact that the mentoring program they participated in within the first three years of teaching agriculture was required by the system/ county ( $M = 4.43, SD = 1.09$ ). Overall, respondents also “somewhat disagree” with the statements “mentoring program was beneficial to my professional goals” ( $M = 3.54, SD = 1.32$ ) and the “mentoring program was beneficial to my personal goals” ( $M = 3.67, SD = 1.06$ ). This data suggests that the participants did not perceive the mentoring program as advantageous for their professional or personal goals, and that their participation in such a program did not yield any significant benefits for them. Participants “somewhat disagree” with the statement “I developed a positive relationship with my mentor” ( $M = 4.30, SD = 1.01$ ), as well as “somewhat disagree” with the statement “I was assigned a mentor regardless of SBAE certification” ( $M = 3.50, SD = 1.74$ ). Respondents “Neither Agree nor Disagree” with the following statements, “Mentoring programs was designed specifically for SBAE teachers” ( $M = 2.57, SD = 1.57$ ) and “I chose my mentor regardless of SBAE certification” ( $M = 2.57, SD = 1.39$ ).

Beyond the examination of participants' experiences with mentoring programs, Objective three aimed to analyze the specific components of the mentoring initiatives, identifying what was beneficial and ineffective, as well as assessing potential future improvements to better meet the needs of early career agriculture educators.

***Objective Three: Analyze the specific components within mentoring programs that were needed and could be helpful in future mentoring programs.***

The study aimed to understand agriculture education teachers' experiences and needs to support the development of a mentoring program specifically for agriculture teachers in Georgia. Objective three examined components that could be seen as necessary and beneficial for future

agriculture educators during their first year of teaching agriculture education. The specific questions focused on classroom practices, professionalism, and personal life. This aligns with Kathy Kram's Mentoring Theory (1988) by emphasizing professionalism, workplace life (career functions), and personal life (psychosocial functions).

Teachers were asked to rate items that they would consider needing professional advice from a mentor during the first year of teaching. The findings are presented in Table 6. As presented in Table 6, "Awareness of school politics" ( $M = 2.64, SD = 0.87$ ), "Identifying school politics" ( $M = 2.51, SD = 0.95$ ), "Managing professional stress" ( $M = 2.70, SD = 1.00$ ), and "Managing professional time" ( $M = 2.55, SD = 0.93$ ) are all ranked as "often". Meaning the average was between 2.51 and 3.50. Teachers felt that these topics would often require professional advice from a mentor in the first year of teaching. "Assigning grades" ( $M=2.06, SD = 0.95$ ), "Inputting grades in electronic grade book" ( $M = 2.04, SD = 0.94$ ), "Developing rapport with students" ( $M = 2.10, SD = 1.04$ ), "Effectively managing my classroom" ( $M = 2.38, SD = 1.00$ ) "Gaining parental support" ( $M = 2.42, SD = 0.94$ ), "Managing personal stress" ( $M = 2.30, SD = 0.98$ ), "Managing personal time" ( $M = 2.19, SD = 0.95$ ) and "Practicing self- reflection" ( $M = 2.17, SD = 0.79$ ) all had a mean of 1.51- 2.50, qualifying these items as "sometimes" needing professional advice from a mentor. This data aligns with Kram's Mentoring Theory (1988), which emphasizes the integration of career and psychosocial functions into mentoring programs. Examples of career functions in the findings are "awareness of school politics," "identifying school politics," "managing professional time," "managing professional stress," "assigning grades," "developing rapport with students," "effectively managing my classroom," and "inputting grades in electronic gradebook." Psychosocial function examples are "managing personal time," "managing personal stress," and "practicing self- reflection." Career functions

and psychosocial functions need to be embedded in mentoring programs, as they are essential components to successful mentoring programs. The item “Managing professional stress” ( $M=2.70$ ,  $SD=1.00$ ) has the highest average, and the item “Inputting grades in an electronic grade book” ( $M=2.04$ ,  $SD=0.94$ ) has the lowest average. These items were designed to capture the career and psychosocial support needs of early-career teachers, as conceptualized by Kram (1988).

**Table 6**

Item of “needs” means, and SD.

Item	<i>M</i>	<i>SD</i>
Managing professional stress.	2.70	1.00
Awareness of school politics.	2.64	0.87
Managing my professional time.	2.55	0.93
Identifying school politics.	2.51	0.95
Gaining parental support.	2.42	0.94
Effectively managing my classroom.	2.38	0.87
Managing personal stress.	2.30	0.98
Managing my personal time.	2.19	0.95
Practicing self- reflection.	2.17	0.79
Developing rapport with students.	2.10	1.04
Assigning Grades.	2.06	0.95
Inputting grades in electronic grade book.	2.04	0.94

Note.  $N = 48$ . 1= Never, 2= Sometimes, 3= Often, 4= Considerable.

In addition to the analysis of the needs of agriculture teachers, Objective four aimed to examine the concerns that agriculture teachers experienced during their first year of teaching.

The concerns that agriculture teachers had in their first year of teaching.

***Objective Four: Analyze the specific components within mentoring programs that are perceived to be concerns and would be helpful in future mentoring programs by Agriculture Education Teachers.***

Concerns among agriculture educators may differ significantly from those of the typical subject teacher. Objective four examined data that could be viewed as concerns of first-year agriculture teachers. Agriculture teachers in Georgia lack a mentoring program specifically tailored to their needs. This data could assist in developing mentoring programs for agriculture teachers in Georgia to reduce their concerns and benefit all involved. The findings regarding concerns among agriculture teachers align with Kram’s theory of career and psychosocial functions in mentoring programs.

Participants were asked to rate items of concern that they faced during their first year of teaching. All items qualified as “Often” ( $M > 2.51- 3.50$ ) except item, “Developing rapport with your students” ( $M = 2.44, SD = 0.79$ ), which qualified as “Sometimes” ( $M < 2.51-1.50$ ). “Advising your FFA chapter” ( $M = 2.83, SD = .63$ ), “Gaining parental support” ( $M = 2.71, SD = 0.89$ ), “Gaining community support” ( $M = 2.88, SD = 0.937$ ), “Managing daily FFA tasks” ( $M = 2.88, SD = 0.76$ ), “FFA time management” ( $M = 2.96, SD = 0.79$ ), “Motivating students” ( $M = 2.94, SD = .836$ ), “Supervising students on trips” ( $M = 2.52, SD = 1.03$ ), “Recruiting students in your ag program” ( $M = 2.63, SD = 0.91$ ), and “Addressing your mental well-being” ( $M = 2.94, SD = 1.06$ ) all are ranked as qualified as “often.” Teachers reported to “often” have had concerns about “FFA time management” ( $M = 2.96, SD = .79$ ), “Motivating students” ( $M = 2.94, SD = 0.83$ ), and “addressing your mental well-being” ( $M = 2.94, SD = 1.06$ ). This information is found in Table 7.

**Table 7**

Items of Concerns means and SD.

Concerns	<i>M</i>	<i>SD</i>
FFA time management	2.96	.798
Motivating students	2.94	.836
Addressing your mental well-being	2.94	.798

Gaining community support	2.88	.937
Managing daily FFA tasks	2.88	.761
Advising your FFA chapter	2.83	.630
Gaining parental support	2.71	.898
Recruiting students in ag program	2.63	.914
Supervising students on trips	2.52	1.031
Developing rapport with your students	2.44	.796

---

Note.  $N = 48$ . Scale: 1= Never, 2= Sometimes, 3= Often, 4= Considerable.

Beyond merely identifying the concerns of agriculture teachers, the fifth objective aimed to examine the correlations between the formalities of mentoring programs in which participants engaged and the program's structure, as well as the concerns and needs identified.

***Objective Five: Examine whether the formality of the mentoring program (formal, informal, or no mentoring program) is significantly correlated with a) the description and structure of the program, b) the concerns reported by first-year teachers, and c) the identified needs of first-year teachers.***

Objective five aimed to examine whether the format of the mentoring program had any significant correlations with the structure, concerns, or needs of first-year teachers. A Spearman's rank-order correlation was conducted to assess the relationship between the formality of the mentoring program and the description of the program. A Spearman's rank-order correlation was performed because the variables were rank-ordered and continuous.

Among the Georgia educators who participated in the study, a statistically significant conclusion was found between the formality of the program and the item "mentoring program was required by the school system/ county" ( $r_s = .560, p < .001$ ). This suggests that the mentoring programs required by the school system/and county are more formal and structured. These mentoring programs are more likely to have scheduled meetings, mentor-mentee assignments, and other requirements. The other items "Mentoring program was designed

specifically for SBAE teachers” ( $r_s=.193, p = 0.20$ ), “The mentoring program was beneficial to my professional goals” ( $r_s=.022, p = .887$ ), “The mentoring program was beneficial to my personal goals” ( $r_s=.186, p = .217$ ), “I was assigned a mentor with SBAE certification” ( $r_s=.182, p = .227$ ), “I developed a positive relationship with my mentor” ( $r_s=.077, p = .610$ ), and “I chose my mentor regardless if SBAE certification had no statistically significant association with the “formality of the mentoring program” ( $r_s = -.108, p =.475$ ), were not found to be statistically associated with one another. Table 8 presents these findings.

**Table 8**

*Formality of the program and its relationship to the description of the program.*

Item	$r_s$	Sig.	N
Mentoring program was required by the school system/ county	.560	<.001*	48
Mentoring program was designed specifically for SBAE teachers	.193	.20	46
The mentoring program was beneficial to my personal goals	.186	.217	46
I was assigned a mentor with SBAE certification	.182	.227	46
I developed a positive relationship with my mentor	.077	.610	46
The mentoring program was beneficial to my professional goals	.022	.887	46
I chose my mentor regardless of SBAE certification	-.108	.475	46

Note. \*statistically significant at  $p > .05$ .

Note: Of the 48 potential respondents, some did not complete the questions regarding their characteristics.

A Spearman’s rank-order correlation was conducted to evaluate the relationship between the formality of the mentoring program and the concerns. Spearman’s correlation was chosen because the data are rank-order (formality of the mentoring program) and continuous variables. Table 9 presents the relationship between the formality of the mentoring program and the concerns reported by agricultural educators. It was found that there was no statistically significant association between the formality of the mentorship and the concerns. “Advising your FFA chapter” ( $r_s = -.222, p = .129$ ), “Developing rapport with your students” ( $r_s = .275, p =$

.059), “Gaining parental support” ( $r_s = -.202$ ,  $p = .168$ ), “Gaining community support” ( $r_s = .037$ ,  $p = .802$ ), “Managing daily FFA tasks” ( $r_s = -.067$ ,  $p = .649$ ), “FFA time management” ( $r_s = -.056$ ,  $p = .706$ ), “Motivating students” ( $r_s = -.153$ ,  $p = .298$ ), “Supervising students on trips” ( $r_s = -.080$ ,  $p = .587$ ), “Recruiting students in your ag program” ( $r_s = -.056$ ,  $p = .706$ ), and “Addressing your mental well-being” ( $r_s = .071$ ,  $p = .631$ ).

**Table 9**

*Formality of the Program and its Relationship to the Concerns.*

Concerns	$r_s$	Sig.	$N$
Addressing your mental well- being.	.071	.631	48
FFA time management.	.056	.706	48
Gaining community support.	.037	.802	48
Recruiting students in your ag program.	-.056	.706	48
Managing daily FFA tasks.	-.067	.649	48
Supervising students on trips.	-.080	.587	48
Motivating students.	-.153	.298	48
Gaining parental support	-.202	.168	48
Advising your FFA chapter.	-.222	.129	48
Developing rapport with your students.	-.275	.059	48

Table 10 presents the relationship between the formality of the mentoring program and the needs reported by the agriculture educators. It was determined that there is a statistically significant negative association between the formality of the mentoring program and the needs: “Developing rapport with students” ( $r_s = -.291$ ,  $p = .045$ ). This suggests that participants in more informal mentoring programs reported a greater need for support in relationship building with students. There was a statistically positive association between mentoring program formality and the need for “Identifying school politics” ( $r_s = .311$ ,  $p = .033$ ). This suggests that participation in more formal mentoring programs was more likely to express a need for guidance in navigating school politics. This could indicate that the mentor/mentee relationship within a

formal mentoring program is stronger, and the relationship has developed enough for both participants to feel comfortable discussing this type of topic. There was no statistically significant association between the formality of the mentoring program and the following needs: “Assigning Grades” ( $r_s = -.095, p = .522,$ ) “Inputting grades in electronic grade book” ( $r_s = -.031, p = .834,$ ) “Effectively managing my classroom” ( $r_s = -.104, p = .481,$ ) “Gaining parental support” ( $r_s = -.181, p = .218,$ ) “Awareness of school politics” ( $r_s = .242, p = .101,$ ) “Managing personal stress” ( $r_s = -.039, p = .795,$ ) “Managing professional stress” ( $r_s = -.042, p = .781,$ ) “Managing my personal time” ( $r_s = -.096, p = .523,$ ) “Managing my professional time” ( $r_s = .029, p = .845,$ ) and “Practicing self- reflection” ( $r_s = -.002, p = .989.$ )

**Table 10**

*Formality of the Program Relationship to the Needs.*

Needs	$r_s$	Sig	$N$
Identifying school politics.	.311*	.033	47
Awareness of school politics.	.242	.101	48
Managing my professional time.	.029	.845	47
Practicing self- reflection	-.002	.989	47
Inputting grades in electronic grade book.	-.031	.834	48
Managing personal stress	-.039	.795	47
Managing professional stress.	-.042	.781	47
Assigning grades.	-.095	.522	48
Managing my personal time.	-.096	.523	47
Effectively managing my classroom.	-.104	.481	48
Gaining parental support.	-.181	.218	48
Developing rapport with my students.	-.291*	.045	48

*Note.* \*statistically significant at  $p > .05$

*Note.* Of the 48 potential respondents, one chose not to complete some sections of the instrument, and the data was analyzed using only the reported responses.

Expanding beyond the correlations between the formal aspects of the mentoring program and the various elements of Objective five, Objective six aimed to determine the relationship

between participants' perceived success self-ratings of the FFA program they advised and the overall agriculture program.

***Objective six: Determine the relationship between participants' perceived success ratings of the FFA program and the overall agricultural program.***

Success can be perceived differently by each educator. Agriculture instructors encounter criticism from multiple perspectives within their profession—originating from the school, the community, and the parents of their students. Success can be characterized in various ways. Frequently, agriculture educators assess their achievements based on the performance of their FFA chapters in Career Development Events and Leadership Development Events. Nonetheless, the FFA constitutes only a part of the broader picture. The agriculture education three-circle model encompasses the classroom and laboratory components, FFA, and SAE segments of the comprehensive agriculture program. A Pearson product-moment correlation was conducted to assess the relationship between participants' perceived success of their FFA program and the overall agricultural education program. A Pearson analysis was performed because both variables are continuous. The analysis revealed a statistically significant positive correlation ( $r = 0.461, p < 0.001$ ). This implies that as perceived success of the FFA program increases, so does the perceived success of the overall agriculture program. This means that the success of the FFA chapter is closely connected to the overall agricultural program. Agriculture education is based on the three-ring model of agriculture education. The three rings include the classroom/laboratory, FFA, and SAE. These components are evenly weighted throughout the program, and the FFA does not hold more importance than the other two. Historically, agriculture teachers tend to gauge the success of their FFA chapter based on the overall success of their agriculture program. This information is displayed in Table 11.

**Table 11**

*The Relationship Between the Perceived Success of Participants' FFA Program and the Perceived Success of Their Overall Agriculture Program.*

	<i>r</i>	sig.
How successful would you rate your FFA program? to How successful would you rate the overall agriculture program?	.461*	.00

Note. \*significant at  $p > .05$

### **Chapter Summary**

Chapter four reported the study's findings according to the six guiding objectives. The findings of this study reveal that many teachers participate in mentoring programs; however, their experiences are inconsistent and are not found to be beneficial for their professional and personal goals. Mentoring programs also do not always result in positive relationships between mentors and mentees. The data further suggests a significant need for support in navigating school politics, managing stress, and managing time. In chapter five, these findings will be analyzed within the context of previous research to examine their implications for mentoring program design and teacher retention in the agriculture education field. We will also explore how the challenges faced by first-year teachers can be alleviated through strategically designed, research-driven support systems, ultimately contributing to the long-term success of agriculture education programs in Georgia.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter Four detailed the study's findings in accordance with each objective. Chapter Five will summarize the conclusions and offer recommendations for future research. The purpose of this research was to determine teachers' perceptions and experiences concerning the prevailing state of mentoring initiatives within Georgia, as well as to ascertain the needs and concerns of early-career agricultural instructors. Educators are departing from the profession in substantial numbers for various reasons, and agricultural teachers are no exception. Career and Technical Education (CTE), which encompasses School-based Agricultural Education (SBAE), faces shortages, with over two-thirds of states reporting deficits of qualified educators (Queen et al., 2025). Many educators opt to leave within their initial five years of service (Keigher, 2010). School-based agricultural educators are departing due to both internal and external factors. Issues related to mental and physical health, teacher burnout, administrative pressures, and additional roles and responsibilities associated with extended contracts contribute to attrition among agricultural teachers (Queen et al., 2025). Numerous states have enacted legislation mandating school districts to institute some form of induction program, often incorporating mentoring components. These initiatives are designed to facilitate a smoother transition for new teachers into the profession. According to Smith and Ingersoll (2004), 83% of public school teachers reported participating in some form of induction program during their first year. Nevertheless, the design, requirements, structure, and support mechanisms of mentoring programs exhibit significant variability (Tummons, 2014). School districts establish mentoring programs due to evidence indicating their efficacy in benefiting novice educators. Specifically, 90% of novice teachers who reported having a mentor and participating in a mentoring program continued

teaching beyond their third year, in contrast to only 23% of teachers who did not participate in such programs and left the profession prior to reaching their third year (Kaiser, 2011).

Research on mentoring programs, mentoring relationships, and related topics has been conducted over the years. However, it is crucial to continue researching to update knowledge and address emerging gaps, with a focus on agricultural teachers. Agriculture teachers are a vital group of educators with specific needs and concerns that differ from those of teachers in other subjects. Meeting the needs of agriculture teachers is essential in efforts to close the growing gap of highly qualified agriculture educators exiting the teaching profession.

### **Summary of the Study**

Research objectives were developed to guide this study. Questions were developed and implemented in a Qualtrics quantitative survey to gauge the response of middle and high school SBAE educators in the state of Georgia. The research objectives were:

1. Analyze the personal characteristics of agricultural education teachers in the State of Georgia.
2. Analyze participants' former experience with both formal and informal mentoring programs.
3. Analyze the specific components within mentoring programs that were needed and could be helpful in future mentoring programs.
4. Analyze the perceived concerns regarding mentoring program components that could inform the design of future programs.
5. Examine whether the formality of the mentoring program (formal, informal, or no mentoring program) is significantly correlated with a) the description and structure of the

program, b) the concerns reported by first-year teachers, and c) the identified needs of first-year teachers.

6. Determine the relationship between participants' perceived success ratings of the FFA program and the overall agricultural program.

The research objectives provided the essential data to comprehensively understand perceptions and experiences of mentoring programs, along with the associated needs and concerns, to improve mentoring programs for agriculture educators in the future.

### **Conclusions and Discussions**

The conclusion and discussion presented were based on themes that emerged upon completion of data analysis and review.

**Conclusion: Most of the teachers in this study reported having participated in a formal mentoring program.**

Teachers were asked if they participated in a formal mentoring program. Using skip logic, teachers received additional questions asking whether they participated in an informal mentoring program or any mentoring program at all. The study found that most teachers engaged in a formal mentoring program, an informal mentoring program, and no mentoring program, respectively (Table 1).

**Conclusion: Most teachers who participated in a formal or informal mentoring program reported having a negative experience with it.**

Teachers were asked to rate their experiences with both formal and informal mentoring programs and to evaluate descriptive statements about the programs in which they participated. A Likert-style scale, based on Borich's Needs Assessment Model, was used to rate the statements. The scale was as follows: 1 = Strongly agree, 2 = Agree, 3 = Neither agree nor

disagree, 4 = Somewhat disagree, 5 = Strongly disagree. All the statements received ratings of "somewhat disagree" or "neither agree nor disagree," including those about the program being personally and professionally beneficial to goals and whether the mentor-mentee relationship was positive (Table 5). Based on this data, the mentoring programs in which participants engaged may not have been developed in accordance with Kram's mentoring theory model (1988). More explicitly, these programs may not have incorporated elements related to career functions or psychosocial functions. Kram's mentor-mentee relationship phases (1983) also come into play with participants' negative experiences. The reported lack of positive relationships could be indicative that most formal mentoring programs in Georgia never progress beyond a dysfunctional initiation phase, failing to reach the crucial cultivation stage where the real benefits begin to emerge.

**Conclusion: Managing time and stress are needs of agriculture teachers.**

Teachers were asked to rate their need for professional advice during their first year of teaching SBAE. A Likert-style scale, based on Borich's Needs Assessment Model (1980), was used to rate the statements. The scale was as follows: 1= Never, 2= Sometimes, 3= Often, 4= Considerable. All of the statements received ratings of "sometimes" or "often". Managing professional stress was ranked the highest need, while managing professional time was ranked the third-highest need (Table 6). Within a mentoring program established in accordance with Kathy Kram's mentoring theory (1988), psychosocial and career support are integral components, specifically encompassing coaching, counseling, and friendship. These elements have the potential to mitigate professional stress through the enhancement of mentor-mentee relationships. The development of the mentor-mentee relationship initially occurs through career-related functions and subsequently progresses to include friendship and psychosocial

functions. The attainment of these outcomes is contingent upon the duration of the mentoring program, and may not necessarily be realized, as outlined in Kathy Kram's (1983) phases of mentor-mentee relationships.

**Conclusion: Learning how to manage and cope with school politics is a necessity for agriculture teachers.**

Teachers were asked to assess their need for professional advice during their first year of teaching SBAE. A Likert-style scale, based on Borich's Needs Assessment Model (1980), was used to evaluate the statements. The scale ranged from: 1= Never, 2= Sometimes, 3= Often, 4= Considerable. All statements received ratings of "sometimes" or "often." "Awareness of school politics" was ranked as the second-highest need for agriculture teachers, and "identifying school politics" was the fourth-highest need overall in the study (Table 6). Navigating and being aware of school politics directly relates to Kathy Kram's mentoring theory (1988) within the coaching component of the career functions. A mentoring program that incorporates this function would assist early-career agriculture teachers with this specific need.

**Conclusion: Teachers had valid concerns about their FFA chapters and activities structured around students during their first year of teaching.**

Teachers were asked to assess how frequently they experienced concerns during their first year of teaching SBAE. A Likert-style scale, based on Borich's Needs Assessment Model (1980), was used to evaluate the statements. The scale ranged from: 1= Never, 2= Sometimes, 3= Often, 4= Considerable. All statements received ratings of "sometimes" or "often." The statement "FFA time management" was ranked as the top concern, "Motivating students" second, and "Addressing your mental well-being" third (Table 7). It is important to alleviate. Advising FFA chapters and engaging with students are essential responsibilities for young

agriculture educators to understand. Without active involvement and motivation of students in an FFA chapter and agriculture program, educators may find it challenging to meet the POW standards. These concerns align directly with Kathy Kram's mentoring theory (1988), particularly within the domain of career functions, specifically coaching. Psychosocial support comes into play when addressing mental well-being. Counseling, acceptance, and friendship all contribute to assisting a mentee in addressing this aspect. This function can be pivotal, and the support provided is essential for early-career agricultural educators.

**Conclusion: A significant association was found between the formality of the mentoring program and the respondents' experience, as determined by data analysis.**

Teachers were asked if they participated in a mentoring program during their first year of teaching SBAE. Using skip logic, teachers received additional questions asking for specifics about their experience with the mentoring program. The study found a significant association between the formality of the mentoring program and the item "mentoring program was required by the school system/ county" (Table 8). This implies that the school system/ county required a formal mentoring program for early-career agriculture teachers.

**Conclusion: No significant relationship was found between the formality of the mentoring program and respondents' concerns, based on data analysis.**

Teachers were asked to assess how frequently they experienced concerns during their first year of teaching SBAE. A Likert-style scale, based on Borich's Needs Assessment Model (1980), was used to evaluate the statements. The scale ranged from: 1= Never, 2= Sometimes, 3= Often, 4= Considerable. No significant relationship was found between the formality of the meeting program and the respondents' concerns, as determined by data analysis.

**Conclusion: A significant association was found between the formality of the mentoring program and respondents' needs, as determined by data analysis.**

Teachers were asked to assess how often they experienced needs based on given statements during their first year of teaching SBAE. A Likert-scale, based on Borich's Needs Assessment Model (1980), was used to evaluate the statements. The scale ranged from: 1= Never, 2= Sometimes, 3= Often, 4= Considerable. A significant relationship was found between the formality of the mentoring program and the need for "developing rapport with students" and "Identifying school politics" (Table 10). No other significant relationships were found.

**Conclusion: Teachers believe that a successful FFA chapter is indicative of the overall success of their agricultural program.**

Using a "slide-bar" format, teachers were asked to rate their FFA program and overall agriculture program on a scale of 1-10, with one being the worst and 10 the best. Teachers' opinions on the success of their FFA chapter positively correlate with their views on the overall success of their agriculture program- as the rating of the FFA chapter increases, so does the rating of the overall agriculture program (Table 11). A program designed with Kram's (1988) career and psychosocial functions in mind would help boost confidence within individuals, improving the overall self-rating, thereby positively impacting the overall success and performance of the agriculture organization and FFA.

### **Recommendations**

Based on the study's findings and conclusions, the following recommendations have been issued. An expanded qualitative analysis of mentoring programs should be undertaken in future research. This qualitative study needs to be a more detailed investigation into the experiences and perspectives of mentoring programs. The researcher recommends positioning the

demographic questions at the outset of the instrument. This approach would mitigate the potential for non-responses. Ongoing research is imperative to maintain relevance and to attain a deeper comprehension of the needs and concerns of agricultural educators at present. This study would benefit from an expanded investigation into the following domains: targeting needs and concerns in FFA, classroom settings, Supervised Agriculture Experience, as well as school and community, and personal mental and emotional health. These five categories will be examined in greater detail to enhance understanding of the needs and concerns of first-year SBAE educators. Exploring these areas may facilitate the development of a more positive experience for agricultural teachers, particularly concerning mentoring programs. Additional research is essential to fully grasp the needs and concerns of agricultural educators. Resources dedicated to mentoring initiatives specifically designed for agricultural educators in Georgia remain scarce; therefore, conducting further research could be instrumental in bridging this deficiency. Presently, Georgia lacks a formal mentorship program exclusively targeting agricultural teachers. The insights derived from this research, combined with subsequent studies, may form the basis for developing a structured mentoring program for the state's agricultural instructors. Due to the acknowledged high Cronbach's Alpha, future research utilizing this instrument should conduct a factor analysis to potentially shorten and refine the scale, thereby making the instrument a more efficient tool.

The researcher recommends a revitalization of certain positions within the leadership structure of Georgia Agriculture teachers and the FFA organization. The agriculture specialist who works with first-year teachers should also manage a research-based mentoring program and review existing effective mentoring programs in previously mentioned states. The program should be structured on research-based principles, and the pairing of mentors and mentees should

also be supported by research evidence. The pairing of the mentor and mentee must be conducted with careful consideration and intentionality, ensuring that personalities as well as job descriptions are compatible to the greatest extent possible. For example, a middle school agriculture teacher should be paired with a middle school agriculture teacher, and similarly, with secondary school teachers. The relevant subject area should also be considered. A horticulture pathway teacher, for instance, should not be paired with an agriculture mechanics pathway teacher. When collaborating on comparable subject areas, the mentor and mentee may engage in detailed discussions regarding curricula and activities that can be readily implemented and tailored to accommodate each other's needs. In this manner, both participants derive benefits from the mentoring program almost immediately.

Ensuring the pairing of like pathways and personas will help alleviate some of the issues that arise in mentor-mentee pairings. The researcher asserts that mentoring initiatives for agricultural educators warrant thorough evaluation and institution within the state of Georgia. It is imperative to engage the efforts of state program leaders. Concerted efforts should be undertaken within Georgia to develop a research-based mentoring program tailored for agricultural educators. The researcher contends that such an initiative would positively influence teacher retention and mitigate the attrition of agriculture teachers.

### **Chapter Summary**

Chapter five examined the study's results and the conclusions drawn from the data analysis. Agricultural educators and state agricultural education staff should review the recommendations to enhance the growth and development of agricultural education in the state of Georgia. Agricultural education faces a significant challenge in retaining teachers in the profession. This trend has continued for decades in the United States, especially in Georgia.

Shortages and high turnover are consequences of this ongoing issue. The findings of this study provided a clearer understanding of how Georgia's agricultural education teachers view mentoring programs and their experiences with them. It also offered insights into the needs and concerns of agriculture teachers during their first year of teaching SBAE. Studies have shown that effective mentoring programs benefit both mentors and mentees. If a mentoring program specifically for agriculture teachers is established in Georgia, it could reduce teacher turnover. Ongoing research on mentoring programs in agricultural education can influence the outlook of the field. This is critically important for the future of agricultural education.

## References

- Albert, M. (2020). If these emails could talk: The pitfalls of hastily implementing a teacher mentoring program. *Taboo: The Journal of Culture & Education*, 19(4), 27 – 64. <https://oasis.library.unlv.edu/taboo/vol19/iss4/3>
- American Association for Agricultural Education. (2023). *AAAE research values*. <https://aaaeonline.org/National-Research-Values>
- Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education*, 39(1), 38 – 42. <https://doi.org/10.1177/002248718803900109>
- Ary, D., Jacobs, L. C., & Sorensen, C. K., & Walker, D. A. (2018). *Introduction to research in education* (10th ed.) Cengage Learning.
- Barnett, J. H. (2022). 3 Strategies to upgrade your mentoring program for new teachers. *The Learning Professional*, (43)4, 34 – 37. <https://learningforward.org/journal/nurturing-new-teachers/3-strategies-to-upgrade-your-mentoring-program-for-new-teachers/>
- Barwick, R. P. (1967). Don't discourage prospective agriculture teachers. *Journal of the American Association of Teacher Educators in America* (8)2, 3 – 4. <https://doi.org/10.5032/jaatea.1967.02003>
- Borich, G. D. (1980). A needs assessment model for conducting follow-up studies. *The Journal of Teacher Education*, 31(3), 39 – 42. <https://doi.org/10.1177/002248718003100310>
- Boyle, L. H., Mosley, K. C., & McCarthy, C. J. (2023). New teachers' risk for stress: Associations with mentoring supports. *International Journal of Mentoring and Coaching in Education*, 12(1), 95 – 110. <https://doi.org/10.1108/IJMCE-05-2022-0037>

- Burris, S., Kitchel, T., Greiman, B. C., & Torres, R. M. (2006). Beginning and mentor agriculture teachers' perceptions of psychosocial assistance, similarities, and satisfaction. *Journal of Agricultural Education*, 47(4), 64 – 75. <https://doi.org/10.5032/jae.2006.04064>
- Callahan, J. (2016). Encouraging retention of new teachers through mentoring strategies. *The Delta Kappa Gamma Bulletin: International Journal for Professional Educators*, 83(1), 6-11. [http://www.deltakappagamma.org/GA-betaepsilon/Newsletters/2016\\_Jour\\_83-1\\_Early-Career-Educators\\_web.pdf](http://www.deltakappagamma.org/GA-betaepsilon/Newsletters/2016_Jour_83-1_Early-Career-Educators_web.pdf)
- Camp, W. G., & Heath, B. (1988). *On becoming a teacher: Vocational education and the induction process* (ED312501). U.S. Department of Education, Institute of Education Sciences. <https://files.eric.ed.gov/fulltext/ED312501.pdf>
- Chao, G.T., Walz, P. M., & Gardner, P. D. (1991). *A comparison of informal mentoring relationships and formal mentorship programs* (ED333784). ERIC. <https://files.eric.ed.gov/fulltext/ED333784.pdf>
- Chapman, D. C., Jr. (2017). *Teacher perception of the Georgia middle school agricultural education curriculum and its relationship to secondary agricultural education enrollment* [Doctoral dissertation, Auburn University]. AUETD. <https://etd.auburn.edu/handle/10415/6002>
- Clemons, C., Hall, M., & Lindner, J. (2021). What is the real cost of professional success? A qualitative analysis of work and life balance in agriscience education. *Journal of Agricultural Education*, 62(1), 95 – 113. <https://doi.org/10.5032/jae.2021.01095>
- Clemons, C. A., & Lindner, J. R. (2025). *Approaches towards revising instrumentation-based reliability coefficients* [Unpublished manuscript]. AURORA, Auburn University. <https://doi.org/10.35099/ZBEM-9F88>

- Clemons, C. A., & Lindner, J. R. (2019). Teacher Longevity and Career Satisfaction in the Secondary Agricultural Education Classroom. *Journal of Agricultural Education*, 60(1), 186–201. <https://doi.org/10.5032/jae.2019.01186>
- Clemons, C., Lindner, J. R., Murray, B., Cook, M. P., Sams, B., & Williams, G. (2018). Spanning the gap: The confluence of agricultural literacy and being agriculturally literate. *Journal of Agricultural Education*, 59(4), 238 – 252. <https://doi.org/10.5032/jae.2018.04238>
- Clemons, C. A., McKibben, J., & Lindner, J. (2021). The Masks We Wear: A Quantitative Analysis of Motivational Factors of School Based Agriculture Education Teachers During a Pandemic. *Journal of Agricultural Education*, 62(2), 83–96. <https://doi.org/10.5032/jae.2021.02083>
- Creswell, J. W. (2018). *Research designs: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publishing.
- Croom, D. B., Yopp, A. M., Edgar, D., Roberts, R., Jagger, C., Clemons, C., McKibben, J., McCubbins, O. P., & Wagner, J. (2023). Technical professional development needs of agricultural education teachers in the Southeastern United States by career pathway. *Journal of Southern Agricultural Education Research*, 73, 1–15. <http://jsaer.org/2023/04/10/technical-professional-development-needs-of-agricultural-education-teachers-in-the-southeastern-united-states-by-career-pathway/>
- Crutchfield, N., Ritz, R., & Burris, S. (2013). Why agricultural educators remain in the classroom. *Journal of Agricultural Education*, 54(2), 1–14. <https://doi.org/10.5032/jae.2013.02001>

- Daniel, A., Franco, S., Schroeder, N. L., & Cenkci, A. T. (2019). Cross-cultural academic mentoring dyads: A case study. *Mentoring & Tutoring: Partnership in Learning*, 27(2), 164 – 189. <https://doi.org/10.1080/13611267.2019.1611286>
- Deng, C., Gulseren, D. B., & Turner, N. (2022). How to match mentors and proteges for successful mentorship programs: A review of the evidence and recommendations for practitioners. *Leadership & Organization Development Journal*, 43(3), 386 – 403. <https://doi.org/10.1108/LODJ-01-2021-0032>
- Disberger, B., Washburn, S. G., Hock, G., & Ulmer, J. (2022). Induction programs for beginning agriculture teachers: Research-based recommendations on program structure and content. *Journal of Agricultural Education*, 63(1), 132 – 14. <https://doi.org/10.5032/jae.2022.01132>
- Dooley, K. E., & Lindner, J. R. (2002). Competency-based behavioral anchors as authentication tools to document distance education competencies. *Journal of Agricultural Education*, 43(1), 24–35. <https://doi.org/10.5032/jae.2002.01024>
- Dunn, S., DeWaters, J., & Williams, S. (1996). *Improving the preparation of special education teachers: A model mentoring program* (ED410733). ERIC. <https://files.eric.ed.gov/fulltext/ED410733.pdf>
- Eastman, K., & Williams, D. L. (1993). Relationship between mentoring and career development of agricultural education faculty. *Journal of Agricultural Education*, 34(2), 71 – 76. <https://doi.org/10.5032/jae.1993.02071>
- Eck, C. J., Robinson, J. S., Cole, K. L., Terry Jr., R., & 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>

Faulk, B., McKibben, J. D., Clemons, C. A. & Lindner, J. R. (2024). Instructor Levels of Importance and Competence With Alabama Agricultural Mechanics Standards. *Journal of Southern Agricultural Education Research*, 74(1).

<http://jsaer.org/wpcontent/uploads/2024/12/74-Faulk-McKibben-Clemons-Lindner.pdf>

Garza, R. & Harter, H. A. (2016). Perspectives from pre-service mathematics and science teachers in an urban residency program: Characteristics of effective mentors. *Education and Urban Society*, 48(4), 403-420. <https://doi.org/10.1177/0013124514533989>

Georgia Farm Bureau. (2025). *About Georgia Agriculture*. <https://www.gfb.org/learn/abt-ga-ag>  
Georgia FFA Association. (2019). *Wiring contest brochure 2019-*

*2020*. [https://www.georgiaffa.org/docs/sidemodules/74993\\_WiringContestBrochure\\_2019-2020%20v81-26-19LR\\_01796.pdf](https://www.georgiaffa.org/docs/sidemodules/74993_WiringContestBrochure_2019-2020%20v81-26-19LR_01796.pdf)

Georgia Vocational Agriculture Teachers Association. (2019). *GVATA Tactical Plan 2019*.

Retrieved June 19, 2024. <https://www.georgiaffa.org/gvata>

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research to Practice Conference in Adult, Continuing, and Community Education, Retrieved from:

<https://scholarworks.indianapolis.iu.edu/server/api/core/bitstreams/976cec6a-914f-4e49-84b2-f658d5b26ff9/content>

Haas, C., Hall, M., & Vlasnik, S. L. (2018). Finding optimal mentor-mentee matches: A case study in applied two-sided matching. *Heliyon*, 4(6), 1 – 17.

<https://doi.org/10.1016/j.heliyon.2018.e00634>

- Hanagriff, R. D., Murphy, T. H., Roberts, T. G., Briers, G. E., & Lindner, J. R. (2010). Economic Impact of Supervised Agricultural Experiences: Returns from SAE Investment Costs in Texas, 2007–2008. *Journal of Agricultural Education*, 51(4), 71–81.  
<https://doi.org/10.5032/jae.2010.04071>
- Hancock, G. T., Hancock, C. E., & McKibben, J. D. (2024). The Teaching Techniques of Alabama’s Traditionally and Alternatively Certified School-Based Agricultural Education Instructors. *Journal of Agricultural Education*, 65(3), 18–34.  
<https://doi.org/10.5032/jae.v65i3.166>
- Harder, A., Ganpat, W., Moore, A., Strong, R., & Lindner, J. R. (2013). An Assessment of Extension Officers’ Self-Perceived Programming Competencies in Selected Caribbean Countries. *Journal of International Agricultural and Extension Education*, 20(1), 33-46.  
DOI: <https://doi.org/10.4148/2831-5960.1244>
- Haynes, M. (2014). *On the path to equity: Improving the effectiveness of beginning teachers* (ED560250). ERIC. <https://all4ed.org/publication/path-to-equity/>
- Hudson, P. (2013). Desirable attributes and practices for mentees: Mentor teachers’ expectations. *European Journal of Educational Research*, 2(3), 107 – 119. <https://doi.org/10.12973/eu-jer.2.3.107>
- Inzer, L. D. & Crawford, C. B. (2005). A review of formal and informal mentoring: Processes, problems, and design. *Journal of Leadership Education*, 4(1), 31 – 50.  
<https://doi.org/10.12806/V4/I1/TF2>
- Irby, B. J., & Boswell, J. (2016). Historical print context of the term, “Mentoring.” *Mentoring & Tutoring: Partnership in Learning*, 24(1), 1 – 7.  
<https://doi.org/10.1080/13611267.2016.1170556>

- Jonson, K. F. (2008). *Being an effective mentor: How to help beginning teachers*. Corwin Press.
- Kaiser, A. (2011). *Beginning Teacher Attrition and Mobility: Results from the first through third waves of the 2007-08 beginning teacher longitudinal study* (ED523821). ERIC.  
<https://eric.ed.gov/?id=ED523821> <http://eric.ed.gov/?id=ED523821>
- Keigher, A. (2010). *Teacher Attrition and Mobility: Results From the 2008–09 Teacher Follow-up Survey* (ED511305). ERIC. <https://files.eric.ed.gov/fulltext/ED511305.pdf>
- Kram, K. E. (1983). Phases of the mentor relationship. *The Academy of Management Journal*, 26(4), 608-625. <https://www.jstor.org/stable/pdf/255910.pdf>
- Kram, K. E. (1988). *Mentoring at work: Developmental relationships in organizational life*. University Press of America.
- Lambert, M. D., Smith, A. R., & Ulmer, J. D. (2010). Factors influencing relational satisfaction within an agricultural education mentoring program. *Journal of Agricultural Education*, 51(1), 64 – 74. <https://doi.org/10.5032/jae.2010.01064>
- Lamm, K.W., Sapp, R., & Lamm, A.J. (2017). The mentoring experience: Leadership development program perspectives. *Journal of Agricultural Education*, 58(2), 20 – 34. <https://doi.org/10.5032/jae.2017.02020>
- Langhout, R. D., Rhodes, J. E., & Osborne, L. N. (2004). An exploratory study of youth mentoring in an urban context: Adolescents' perceptions of relationship styles. *Journal of Youth and Adolescence*, 33(4), 293 – 306.  
<https://doi.org/10.1023/B:JOYO.0000032638.85483.44>
- Leidenfrost, B., Strassnig, B., Schabmann, A., Spiel, C. & Carbon, C. C. (2011). Peer mentoring styles and their contribution to academic success among mentees: A person-oriented

- study in higher education. *Mentoring & Tutoring: Partnership in Learning*, 19(3), 347 – 364. <https://doi.org/10.1080/13611267.2011.597122>
- Lindner, J. R., Dooley, K. E., & Kelsey, K. D. (2002). All for one and one for all: Relationships in a distance education program. *Online Journal of Distance Learning Administration*, 5(1). Retrieved March 29, 2002, from <http://www.westga.edu/%7Edistance/ojdl/spring51/linder51.html>
- Lindner, J. R., Dooley, K. E., & Murphy, T. H. (2001). Differences in competencies between doctoral students on-campus and at a distance. *American Journal of Distance Education*, 15(2), 25–40. <https://doi.org/10.1080/08923640109527082>
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling Nonresponse in Social Research. *Journal of Agricultural Education*, 42(4), 43–53. <https://doi.org/10.5032/jae.2001.04043>
- Lindner, J. R. (2002). Handling of non-response in the Journal of International Agricultural and Extension Education. *Journal of International Agricultural and Extension Education*, 9(3), 55-60. <https://doi.10.5191/jiaee.2002.09307>
- Lindner, J. R. & Lindner, N. J. (2024). Interpreting Likert-type scales, summated scales, unidimensional scales, and attitudinal scales: I neither nor disagree, Likert or not. *Advancements in Agricultural Development*, 5(2), 152 – 163. <https://doi.org/10.37433/aad.v5i2.351>
- Lindner, J. R. & Lindner, N. J. (2024). Interpreting Likert type scales, summated scales, unidimensional scales, and attitudinal scales: I neither nor disagree, Likert or not. *Advancements in Agricultural Development*, 5(2), 152 – 163. <https://doi.org/10.37433/aad.v5i2.351>

- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling Nonresponse in Social Research. *Journal of Agricultural Education*, 42(4), 43–53. <https://doi.org/10.5032/jae.2001.04043>
- Madigan, D. J., Kim, L. E., Glandorf, H. L., & Kavanagh, O. (2023). Teacher burnout and physical health: A systematic review. *International Journal of Educational Research*, 119, 1 – 12. <https://doi.org/10.1016/j.ijer.2023.102173>
- Mathipa, E. R. & Matlabe, S.M. (2016). *Mentoring: A key to the professional development of the teacher* (EJ1177051). ERIC. <https://files.eric.ed.gov/fulltext/EJ1177051.pdf>
- McKibben, J. D., Clemons, C. A., & Blythe, J. M. (2025). Survey response rates by requestor’s characteristics. *Advancements in Agricultural Development*, 6(1), 43–54. <https://doi.org/10.37433/aad.v6i1.525>
- 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>
- Miller, H., Clemons, C. A., McKibben, J. D., Cletzer, D. A., & Lindner, J. R. (2025). Assessing the readiness of central California agricultural educators to teach multilingual learners. *Advancements in Agricultural Development*, 6(1), 31–42. <https://doi.org/10.37433/aad.v6i1.563>
- Miller, H., Clemons, C. A., McKibben, J. D., & Lindner, J. R. (2025). Advancing Multilingual Learner Success in Agricultural Education: Analyzing English Proficiency, Instructional Practices, and Culturally Responsive Teaching. *Journal of Agricultural Education*, 66(3), Article 7. <https://doi.org/10.5032/jae.v66i3.3093>

- Missouri Department of Elementary and Secondary Education. (n.d.). *Agricultural education mentoring handbook*. Retrieved September 22, 2025, from <https://dese.mo.gov/media/pdf/agricultural-education-mentoring-handbook>
- Moser, E. M. & McKim, A. J. (2020). Teacher retention: A relational perspective. *Journal of Agricultural Education*, *61*(2), 263 – 275. <https://doi.org/10.5032/jae.2020.02263>
- 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>
- Norris, W., Swortzel, K., & McCubbins, O. (2024). Stability in transitional time: Factors contributing to agricultural educators’ decision to remain in the profession. *Journal of Agricultural Education*, *65*(2), 35 – 53. <https://doi.org/10.5032/jae.v65i2.84>
- Odell, S. J. (1990). *Mentor teacher programs. What research says to the teacher* (ED323185). ERIC. <https://files.eric.ed.gov/fulltext/ED323185.pdf>
- Pan, D. T., Mutchler, S. E., Shapley, K.S., Bush, J., & Glover, R.W. (2000). *Mentoring beginning teachers: Lessons from the experience in Texas* (ED463572). Southwest Educational Development Laboratory. <https://files.eric.ed.gov/fulltext/ED463572.pdf>
- Peiter, R. L, Terry Jr., R., & Cartmell II, D. D. (2005). Mentoring first-year agricultural educators: Examining a state-mandated induction program. *Journal of Agricultural Education*, *46*(1), 11 – 19. <https://doi.org/10.5032/jae.2005.01011>
- Phipps, L. J., Osborne, E. W., Dyer, J. E., & Ball, A. L. (2008). *Handbook on agricultural education in public schools* (6th. ed.). Thomson Delmar Learning.

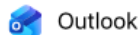
- Queen, T. P., Bird, T. D., & Rubenstein, E. D. (2025). Factors influencing school-based agricultural educator retention and attrition rates. *Journal of Agricultural Education*, 66(2), 1-16. <https://doi.org/10.5032/jae.v66i2.2929>
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology*, 84(4), 529 – 550. <https://doi.org/10.1037/0021-9010.84.4.529>
- Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43(6), 1177 – 1194.  
<https://www.semanticscholar.org/paper/Marginal-Mentoring%3A-The-Effects-Of-Type-Of-Mentor%2C-Ragins-Cotton/2a583f2b4c1887c41ad23e6496ef6296a6c0feb2>
- Ragins, B. R., & Kram, K. E. (2007). The roots and meaning of mentoring. In B. R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice* (pp. 1–16). Sage Publications.
- Ray, B. L., Clemons, C. A., McKibben, J. D., Lindner, J. R., Fuhrman, N. E., & Barlow, R. J. (2022). Implementing Forestry and Natural Resource Curricula in Georgia. A Quantitative Analysis of Perceived Barriers Towards Implementation. *Journal of Agricultural Education*, 63(3), 149–165. <https://doi.org/10.5032/jae.2022.03149>
- Roby, L. L. (2012). *Teachers' sense of professional practices as a result of mentoring* [Doctoral dissertation, Western Michigan University]. ScholarWorks.  
[https://scholarworks.wmich.edu/dissertations/34/?utm\\_source=scholarworks.wmich.edu%2Fdissertations%2F34&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](https://scholarworks.wmich.edu/dissertations/34/?utm_source=scholarworks.wmich.edu%2Fdissertations%2F34&utm_medium=PDF&utm_campaign=PDFCoverPages)

- Smith, D. N., Clemons, C., McKibben, J. D., Miller, H., Lindner, J. R., & Dunn, C. (2024). Perceptions and Preparedness: An Investigation of Agricultural Education Teachers' Self-Efficacy for Including Students with Learning Disabilities in Supervised Agricultural Experience Programs. *Journal of Agricultural Education*, 65(4), 332–347. <https://doi.org/10.5032/jae.v65i4.2841>
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681 – 714. <https://doi.org/10.3102/00028312041003681>
- Solomonson, J. K., Thieman, 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. & Velez, J. J. (2016). Why agriculture teachers leave: A national examination of turnover intention and work-family conflict. *Journal of Agricultural Education*, 57(4), 186 – 201. <https://doi.org/10.5032/jae.2016.04186>
- Sparks, J. (2020). An investigation of new teacher mentorship. *Alabama Journal of Educational Leadership*, 7, 42–50. <https://files.eric.ed.gov/fulltext/EJ1327512.pdf>
- Stansbury, K., & Zimmerman, J. (2000). *Lifelines to the classroom: Designing support for beginning teachers* (ED447104). WestEd. <https://files.eric.ed.gov/fulltext/ED447104.pdf>
- Summers-Ewing, D. (1994, November 9–13). *Mentoring: A vital ingredient for career success* [Paper presentation]. American Association for Adult and Continuing Education Annual Meeting, Nashville, TN, United States. <https://files.eric.ed.gov/fulltext/ED378519.pdf>

- 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 – 40. <http://dx.doi.org/10.14507/epaa.27.3696>
- Toombs, J. M. & Ramsey, J. W. (2020). Potential mentoring impacts on Oklahoma induction-year school-based agricultural education teachers: A modified Delphi study. *Journal of Research in Technical Careers*, 4(2), 39 – 54. <https://doi.org/10.9741/2578-2118.1086>
- Touchstone, A. J. L. (2015). Professional development needs of beginning agricultural education teachers in Idaho. *Journal of Agricultural Education*, 56(2), 170 – 187. <https://doi.org/10.5032/jae.2015.02170>
- Tummons, J. D. (2014). *Mentoring expectation congruency, interaction, and psychosocial support in Missouri's agriculture teacher mentor program* [Doctoral dissertation, University of Missouri-Columbia]. Mospace. <https://www.mospace.umsystem.edu/xmlui/handle/10355/44236>
- Tummons, J., Kitchel, T., & Garton, B. L. (2016). Expectation congruency and psychosocial support in formal agriculture teacher mentoring relationships. *Journal of Agricultural Education*, 57(4), 68 – 85. <https://doi.org/10.5032/jae.2016.04068>
- Weinberg, F.J. & Lankau, M. J. (2011). Formal mentoring programs: A mentor-centric and longitudinal analysis. *Journal of Management*, 37(6), 1527 – 1557. <https://doi.org/10.1177/0149206309349310>
- Weisberg, E. M., Rowe, S. P., Chu, L. C., & Fishman, E. K. (2023). Getting by with a little help from my friends? Expanding mentorship for career development and satisfaction. *Clinical Imaging*, 93, 23–25. <https://doi.org/10.1016/j.clinimag.2022.11.001>

- van Ginkel G., van Drie, J., & Verloop, N. (2018). Mentor teachers' views of their mentees. *Mentoring & Tutoring: Partnership in Learning*, 26(2), 122 – 147.  
<https://doi.org/10.1080/13611267.2018.1472542>
- van Tonder, G. P. (2021). A multimodal induction model of beginning teachers: A narrative approach. *International Journal of Educational Management*. 35(4). 879 – 896.  
<https://doi.org/10.1108/IJEM-08-2020-0389>
- Vaske, J. J., Beaman, J., & Sponarski, C. C. (2017). Rethinking internal consistency in Cronbach's alpha. *Leisure Sciences*, (39)2, 163-173.  
<https://doi.org/10.1080/01490400.2015.1127189>
- Villani, S. (2002). *Mentoring programs for new teachers: Models of induction and support*. Corwin Press.
- Yirci, R. (2017). The evaluation of new mentoring program for novice teachers according to their perceptions. *Pedagogika*, 126(2), 29–47. <http://dx.doi.org/10.15823/p.2017.18>

## Appendix 1- Correspondence with Georgia FFA Executive Secretary



---

**RE: Georgia Ag. Mentoring Program**

---

**From** Ben Lastly <blastly@uga.edu>  
**Date** Mon 10/13/2025 12:12 PM  
**To** Calahan Kendrick <ckendrick@upson.k12.ga.us>

Callie

Good morning. I hope that you had a nice weekend.

As we discussed on our phone call, for the past couple of years there has been effort to develop a teacher mentor program for first year agricultural education teachers in Georgia. While there has been some work done, I still consider the program to be in the developmental phase. For the past two years there has been a listing made of all first-year teachers, and an application made available to current teachers who are willing to serve as mentors. In both the 2024-25 school year, and this, the 2025-26 school year, mentors were identified and contacted for each new teacher. The teachers were paired last year (24-25) and have been paired for this year (25-26). The reason I consider this program to still be in the development phase, is because no data or follow-up has yet occurred from the teacher mentor program. I do believe that some of our young teachers have been able to form relationships with their assigned mentors, and some good is likely coming from the connection. However, the structure is still being refined, as is the follow-up and collection of data. Other than pairing the teachers together and encouraging them to communicate, no additional steps are being taken.

A significant reason for the teacher mentor program remaining in the development phase in 2025-2026 school year is because the management of the initiative is still not confirmed. There has been effort for the program to be managed in the state FFA office, but the person who was beginning that work no longer works in our office. Georgia Agricultural Education does have a Recruitment & Retention specialist who spends the majority of their time traveling to meet with first year teachers. In order for the teacher mentor program to not just get off the ground, but truly fly, we need to confirm management of it. That discussion is still happening. I do not expect this program to reach its final phase during the 2025-2026 school year. Therefore, for the purposes of your research, I believe it is accurate to say that Georgia is developing a teacher mentor program, but does not yet have a program providing quantifiable results.

I hope that this helps.

Ben Lastly  
Executive Secretary  
Georgia FFA Association  
328 Hoke Smith – UGA  
Athens, GA 30602  
Mobile: (706) 410-4604  
Office: (706) 552-4456  
Email: blastly@gaaged.org

## Appendix 2- Program of Work (POW)



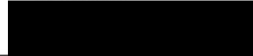
Georgia Agricultural Education  
 Program of Work and Performance Evaluation  
**2024-2025 Middle School Program of Work**



Employment Begin Date



Employment End Date



Program of Work

Teacher Meets Standards: **YES**  
 System Meets Standards: **YES**

Evaluation

Teacher Meets Standards: **YES**  
 System Meets Standards: **YES**

POW	Item	POW Professional Accomplishments/Requirements	Evaluation
		Teacher Standards	
Yes	1	The teacher holds a valid teaching certificate in agricultural education or a provisional certificate in agricultural education.	Yes
Yes	2	The Teacher does not have any after school duties and responsibilities that would conflict with the FFA and SAE activities. *The Agricultural Education Program has three components. The classroom, FFA, and SAE combine to make the complete and balanced program. Students must be trained for Career Development Events and supervised at these activities. The students must have an SAE that requires home and worksite visits by the Agriculture Teacher. These activities occur throughout the school year and during the summer. As a result the Agricultural Education Teacher should not have any after school duties and responsibilities that would conflict with the FFA and SAE activities for which they receive extended day and extended year. This would include athletic and administrative duties or assignments.	Yes
Yes	3	The teacher will comply with the Agricultural Education Teachers Creed.	Yes
Yes	4	The teacher will be actively involved in the professional teacher organization, Georgia Vocational Agricultural Teachers Association (GVATA), which is dedicated specifically to agricultural educators in the state.	Yes
Yes	5	The teacher will attend all area meetings for agricultural education teachers (summer, fall, winter, spring).	Yes
Yes	6	The teacher will attend and participate in the GVATA Summer Leadership Staff Development Conference.	Yes
Yes	7	The teacher will attend and participate in the GVATA Mid-Winter Staff Development Conference.	Yes
Yes	8	The teacher will conduct at least two advisory committee meetings. Membership of the advisory committee will include agricultural industry and community leaders (minimum of seven). The teacher will keep proper advisory committee minutes.	Yes
	8A	Proposed Advisory Committee meeting location / dates:  <b>Upson- Lee Ag Center Fall 2024 Upson- Lee Ag Center Spring 2025</b>	
	8B	List Advisory Committee Members (Name/ Title/ Occupation (Minimum of Seven).  <b>Jeff Kennerly- Ga Forestry Commission Cynthia Douglas- Georgia Cattlewomen Steve Douglas- Farmer Tom Johnston- GA Greenhouse Danny Bentley- Cattle Producer David Eubanks- Alumni President Anna White- Upson Co. Livestock Karla Kendrick- B &amp; B Feed Seed Tom Johnston- GA Greenhouses</b>	
Yes	9	The teacher will complete and submit detailed monthly reports by the 10th day of each month. Reports should include contacts, extended day and extended year hours which reflect participation in the 3-Component Model.	Yes
Yes	10	The teacher will attend a minimum of one Professional Learning activity conducted by the Agricultural Education Staff (minimum of 10 contact hours) in which the teacher registered for the PLU through the CTAERN. The Summer Leadership Conference and Mid-Winter Leadership Conference do not satisfy this requirement. Please list AgEd related PLU classes that they have taken the previous 2 years.	Yes

No		Floriculture CDE	No
Yes		Floral Design CDE	Yes
No		Forestry CDE	No
No		Forestry Field Day	No
No		Horse Judging CDE	No
No		Land Judging CDE	No
No		Lawnmower Driving CDE	No
No		Livestock Judging CDE	No
No		Meats Judging CDE	No
No		Nursery / Landscape CDE	No
Yes		Poultry Judging CDE	Yes
Yes		Wildlife Management CDE	Yes
Yes		Vet Science CDE	Yes
Yes	33	The teacher will participate with students in one or more of the following FFA Leadership activities. Please indicate projected number in attendance.	Yes
		Area Awards Banquet	
		<b>5</b>	
		Discovery Conference	
		<b>15</b>	
		National FFA Convention	
		<b>0</b>	
		Georgia FFA Summer Leadership Camp	
		<b>15</b>	
		Region Rally	
		<b>15</b>	
		State Livestock Record Book (minimum of 4 record books submitted)	
		<b>0</b>	
Yes	34	The teacher will maintain all facilities in a safe, neat, and aesthetically pleasing condition.	Yes
		Local Standards	
Yes	35	Local system will provide transportation and/or travel funds to meet the Agriculture Education program of work standards at no expense to the local FFA Chapter.	Yes
Yes	36	Teacher will have a planning period during school hours.	Yes
Yes	37	The local system will provide adequate budget for supplies.	Yes
Yes	38	The local system will provide adequate budget for equipment.	Yes
Yes	39	The local system will provide adequate computers.	Yes
Yes	40	The local system will provide adequate office space.	Yes
Yes	41	The local system will provide access to audio/video equipment.	Yes
Yes	42	The local system will provide for specialized facilities or have an approved plan for addressing specialized facility needs.	Yes
Yes	43	The local system will provide adequate classroom facilities.	Yes
Yes	44	The local system will provide adequate funding for facility maintenance.	Yes
Yes	45	The teacher will maintain an FFA Chapter & serve as advisor.	Yes
Yes	46	The teacher will not teach more than one segment out of field per grading period.	Yes

Yes	47	The local system will compensate teacher at minimum hourly rate for extended day.	Yes
-----	----	---	-----

\_\_\_\_\_  
Teacher Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Approve by:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Appendix 3- Pilot Study Research Invitation



Good afternoon!

Please help me to evaluate a pilot research instrument. I am conducting research addressing mentoring programs in ag education. Your time is *greatly* appreciated and should only take eight minutes to complete.

Thank you again,

Callie

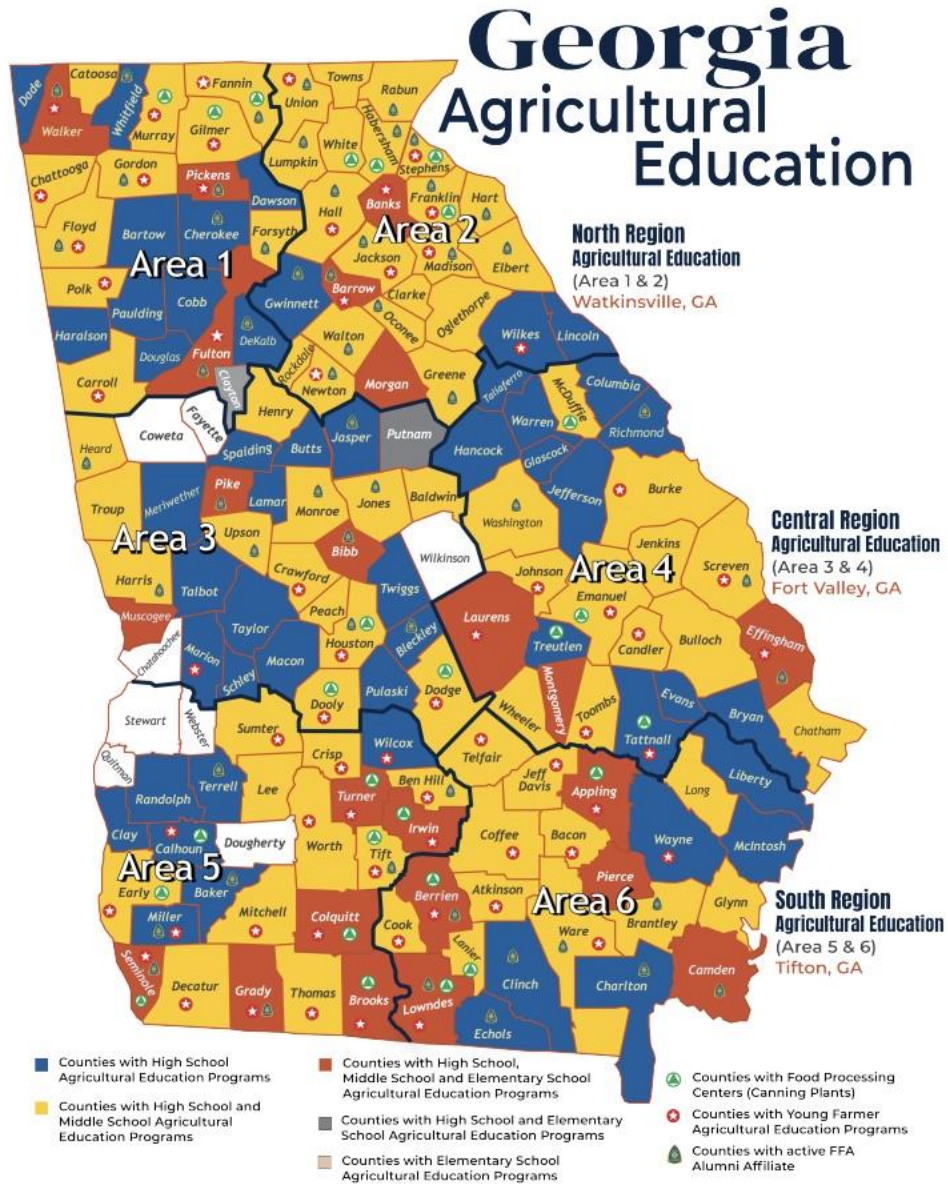
Appendix 4- Pilot Study Thank you Email



Thank you so much for participating in my Pilot Questionnaire on Mentoring Programs in Ag Edu. I hope you have an amazing start to your New Year with your family, and I look forward to sharing the results once they are complete.

Thank you again,  
Callie

Appendix 5- Georgia Agriculture Education Map (Georgia FFA Association, 2019)



Georgia Agricultural Education does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities.

Appendix 6- Instrument Alignment

Item Number	Item Text	Source Justification	Rationale for integration	Research Objective
Section 1: Introduction Questions-Mentoring Program Participation Items 1-16	I have participated in a formal mentoring program in the first three years of teaching school- based agricultural education.	Kathy Kram's Mentoring Theory (1988)	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 1
	I have participated in an informal mentoring program in the first three years of teaching school-based agricultural education.	Kathy Kram's Mentoring Theory (1988)	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 1
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program: - The mentoring program was required by the school system/county.	Kathy Kram's Mentoring Theory (1988)	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 1 and Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program:	Kathy Kram's Mentoring Theory (1988)	A mentoring program in which a participant is engaged should incorporate Kathy	Objective 1 and Objective 2

	- The mentoring program was designed specifically for SBAE teachers.		Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program: - The mentoring program was beneficial to my professional goals.	Overall POW Kathy Kram's Mentoring Theory (1988) Career Function	The mentoring program assisted participants professionally in areas such as sponsorship, exposure, coaching, protection, and facing challenges.	Objective 1 and Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program: - The mentoring program was beneficial to my personal goals.	Overall POW Psychosocial Function (Acceptance)	Mutual acceptance and respect, and confidence is an indicator of acceptance for participants.	Objective 1 and Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program: - I was assigned a mentor with SBAE certification.	Kram's Mentoring Theory (1988)	Mentor-mentee relationships with similar teaching disciplines.	Objective 1 and Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program: - I developed a positive relationship with my mentor.	Psychosocial Function (Friendship)	A confidant relationship is a key indicator of friendship and trust inherit in this function.	Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program:	Kram's Mentoring Theory (1988)	Mentor-mentee relationships with similar teaching disciplines.	Objective 2

	- I chose my mentor regardless of SBAE certification.			
	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - The mentoring program was required by the school system/county.	Kram's Mentoring Theory (1988)	Mentoring program experience.	Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - The mentoring program designed specifically for SBAE teachers.	Kram's Mentoring Theory (1988)	Mentor-mentee relationships with similar teaching disciplines.	Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - The mentoring program was beneficial to my professional goals.	Psychosocial Function (Acceptance)	Mutual acceptance and respect, and confidence is an indicator of acceptance for participants.	Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - The mentoring program was beneficial to my personal goals.	Psychosocial Function (Acceptance)	Mutual acceptance and respect, and confidence is an indicator of acceptance for participants.	Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - I was assigned a mentor with SBAE certification.	Kram's Mentoring Theory (1988)	Mentor-mentee relationships with similar teaching disciplines.	Objective 2

	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - I developed a positive relationship with my mentor.	Kram's (1988) Mentoring Theory (Friendship)	A confidant relationship is a key indicator of friendship and trust inherit in this function.	Objective 2
	When I participated in a school-based agricultural education (SBAE) teacher informal mentoring program: - I chose my mentor regardless of SBAE certification.	Kram's Mentoring Theory (1988)	Mentor-mentee relationships with similar teaching disciplines	Objective 2
Section 2: FFA Activities Items 17-35	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the development of an Advisory Committee.	POW #8, 8A, 8B (Advisory Committee) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the development of my FFA curriculum.	POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the development of my SAE curriculum.	POW #11 (Curriculum), #12 (Teaching), #14 (Lesson Plans), #18(SAEs), #19 (SAE Recordkeeping) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate	POW #16 (Leadership Curriculum)	A trusting relationship that facilitates career	Objective 3

	your feelings of the following statements related to assistance with the FFA. - Assist in the development of my leadership and personal development curriculum.	Career Function (Coaching)	navigation is a key indicator in this function.	
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in guiding students through record book applications.	POW #17 (Recordkeeping Instruction), #19 (SAE Recordkeeping), #21 (Middleschool Recordbook) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist with questions for official enrollment standards for FFA affiliation purposes.	POW #23 (FFA Affiliation) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the development of a Program of Activities.	POW #24 (FFA Program of Activities and Budget) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist with the	POW #25 (Chapter Officer Leadership Training) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3

	training and development of an FFA Officer Team.			
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the development and implementation of activities for National FFA Week.	POW #27 (National FFA Week)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the development of community service projects.	POW #28 (Community Service)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in attending the Georgia FFA State Convention.	POW #29 (State Convention)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the planning of an Annual FFA Banquet.	POW #30 (FFA Banquet)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3

	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in completing the National Chapter Application (Form 1).	POW #31 (National Chapter)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in completing the National Chapter Application (Form 2).	POW #31 (National Chapter)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the preparation of Career Development Events.	POW #32 (Career Development Events and Leadership Development Events)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the preparation of Leadership Development Events.	POW #32 (Career Development Events and Leadership Development Events)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate	POW #33 (Leadership Activities)	A trusting relationship that facilitates career navigation is a	Objective 3

	your feelings of the following statements related to assistance with the FFA. - Assist in the planning of day field trips for FFA.	Career Function (Coaching)	key indicator in this function.	
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in the planning of FFA overnight field trips.	POW #33 (Leadership Activities) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA. - Assist in organizing and maintaining safe facilities.	POW #34 (Facilities) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
Section Three: Teaching Items 36-39	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with teaching. - Assist in maintaining accurate monthly program of work reports.	POW #9 (Monthly Reports) and #20 (SAEs) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with teaching. - Assist in the development of	POW #11 (Curriculum), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum), #17	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3

	agricultural education curriculum.	(Recordkeeping Instruction)  Career Function (Coaching)		
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with teaching. - Assist in assuring the local school system will provide an adequate budget for delivering classroom instruction.	POW#37 (Budget for supplies), #38 (Budget for equipment) #42 (Facility Needs), #43 (Classroom facilities), #44 (Facility maintenance)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with teaching. - Assist in assuring the local school system will provide adequate computers and technology resources.	POW #39 (Technology) and POW #41 (Technology equipment)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
Section Four: Professionalism Items 40-43	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with professional opportunities. - Assist in providing resources to be involved in the Georgia Vocational Agricultural Teachers Association.	POW #4 (GVATA), #6 (GVATA Summer Conference), #7 (GVATA Mid-Winter Conference)  Career Function (Exposure/ Visibility)	A reliable relationship that facilitates navigation, communication, and networking are key indicators in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements	POW #5 (Area Meetings)	A reliable relationship that facilitates navigation, communication,	Objective 3

	related to assistance with professional opportunities. - Assist in attending all area meetings for agricultural education teachers.	Career Function (Exposure/ Visibility)	and networking are key indicators in this function.	
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with professional opportunities. - Assist in attending GVATA Professional conferences.	POW #4 (GVATA), #6 (GVATA Summer Conference), #7 (GVATA Mid-Winter Conference)  Career Function (Exposure/ Visibility)	A reliable relationship that facilitates navigation, communication, and networking are key indicators in this function.	Objective 3
	If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with professional opportunities. - Assist in completing the Program of Work successfully.	Overall POW  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
Section Five: Formal Mentoring Program Experience Items 44-48	During my mentorship program, I experienced: - Support and encouragement for my FFA chapter activities.	POW #22 (FFA Advisor Duties)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
	During my mentorship program, I experienced: - Opportunities to discuss FFA questions and concerns.	POW #22 (FFA Advisor Duties)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
	During my mentorship program, I experienced: - Opportunities to share	Yearly POW Review	A trusting relationship that offers advice based on prior	Objective 2

	personal experiences as an SBAE teacher.	Psychosocial Function (Counseling)	experiences in a supportive manner is a key indicator in this function.	
	During my mentorship program, I experienced: - Opportunities to share personal experiences as an FFA chapter advisor.	POW #22 (FFA Advisor Duties) Psychosocial Function (Counseling)	A trusting relationship that offers advice based on prior experiences in a supportive manner is a key indicator in this function.	Objective 2
	During my mentorship program, I experienced: - Opportunities to share SAE questions with someone I trust.	POW #18 (Student SAEs), #19 (SAE Recordbook), #20 (SAE Records), #21 (SAE Middle School Record book) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
Sections Six: Mentor Relationship-Teaching Items 49-52	To what extent did your mentor provide: - Support and encouragement for teaching.	POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum), #17 (Recordkeeping Instruction) curriculum Psychosocial Function (Friendship)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
	To what extent did your mentor provide: - Opportunities to discuss teaching questions and concerns.	POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans),	A trusting relationship that offers advice based on prior experiences in a	Objective 2

		#15 (FFA Intracurricular), #16 (Leadership Curriculum), #17 (Recordkeeping Instruction)  Psychosocial Function (Counseling)	supportive manner is a key indicator in this function.	
	To what extent did your mentor provide: - Their personal experiences as another perspective to your problems with teaching and the classroom.	POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum), #17 (Recordkeeping Instruction)  Psychosocial Function (Counseling)	A trusting relationship that offers advice based on prior experiences in a supportive manner is a key indicator in this function.	Objective 2
	To what extent did your mentor provide: - Create trust when asking professional teaching questions.	POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum), #17 (Recordkeeping Instruction)  Psychosocial Function (Friendship)	A confidant relationship is a key indicator of friendship and trust inherit in this function.	Objective 2
Section Seven: Mentor Relationship: Professionalism Items 53-58	To what extent did your mentor: - Provide support and encouragement for your overall professional career.	Overall POW  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2

	To what extent did your mentor: - Discuss professional questions and concerns.	Overall POW Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
	To what extent did your mentor: - Serve as a confidant.	Psychosocial Function (Friendship)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
	To what extent did your mentor: - Accept you as a colleague.	Psychosocial Function (Acceptance)	Mutual acceptance and respect, and confidence is an indicator of acceptance for participants.	Objective 2
	To what extent did your mentor: - Become someone you identified with.	Psychosocial Function (Friendship)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
	To what extent did your mentor: - Shared personal experiences as another perspective to your problems with your profession and career.	Overall POW Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 2
Section Eight: Concerns Items 59-68	In your first year of teaching, how often did you have concerns about: - Advising your FFA chapter.	POW #22 (FFA Advisor Duties) and #32 Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - Developing rapport with your students.	POW #22 (FFA Advisor Duties) and #32 (Career Development Events and Leadership Development Events)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4

		Career Function (Coaching)		
	In your first year of teaching, how often did you have concerns about: - Gaining parental support.	POW #32 (Career Development Events and Leadership Development Events) POW #30 (Banquet)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - Gaining community support.	POW #28  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - Managing daily FFA tasks.	POW #22 (FFA Advisor Duties) and #32 (Career Development Events and Leadership Development Events)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - FFA time management.	POW #22 (FFA Advisor Duties) and #32 (Career Development Events and Leadership Development Events) Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - Motivating students.	POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14	A trusting relationship that facilitates career navigation is a	Objective 4

		(Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum)  Career Function (Coaching)	key indicator in this function.	
	In your first year of teaching, how often did you have concerns about: - Supervising students on trips.	POW #33 (Leadership Activities)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - Recruiting students in your ag program.	POW #22 (FFA Advisor Duties) and #32 (Career Development Events and Leadership Development Events) and #33 (Leadership Activities)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
	In your first year of teaching, how often did you have concerns about: - Addressing your mental well-being.	Yearly POW Review  Psychosocial Function (Friendship)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 4
Section Nine: Needs-Professional Items 69-80	During your first year of teaching to what extent did you need professional advice from your mentor? - Assigning student grades.	POW #11 (Curriculum), #12 (Teaching)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Inputting grades in electronic grade book.	POW #11 (Curriculum), #12 (Teaching)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3

	During your first year of teaching to what extent did you need professional advice from your mentor? - Developing rapport with students.	POW #22 (FFA Advisor Duties) and #32 (Career Development Events and Leadership Development Events)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Effectively managing my classroom	POW #11 (Curriculum), #12 (Teaching)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Gaining parental support.	POW #22 (FFA Advisor Duties) #32 (Career Development Events and Leadership Development Events) #33 (Leadership Activities)  Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Awareness of school politics.	Overall POW  Career Function (Protection)	A trusting relationship that protects the participant from failures to be noticed is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Identifying school politics.	Overall POW  Career Function (Protection)	A trusting relationship that protects the participant from failures to be noticed is a key	Objective 3

			indicator in this function.	
	During your first year of teaching to what extent did you need professional advice from your mentor? - Managing personal stress.	Yearly POW Review - Psychosocial Function (Counseling)	A trusting relationship that offers advice based on prior experiences in a supportive manner is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Managing professional stress.	Yearly POW Review - Kathy Kram's Mentoring Theory (1988) Career Function		Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Managing my personal time.	Yearly POW Review - Psychosocial Function (Counseling)	A trusting relationship that offers advice based on prior experiences in a supportive manner is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Managing my professional time.	Overall POW Career Function (Coaching)	A trusting relationship that facilitates career navigation is a key indicator in this function.	Objective 3
	During your first year of teaching to what extent did you need professional advice from your mentor? - Practicing self- reflection.	Yearly POW Review - Psychosocial Function (Counseling)	A trusting relationship that offers advice based on prior experiences in a supportive manner is a key indicator in this function.	Objective 3

<p>Section Ten: Mentor- Mentee Relationship Items 81-84</p>	<p>Indicate the extent you agree with each of the following statements. My entry-year mentor and I: - Have similar values and attitudes toward the FFA.</p>	<p>POW #22 (FFA Advisor Duties)  Kathy Kram's Mentoring Theory (1988) Career Function</p>	<p>The mentoring program assists participants professionally in areas such as sponsorship, exposure, coaching, protection, and facing challenges.</p>	<p>Objective 2</p>
	<p>Indicate the extent you agree with each of the following statements. My entry-year mentor and I: - Have similar values and attitudes toward teaching.</p>	<p>POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum), #17 (Recordkeeping Instruction)  Kathy Kram's Mentoring Theory (1988) Career Function</p>	<p>The mentoring program assists participants professionally in areas such as sponsorship, exposure, coaching, protection, and facing challenges.</p>	<p>Objective 2</p>
	<p>Indicate the extent you agree with each of the following statements. My entry-year mentor and I: - Have similar teaching philosophies.</p>	<p>POW #11 (Curriculum), #12 (Teaching), #13 (Syllabus), #14 (Lesson Plans), #15 (FFA Intracurricular), #16 (Leadership Curriculum), #17 (Recordkeeping Instruction)  Kathy Kram's Mentoring Theory (1988) Career Function</p>	<p>The mentoring program assists participants professionally in areas such as sponsorship, exposure, coaching, protection, and facing challenges.</p>	<p>Objective 2</p>
	<p>Indicate the extent you agree with each of the following statements. My</p>	<p>Overall POW</p>	<p>The mentoring program assists participants</p>	<p>Objective 2</p>

	entry-year mentor and I: - Have similar values and attitudes professionally.	Kathy Kram's Mentoring Theory (1988) Career Function	professionally in areas such as sponsorship, exposure, coaching, protection, and facing challenges.	
Section Eleven: Needs of those participants that did not participate Items 85-86	Although I did not participate in a mentoring program in the first 3 years of teaching agricultural education: - Participating in a generic mentorship program would have been beneficial for my career.	Overall POW  Kathy Kram's (1988) Mentoring Theory	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 3
	Although I did not participate in a mentoring program in the first 3 years of teaching agricultural education: - Participating in a mentorship program specifically for agriculture teachers would have been beneficial for my career.	Overall POW  Kathy Kram's (1988) Mentoring Theory	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 3
Demographic Questions Items 87-93: Teacher Prep Route)	Which option best describes your teacher preparation?	Demographics		Objective 1
Level of Edu.	Please provide the highest level of education earned.	Demographics		Objective 1
Years taught in SBAE	How many years have you taught SBAE?	Demographics		Objective 1

Gender	Please provide your gender.	Demographics		Objective 1
Age	Please provide your current age.	Demographics		Objective 1
Level of School	Which level of school do you teach?	Demographics		Objective 1
Region	Which GVATA region do you currently teach?	Demographics		Objective 1
Self- Rating on FFA Program	For this set of questions, please use the scale 1-10 (1- being the lowest and 10- being the highest) - How successful would you rate your FFA program?	Overall POW and Kram's (1988) Mentoring Theory	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 1 and Objective 6
Self- Rating on success of overall agriculture program	For this set of questions, please use the scale 1-10 (1- being the lowest and 10- being the highest) - How successful would you rate the overall agriculture program?	Overall POW and Kram's (1988) Mentoring Theory	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest level and be advantageous for all involved.	Objective 1 and Objective 6
Thoughts	Please share your thoughts/experiences on mentoring programs in agricultural education	Overall POW and Kram's (1988) Mentoring Theory	A mentoring program in which a participant is engaged should incorporate Kathy Kram's mentoring theory (1988) to operate at the highest	

			level and be advantageous for all involved.	
--	--	--	---	--

Appendix 7- Official Research Instrument

## **Mentoring Programs Final**

---

Start of Block: Q1

**\*Your participation and expertise are important and valued!\*** The purpose of this study is to investigate SBAE teacher's perceptions and experiences with mentoring programs. This study can be completed using a desktop, tablet, or phone. Your feedback will help us understand how agricultural educators like you view mentoring programs and their experience with mentoring programs. We ask you to review the informed consent information sheet and complete the accompanying questionnaire; your participation will take less than eight minutes. Things you should know about your participation: Your participation is voluntary. You may stop participating at any time. You will not be compensated for participation. Participation involves minimal risk (no more than occurs during daily life). Information about participants and their responses will be anonymous. Please do not hesitate to contact Callie Kendrick if you have any questions about this research project. Informed Consent This survey should take approximately eight minutes to complete. Thank you! Callie Kendrick Doctoral Candidate Agriscience Education Auburn University 229-344-3926 csh0045@auburn.edu The Auburn University Institutional Review Board approved this document for use on March 20, 2024. Protocol #24-741 EX 2402

- I AGREE to participate (I have read the informed consent information sheet and agree to participation) (1)
- No I DO NOT wish to participate (2)
- 

Q1F) I have participated in a formal mentoring program in the first three years of teaching school- based agricultural education.

- Yes (1)
- No (2)
- 

Q1IN) I have participated in an *informal* mentoring program in the first three years of teaching school- based agricultural education.

- Yes (1)
- No (2)
-

Q1F1) When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program:

	Strongly Agree (1)	Somewhat Agree (2)	Neither Agree nor Disagree (3)	Somewhat Disagree (4)	Strongly Disagree (5)
The mentoring program was required by the school system/county. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mentoring program was designed specifically for SBAE teachers. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mentoring program was beneficial to my professional goals. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----  
 Page Break

Q2F1) When I participated in a school-based agricultural education (SBAE) teacher formal mentoring program:

	Strongly Agree (1)	Somewhat Agree (2)	Neither Agree nor Disagree (3)	Somewhat Disagree (4)	Strongly Disagree (5)
The mentoring program was beneficial to my personal goals. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was assigned a mentor with SBAE certification. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I developed a positive relationship with my mentor. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I chose my mentor regardless of SBAE certification. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Q1IN1) When I participated in a school-based agricultural education (SBAE) teacher *informal* mentoring program:

	Strongly Agree (1)	Somewhat Agree (2)	Neither Agree nor Disagree (3)	Somewhat Disagree (4)	Strongly Disagree (5)
The mentoring program was required by the school system/county. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mentoring program designed specifically for SBAE teachers. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mentoring program was beneficial to my professional goals. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mentoring program was beneficial to my personal goals. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Q2IN1) When I participated in a school-based agricultural education (SBAE) teacher *informal* mentoring program:

	Strongly Agree (1)	Somewhat Agree (2)	Neither Agree nor Disagree (3)	Somewhat Disagree (4)	Strongly Disagree (5)
I was assigned a mentor with SBAE certification. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I developed a positive relationship with my mentor. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I chose my mentor regardless of SBAE certification. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

FFA 1) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA.

	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (3)	Agree (4)	Strongly Agree (5)
Assist in the development of an Advisory Committee. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the development of my FFA curriculum. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the development of my SAE curriculum. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the development of my leadership and personal development curriculum. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FFA 2 FFA 2) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA.

	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (3)	Agree (4)	Strongly Agree (5)
Assist in guiding students through record book applications. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist with questions for official enrollment standards for FFA affiliation purposes. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the development of a Program of Activities. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist with the training and development of an FFA Officer Team. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

FFA 3 FFA 3) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA.

	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (3)	Agree (4)	Strongly Agree (5)
Assist in the development and implementation of activities for National FFA Week. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the development of community service projects. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in attending the Georgia FFA State Convention. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the planning of an Annual FFA Banquet. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in completing the National Chapter Application (Form 1). (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

FFA 4 FFA 4) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with the FFA.

	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (6)	Agree (4)	Strongly Agree (5)
Assist in completing the National Chapter Application (Form 2). (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the preparation of Career Development Events. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the preparation of Leadership Development Events. (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the planning of day field trips for FFA. (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the planning of FFA overnight field trips. (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in organizing and maintaining safe facilities. (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Teaching 1 Teaching 1) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with teaching.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Assist in maintaining accurate monthly program of work reports. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in the development of agricultural education curriculum. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Teaching 2 Teaching 2) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with teaching.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Assist in assuring the local school system will provide an adequate budget for delivering classroom instruction. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in assuring the local school system will provide adequate computers and technology resources. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Professionalism 1 Professionalism 1) If you were to participate in a formal mentoring program please indicate your feelings of the following statements related to assistance with professional opportunities.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Assist in providing resources to be involved in the Georgia Vocational Agricultural Teachers Association. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in attending all area meetings for agricultural education teachers. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in attending GVATA Professional conferences. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist in completing the Program of Work successfully. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: FFA 1

Start of Block: To what extent did your mentor: Teaching 1

IFPartF1) IFPartF1) During my mentorship program, I experienced:

	Not at All (1)	Some Extent (2)	Large Extent (3)
Support and encouragement for my FFA chapter activities. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities to discuss FFA questions and concerns. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities to share personal experiences as an SBAE teacher. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities to share personal experiences as an FFA chapter advisor. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities to share SAE questions with someone I trust. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: To what extent did your mentor: Teaching 1

Start of Block: TeachingMENTOR

Teaching FMP Teaching MENTOR) To what extent did your mentor provide:

	Not at All (1)	Some Extent (2)	Large Extent (3)
Support and encouragement for teaching. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities to discuss teaching questions and concerns. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Their personal experiences as another perspective to your problems with teaching and the classroom. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create trust when asking professional teaching questions. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

ProfessionalismMento ProfessionalismMENTOR) To what extent did your mentor:

	Not at All (1)	Some Extent (2)	Large Extent (3)
Provide support and encouragement for your overall professional career. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discuss professional questions and concerns. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serve as a confidant. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accept you as a colleague. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Become someone you identified with. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shared personal experiences as another perspective to your problems with your profession and career. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Concerns Concerns) In your first year of teaching, how often did you have concerns about:

	Never (1)	Sometimes (2)	Often (3)	Considerable (4)
Advising your FFA chapter. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing rapport with your students. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gaining parental support. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gaining community support. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing daily FFA tasks. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FFA time management. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivating students. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supervising students on trips. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recruiting students in your ag program. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Addressing your mental well-being. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Needs 1:Professional Needs 1:Professional) During your first year of teaching to what extent did you need professional advice from your mentor?

	Never (1)	Sometimes (2)	Often (3)	Considerable (4)
Assigning student grades. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inputting grades in electronic grade book. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing rapport with students. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effectively managing my classroom (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gaining parental support. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Needs 2:Professional Needs 2:Professional) During your first year of teaching to what extent did you need professional advice from your mentor?

	Never (1)	Sometimes (2)	Often (3)	Considerable (4)
Awareness of school politics. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying school politics. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing personal stress. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing professional stress. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing my personal time. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing my professional time. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practicing self-reflection. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Mentor/Mentee Mentor/Mentee) Indicate the extent you agree with each of the following statements. My entry-year mentor and I:

	Agree (1)	Neutral (2)	Disagree (3)
Have similar values and attitudes toward the FFA. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have similar values and attitudes toward teaching. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have similar teaching philosophies. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have similar values and attitudes professional. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Needs 3 Needs 3) Although I did not participate in a mentoring program in the first 3 years of teaching agricultural education:

	Strongly Agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
Participating in a generic mentorship program would have been beneficial for my career. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in a mentorship program specifically for agriculture teachers would have been beneficial for my career. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Teacher Prep Route) Which option best describes your teacher preparation?

- A traditional 4- year Teacher Program (college or university) (1)
- Alternative Certification (2)
- Other (3)

---

Level of Edu.) Please provide the highest level of education earned.

---

---

Years taught in SBAE) How many years have you taught SBAE?

\_\_\_\_\_

---

Age) Please provide your current age.

\_\_\_\_\_

---

Level of School) Which level of school do you teach?



- Elementary School (1)
  - Middle School (2)
  - High School (3)
- 

Region) Which GVATA region do you currently teach?

- North Region (1)
  - Central Region (5)
  - South Region (2)
- 

Rate) For this set of questions, please use the scale 1-10 (1- being the lowest and 10- being the highest)

0 1 2 3 4 5 6 7 8 9 10

How successful would you rate your FFA program? ()	
How successful would you rate the overall agriculture program? ()	

---

Thoughts) Please share your thoughts/ experiences on mentoring programs in agricultural education.

---

---

---

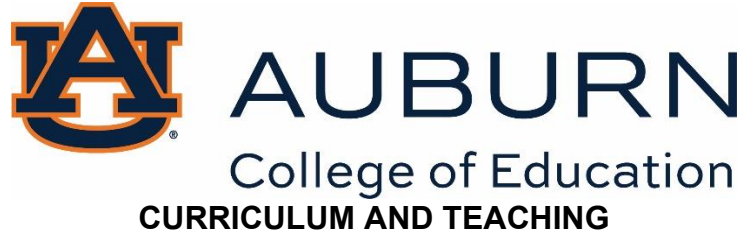
---

---

---

Page Break

Appendix 8- Initial Research Invitation Email



Good morning!

On Tuesday, you will be receiving a Qualtrics invitation to participate in research I am conducting addressing mentoring programs in agriculture education. The email will be titled "Mentoring Programs in Agriculture Education Research" from the email address: **noreply@survey.auburn.edu**. Please note that the email may go to your spam folder.

I would sincerely appreciate SEVEN minutes of your time.

Have a great rest of your week!

Callie Kendrick  
Doctoral Candidate  
Department of Curriculum and Teaching  
Auburn University  
229-344-3926  
csh0045@auburn.edu

Appendix 9- Follow-up Email



Good morning!

I am sorry for the follow-up email again today. I noticed a number of the email invitations to complete the mentoring programs in agriculture education survey were being bounced back. I believe this is because of a mail server issue, and I wanted to provide you with a direct link to the survey. If you were able to complete the survey, thank you, but I wanted to make sure my email was able to get to you.

[https://auburn.qualtrics.com/jfe/form/SV\\_4Oa4vZzbQ8VzIwe](https://auburn.qualtrics.com/jfe/form/SV_4Oa4vZzbQ8VzIwe)

Thank you again!

Callie Kendrick  
Doctoral Candidate  
Department of Curriculum and Teaching  
Auburn University  
229-344-3926  
csh0045@auburn.edu

Appendix 10: IRB Approval Application

MEMORANDUM

DATE: February 28, 2024 TO: IRB Admin

FROM: Mrs. Calahan Kendrick

SUBJECT: IRB Revisions Based on Reviewer Recommendations

The following revisions were made to the protocol entitled “Georgia Secondary Agricultural Education Teachers Perceptions of Mentoring Programs of Agricultural Education” based on the IRB Reviewer

recommendations:

Instrument:

For section one more clear directions were added. This is indicated by highlighting the directions and adding a scale that is also highlighted. Wording was also changed in section one for two statements.

1. Directions in Section One were changed to: “For each statement below, select your level of agreement or disagreement with each of the statements regarding your experience going

through a mentoring program with: Strongly Agree (1), Agree (2), Neither Agree or Disagree (3), Disagree (4), Strongly Disagree (5).”

<b>Section One: Determine your experience with mentoring program for Secondary Agricultural Education.</b>	<b>Strongly Agree (1)</b>	<b>Agree (2)</b>	<b>Neither Agree</b>	<b>Disagree (4)</b>	<b>Strongly Disagree (5)</b>
--	-------------------------------	------------------	----------------------	---------------------	----------------------------------

2. Wording was changed in Section One regarding two statements to: “the mentoring program that I was a part of was” and “mentoring program met an adequate amount of times”.

No other revisions were made.

Mrs. Calahan Kendrick

Calahan Kendrick

**The Georgia Secondary Agricultural Education Teachers Perception of Mentoring Programs of Agricultural Education**

\*\*This survey should take approximately 10 minutes to complete. This research study seeks to investigate the perceptions of mentoring programs amongst the Georgia Secondary Agricultural educators and develop an ideal mentoring program to be utilized within the profession. Your participation is voluntary, and you may stop participating at any time. Your personal identifiable information will not be collected, and all responses are anonymous. Please do not hesitate to contact Calahan Kendrick or Ph.D. Chair, Dr. Clemons if you have any questions about this research project. For further information, click the "Informed Consent" link below.

Informed Consent

This survey should take approximately 10 minutes to complete.

Thank you!

Calahan Kendrick Ph.D. Candidate Agriscience Education Auburn University 229.344.3926, [csh0045@auburn.edu](mailto:csh0045@auburn.edu)

Christopher A. Clemons, Ph.D. Associate Professor Agriscience Education Auburn University 334.844.4411, [chrisclemons@auburn.edu](mailto:chrisclemons@auburn.edu)

Directions:

Section One: For each statement below, select your level of agreement or disagreement with each of the statements regarding your experience going through a mentoring program. Strongly Agree (1), Agree (2), Neither Agree or Disagree (3), Disagree (4), Strongly Disagree (5).

<b>Section One: Determine your experience with mentoring program for Secondary Agricultural Education.</b>	Strongly Agree (1)	Agree (2)	Neither Agree or Disagree (3)	Disagree (4)	Strongly Disagree (5)
Mentoring program you went through was effective					
Mentoring Program was specifically agriculture related					
Mentoring Pair- was it purposeful? (IE Same Subject taught)					
Positive relationship with mentor					
The mentoring program that I was a part of was					

considered "formal"					
Was mentoring program considered "informal"					
Mentoring Program met an adequate amount of times					

Section 2: Determine the "Ultimate" Mentorship Program Development with emphasis on the following (Likert Scale- 1-5)

Directions: For each statement below (Section Two) please select your perceived level of importance (1= Not Important, 2= Of Little Importance, 3= Somewhat Important, 4= Important, 5= Very Important)

Sections in Bold	1. NI	2. OLI	3. SI	4. I	5. VI
<b>Standard Classroom</b>					
Developing Class Specific Curriculum					
General Lesson Planning					

Managing the Agriculture Classroom					
<b>Relationships</b>					
<b>Parent/ Teacher:</b> How to talk to parents					
<b>Administration Relationships:</b> How to develop strong administration relationships					
<b>FFA Development</b>					
Program of Activities					
Developing an Officer Team					
Managing Officer Team					
Chapter Meetings					
Community Involvement					
Connections within Community					
Career Development Event Resources					
<b>Award Applications</b>					
Proficiencies					
SAE Record books					
<b>Supervised Agriculture Experience</b>					

Managing Student Supervised Agriculture Experience					
<b>General</b>					
In- person Observations					
Meetings once a month					
Meetings once a semester					
Virtual Meetings					
Mentoring Pairing					
Same Gender					
Same Content					
Same Level of Teaching (MS/MS) (HS / HS)					

Section 3: Determine the personal characteristics of secondary agricultural education teachers in Georgia

1. Highest degree completed as of 2023
  - A. Bachelor's
  - B. Masters
  - C. Specialist
  - D. Doctoral
  - E. Other

2. Which option best describes your teacher preparation?
  - a. A traditional 4- year teacher program (college or university)
  - b. Alternative Certification
  - c. Other
  
3. What is your level of experience in teaching secondary agriculture education?
  - a. 1-3 years
  - b. 4-9 years
  - c. 10-15 years
  - d. 16+ years
  
4. In your experience, have you served as a mentor?
  - a. Yes
  - b. No
5. In your experience, have you gone through a mentoring process as a mentee?
  - a. Yes
  - b. No
6. What is your gender?
  - a. Female
  - b. Male
7. What is your age? (Whole Number)
8. What region for you teach in?
  - a. North
  - b. Central

Revised 09/13/2023

AUBURN UNIVERSITY HUMAN RESEARCH PROTECTION PROGRAM (HRPP)

---

## EXEMPT REVIEW APPLICATION

---

For assistance, contact: **The Office of Research Compliance (ORC)**

Phone: 334-844-5966 E-Mail: [IRBAdmin@auburn.edu](mailto:IRBAdmin@auburn.edu) Web Address:

<http://www.auburn.edu/research/vpr/ohs> Submit completed form and supporting materials  
as one PDF through the [IRB Submission Page](#)

Hand written forms are not accepted. Where links are found hold down the control button (Ctrl) then click the link..

---

### 1. Project Identification

Today's

**Date:** January 30, 2024 **Anticipated start date of the project:** April 1, 2024

**Anticipated duration of project:** 1 Year

- a. **Project Title:** The Georgia Secondary Agricultural Education Teachers Perceptions of Mentoring Programs of Agricultural Education

- b. **Principal Investigator (PI):** Calahan Kendrick

Degree(s): BS, MAEE, SED

Rank/Title: Doctoral Candidate

Department/School:

Curriculum and Teaching Role/responsibilities in this project: **The principal investigator is responsible for developing the manuscript.** Preferred Phone Number: 2293443926

AU Email: csh0045@auburn.edu

**Faculty Advisor Principal Investigator (if applicable):** Christopher Clemons

Rank/Title: Associate Professor

Department/School:

ol: Curriculum and Teaching Role/responsibilities in this project: **Serves as the major advisor.**

Preferred Phone Number: 3448444434

AU Email: cac0132/2auburn.edu

**Department Head:** Paul Fitchett

Department/School:

Curriculum and Teaching Preferred Phone Number: 3448444434 AU

Email: pgf0011@auburn.edu Role/responsibilities in this project: [Click](#)

[or tap here to enter text.](#)

- c. **Project Key Personnel** – Identify all key personnel who will be involved with the conduct of the research and describe their role in the project. Role may include design, recruitment, consent process, data collection, data analysis, and reporting. ([To determine key personnel, see decision tree](#)). *Exempt determinations are made by individual institutions; reliance on other institutions for exempt determination is not feasible. Non-AU personnel conducting exempt research activities must obtain approval from the IRB at their home institution.*

Key personnel are required to maintain human subjects training through [CITI](#). Please provide documentation of completed CITI training, with course title(s) and expiration date(s) shown. As a reminder, both IRB and RCR modules are required for all key study personnel.

Name: **Calahan Kendrick**

Degree(s): **BS, MAEE, SEd**

Rank/Title: Doctoral Candidate

Department/School

: Curriculum and Teaching Role/responsibilities in this project: **Responsible for developing the manuscript, recruiting participants, consenting and answering participant questions, and analyzing data.**

- AU affiliated?  Yes  No If no, name of home institution: [Click or tap here to enter text.](#)

- Plan for IRB approval for non-AU affiliated personnel? [Click or tap here to enter text.](#)

- Do you have any known competing financial interests, personal relationships, or other interests that could have influence or appear to have influence on the work conducted in this project?  Yes  No

- If yes, briefly describe the potential or real conflict of interest: [Click or tap here to enter text.](#)

- Completed required CITI training?  Yes  No If NO, complete the appropriate [CITI basic course](#) and update the revised Exempt Application form.

- If YES, choose course(s) the researcher has completed: Human Sciences Basic Course

[Expiration Date](#)

Refresher Course

[Expiration Date](#)

Name: **Chris Clemons**

Degree(s): **Ph.D., Ed.S.**

Rank/Title: Associate Professor

Department/School: Curriculum and Teaching

Role/responsibilities in this project: Serves as supervisor for the study and is responsible for all aspects of student led research.

- AU affiliated?  Yes  No If no, name of home institution: [Click or tap here to enter text.](#)
- Plan for IRB approval for non-AU affiliated personnel? [Click or tap here to enter text.](#)
- Do you have any known competing financial interests, personal relationships, or other interests that could have influence or appear to have influence on the work conducted in this project?  Yes  No
- If yes, briefly describe the potential or real conflict of interest: [Click or tap here to enter text.](#)
- Completed required CITI training?  Yes  No If NO, complete the appropriate [CITI basic course](#) and update the revised EXEMPT application form.
- If YES, choose course(s) the researcher has completed: Human Sciences Basic Course Expiration Date  
Human Sciences Basic Course Expiration Date

Name: [Click or tap here to enter text.](#)

Degree(s): [Click or tap here to enter text.](#)

Rank/Title: [Choose Rank/Title](#)

Department/School: [Choose Department/School](#)

Role/responsibilities in this project: [Click or tap here to enter text.](#)

- AU affiliated?  Yes  No If no, name of home institution: [Click or tap here to enter text.](#)
- Plan for IRB approval for non-AU affiliated personnel? [Click or tap here to enter text.](#)
- Do you have any known competing financial interests, personal relationships, or other interests that could have influence or appear to have influence on the work conducted in this project?  Yes  No
- If yes, briefly describe the potential or real conflict of interest: [Click or tap here to enter text.](#)
- Completed required CITI training?  Yes  No If NO, complete the appropriate [CITI basic course](#) and update the revised EXEMPT application form.
- If YES, choose course(s) the researcher has completed: [Choose a course](#) Expiration Date  
[Choose a course](#) Expiration Date

d. **Funding Source** – Is this project funded by the investigator(s)? Yes  No

Is this project funded by AU? Yes  No  If YES, identify source [Click or tap here to enter text.](#)

Is this project funded by an external sponsor? Yes  No  If YES, provide name of sponsor, type of sponsor (governmental, non-profit, corporate, other), and an identification number for the award.

Name: [Click or tap here to enter text.](#) Type: [Click or tap here to enter text.](#) Grant #: [Click or tap here to enter text.](#)

e. List other AU IRB-approved research projects and/or IRB approvals from other institutions that are associated with this project. Describe the association between this project and the listed project(s):  
N/A

## 2. Project Summary

a. Does the study **TARGET** any special populations? Answer YES or NO to all.

Minors (under 18 years of age; if minor participants, at least 2 adults must be present during all research procedures that include the minors) Yes  No

Auburn University Students Yes  No

Pregnant women, fetuses, or any products of conception

Yes  No

Prisoners or wards (unless incidental, not allowed for Exempt research)

Yes  No

Temporarily or permanently impaired

Yes  No

Revised 09/13/2023

**b. Does the research pose more than minimal risk to participants?**

Yes  No

*If YES, to question 2.b, then the research activity is NOT eligible for EXEMPT review. Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research is not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or test. 42 CFR 46.102(i)*

**c. Does the study involve any of the following?** *If YES to any of the questions in item 2.c, then the research activity is NOT eligible for EXEMPT review.*

Procedures subject to FDA regulations (drugs, devices, etc.)

Yes  No

Use of school records of identifiable students or information from instructors about specific students.

Yes  No

Protected health or medical information when there is a direct or indirect link which could identify the participant.

Yes  No

Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or alcohol use.

Yes  No

**d. Does the study include deception? Requires limited review by the IRB\***

Yes  No

**3. MARK the category or categories below that describe the proposed research. Note the IRB Reviewer will make the final determination of the eligible category or categories.**

- 1.** Research conducted in established or commonly accepted educational settings, involving normal educational practices. The research is not likely to adversely impact students' opportunity to learn or assessment of educators providing instruction. 104(d)(1)
- 2.** Research only includes interactions involving educational tests, surveys, interviews, public observation if at least ONE of the following criteria. (The research includes data collection only; may include visual or auditory recording; may NOT include intervention and only includes interactions). **Mark the applicable sub-category below (I, ii, or iii). 104(d)(2)**
- (i)** Recorded information cannot readily identify the participant (directly or indirectly/ linked);  
**OR**  
- surveys and interviews: no children;  
- educational tests or observation of public behavior: can only include children when investigators do not participate in activities being observed.
- (ii)** Any disclosures of responses outside would not reasonably place participant at risk; **OR**
- (iii)** Information is recorded with identifiers or code linked to identifiers and IRB conducts limited review; no children. **Requires limited review by the IRB.\***
- 3.** Research involving Benign Behavioral Interventions (BBI)\*\* through verbal, written responses including data entry or audiovisual recording from adult subjects who prospectively agree and ONE of the following criteria is met. (This research does not include children and does not include medical interventions. Research cannot have deception unless the participant prospectively agrees that they will be unaware of or misled regarding the nature and purpose of the research) **Mark the applicable sub-category below (A, B, or C). 104(d)(3)(i)**

**(A)** Recorded information cannot readily identify the subject (directly or indirectly/ linked); **OR**

**(B)** Any disclosure of responses outside of the research would not reasonably place subject at risk;  
**OR**

Revised 09/13/2023

- (C)** Information is recorded with identifies and cannot have deception unless participants prospectively agree.  
**Requires limited review by the IRB.\***
- 4.** Secondary research for which consent is not required: use of identifiable information or identifiable bio- specimen that have been or will be collected for some other 'primary' or 'initial' activity, if one of the following criteria is met. Allows retrospective and prospective secondary use. **Mark the applicable sub-category below (i, ii, iii, or iv).** 104(d)(4)
  - (i)** Bio-specimens or information are publicly available;
  - (ii)** Information recorded so subject cannot readily be identified, directly or indirectly/linked investigator does not contact subjects and will not re-identify the subjects; **OR**
  - (iii)** Collection and analysis involving investigators use of identifiable health information when us is regulated by HIPAA "health care operations" or "research" or "public health activities and purposes" (does not include bio-specimens (only PHI and requires federal guidance on how to apply); **OR**
  - (iv)** Research information collected by or on behalf of federal government using government generated or collected information obtained for non-research activities.
- 5.** Research and demonstration projects which are supported by a federal agency/department AND designed to study and which are designed to study, evaluate, or otherwise examine: (i)public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or service under those programs. (must be posted on a federal web site). 104.5(d)(5) (must be posted on a federal web site)
- 6.** Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives and consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. The research does not involve prisoners as participants. 104(d)(6)

*\*Limited IRB review – the IRB Chair or designated IRB reviewer reviews the protocol to ensure adequate provisions are in place to protect privacy and confidentiality.*

*\*\*Category 3 – Benign Behavioral Interventions (BBI) must be brief in duration, painless/harmless, not physically invasive, not likely to have a significant adverse lasting impact on participants, and it is unlikely participants will find the interventions offensive or embarrassing.*

*\*\*\* Exemption categories 7 and 8 require broad consent. The AU IRB has determined the regulatory requirements for legally effective broad consent are not feasible within the current institutional infrastructure. EXEMPT categories 7 and 8 will not be implemented at this time.*

**4. Describe the proposed research, including who does what, when, where, how, and for how long, etc.**

**a. Purpose**

The research study investigates the real and perceived mentoring experiences of Georgia secondary agricultural educators with mentoring programs to develop an effective program to utilize in the state.

Revised 09/13/2023

- b.** Participant population, including the number of participants and the rationale for determining the number of participants to recruit and enroll. Note if the study enrolls minor participants, describe the process to ensure more than 1 adult is present during all research procedures, which include the minor.

No minors will participate in this study. The stratum for selection includes licensed agriculture educators in Georgia with at least one year of experience in the secondary agricultural education teaching field. For this study, 250 participants will be contacted through Qualtrics as potential participants. The participants will be contacted using the information from the databases on the publicly available Georgia agricultural education website. The study will be available on Qualtrics for participants to participate for three weeks with reminders sent at one week intervals.

- c.** Recruitment process. Address whether recruitment includes communications/interactions between study staff and potential participants in person or online. *Submit a copy of all recruitment materials.*

Participants will be contacted by email from the PI via email recruitment study. A participant can click the survey link to participate or decline by ignoring the invitation. There will be one follow-up recruitment email to potential participants to participate in the study.

- d.** Consent process including how information is presented to participants, etc.

If a participant selects the participation link the Online Information Letter for Electronic Survey will be presented through Qualtrics. Information presented to participants will follow IRB protocols as found in the informed consent. The PI and Faculty Advisor are available to answer participant questions and all contact information is provided on the Online Information Letter.

- e.** Research procedures and methodology

The proposed study will be quantitative. The instrument uses a combination of binary choice and interval measurement scales. The instrument used for this study is a questionnaire administered online via Qualtrics.

- f.** Anticipated time per study exercise/activity and total time if participants complete all study activities. The research instrument should take the participant approximately 10 minutes to complete and will be live for three weeks.

- g.** Location of the research activities.

The online platform Qualtrics will be used to collect participant responses.

- h.** Costs to and compensation for participants? If participants will be compensated describe the amount, type, and process to distribute.

There is no cost or compensation for the participants of this study.

- i.** Non-AU locations, site, institutions. *Submit a copy of agreements/IRB approvals.*

NA

- j.** Describe how results of this study will be used (presentation? publication? thesis? dissertation?)

The results of this study will be disseminated through manuscripts in professional journals, presentations, and research conferences, and references for developing appropriate and data-based mentoring programs in Georgia.

- k. Additional relevant information.  
NA

Revised 09/13/2023

## 5. Waivers

Check applicable waivers and describe how the project meets the criteria for the waiver.

- Waiver of Consent (Including existing de-identified data)
- Waiver of Documentation of Consent (Use of Information Letter, rather than consent form requiring signatures)
- Waiver of Parental Permission (in Alabama, 18 years-olds may be considered adults for research purposes)

<https://sites.auburn.edu/admin/orc/irb/IRB 1 Exempt and Expedited/11-113 MR 1104 Hinton Renewal 2021-1.pdf>

**a.** Provide the rationale for the waiver request.

The online informational letter for electronic survey will detail the particulars of the study, recruitment, information, anonymity in response, data analysis, and details of the completed study.

## 6. Describe the process to select participants/data/specimens. If applicable, include gender, race, and ethnicity of the participant population.

Participants will be randomly selected from the established strata using the publicly available databases on the Georgia agricultural education website. Participants must have a minimum of one year of experience in teaching secondary agricultural education. The publicly available database, or Teacher Directory, contains the teacher's contact information. As this is a randomly stratified sample of gender, race, and ethnicity are outside the parameter of selection to the participant.

## 7. Risks and Benefits

**7a. Risks - Describe why none of the research procedures would cause a participant either physical or psychological discomfort or be perceived as discomfort above and beyond what the person would experience in daily life (minimal risk).**

*The research is being conducted online using Qualtrics. Participants will be informed of their participation and can cease participation at any time. There are no anticipated risks for participating in the study not usually experienced in everyday life.*

**7b. Benefits – Describe whether participants will benefit directly from participating in the study. If yes, describe the benefit. And, describe generalizable benefits resulting from the study.**

The participant can expect to understand their role in the mentoring process better moving forward in their teaching career. The published data and information can benefit future secondary agriculture educators, helping them stay in the profession and increasing their longevity in their teaching careers.

**8. Describe the provisions to maintain confidentiality of data, including collection, transmission, and storage. Identify platforms used to collect and store study data. For EXEMPT research, the AU IRB recommends AU BOX or using an AU issued and encrypted device. If a data collection form will be used, submit a copy.**

Storage of data will be maintained using the AU Box which is an encrypted file storage service. All responses to the

instrument, including collected and analyzed data, will be stored behind the PI's password-protected computer in AU Box.

Revised 09/13/2023

- a. If applicable, submit a copy of the data management plan or data use agreement.

**9. Describe the provisions included in the research to protect the privacy interests of participants (e.g., others will not overhear conversations with potential participants, individuals will not be publicly identified or embarrassed).**

**No identifiable information will be asked or collected by the researchers. Participants will receive the survey link and email recruitment and only required to agree or to not agree to participate.**

**10. Does this research include purchase(s) that involve technology hardware, software or online services?**

YES     NO

If YES:

- A. Provide the name of the product and the manufacturer of the product** [Click or tap here to enter text.](#)  
[Click or tap here to enter text.](#)
- B. Briefly describe use of the product in the proposed human subject's research.**  
[Click or tap here to enter text.](#)
- C. To ensure compliance with AU's Electronic and Information Technology Accessibility Policy, contact AU IT Vendor Vetting team at [vetting@auburn.edu](mailto:vetting@auburn.edu) to learn the vendor registration process (prior to completing the purchase).**
- D. Include a copy of the documentation of the approval from AU Vetting with the revised submission.**

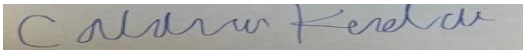
**11. Additional Information and/or attachments.**


*In the space below, provide any additional information you believe may help the IRB review of the proposed research. If attachments are included, list the attachments below. Attachments may include recruitment materials, consent documents, site permissions, IRB approvals from other institutions, data use agreements, data collection form, CITI training documentation, etc.*

[Click or tap here to enter text.](#)

---

**Required Signatures** (If a student PI is identified in item 1.a, the EXEMPT application must be re-signed and updated at every revision by the student PI and faculty advisor. The signature of the department head is required only on the initial submission of the EXEMPT application, regardless of PI. Staff and faculty PI submissions require the PI signature on all version, the department head signature on the original submission)

Signature of Principal Investigator:  Date: 02-20-2024 Signature of

Faculty Advisor (If applicable):  Date: 02-20-2024

*Revised 09/13/2023*

**Signature of Dept. Head:**

**Paul G.  
Fitchett**



Digitally signed by  
Paul  
G. Fitchett  
Date: 2024.02.20

**Date:** \_\_\_\_\_

**Version Date:** [Click or tap to enter a date.](#)





COLLEGE OF EDUCATION  
CURRICULUM AND TEACHING

**The Georgia Secondary Agriculture Education Teachers Perception of  
Mentoring Programs of Agricultural Education**

**You are invited to participate in a research study** to investigate an effective agricultural education mentoring program. The study is being conducted by Doctoral Candidate, Calahan Kendrick, in the Agriscience Education Program and Dr. Chris Clemons, Associate Professor of Agriscience Education at Auburn University. You are invited to participate because you are a practicing secondary agricultural education teacher in the state of Georgia, and are over the age of 19.

**What will be involved if you participate?** Your participation is completely voluntary. If you decide to participate in this research

study, you will be asked to complete an anonymous item response survey. The nature of the questions will help us understand your experience with mentor programs in agriculture education and what you would like to see in a mentor program in an effort to develop an effective mentorship program specifically for agricultural education.

**Are there any risks or discomforts?** The risks associated with participating in this study are a potential loss of anonymity. To minimize these risks, we will NOT collect any personally identifiable information.

**Are there any benefits to yourself or others?** If you participate in this study, you can expect to help in forming an effective mentoring program specifically for agriculture educators new to the field. You will not directly benefit from participating in this research study. Benefits to others may include published data indicating the results of this study.

**Will you receive compensation for participating?** No compensation in participating in the study will be provided.

5040 Haley Center  
Auburn, AL 36849-5212

Telephone:  
334-844-4434

Fax:  
334-844-6789

[www.auburn.edu](http://www.auburn.edu)



COLLEGE OF EDUCATION  
CURRICULUM AND TEACHING


If you choose to change your mind in participating, you can withdraw at any time by deleting the email invitation, selecting your option of not participating, or closing your browser window at any time. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision whether to participate or to stop participating in the study, will not jeopardize your future relations with Auburn University, the College of Education, or Agriscience Education.


Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any identifiable information. Information collected through your participation in this study may be used for manuscript submission or disseminated at professional conferences. If any questions may arise about this study, please contact Calahan Kendrick at (229.344.3926) csh0045@auburn.edu or Dr. Chris Clemons (334.844.4411) cac0132@auburn.edu.

If you have any questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844.5966 or email at IRBadmin@auburn.edu or IRBChair@auburn.edu

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH STUDY. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Date: 2/1/2024

  
Calahan S. Kendrick  
Investigator  
Doctoral Candidate  
Auburn University  
Agriscience Education  
229.344.3926  
Csh0045@auburn.edu

  
Dr. Christopher Clemons  
Associate Professor  
Auburn University  
College of Education  
Curriculum and Teaching  
334.844.4411  
cac0132@auburn.edu

5040 Haley Center  
Auburn, AL 36849-5212

Telephone:  
334-844-4434

fax:  
334-844-6789

The Auburn University Institutional Review Board has approved this document for use from \_\_\_\_\_ to \_\_\_\_\_ . Protocol # \_\_\_\_\_

www.auburn.edu

LINK TO SURVEY EMAIL INVITATION FOR ON-LINE SURVEY

Dear Secondary Agricultural Education Teacher,

I am a Doctoral Candidate in Agriscience Education at Auburn University. I want to invite you to participate in my research study to investigate your perception of current mentoring programs provided for agricultural educators and what you would like to see in a mentoring program to be more effective in helping the novice and new-to-the-field agricultural educators.

Participants will be asked to complete an item response survey requiring ten minutes of your time.

To mitigate risk, potentially identifiable information will not be collected. No compensation will be provided, and benefits include developing a more effective and improved mentoring program for Agricultural Educators.

If you want more information about this study, an information letter can be obtained by selecting this link. If you decide to participate after reading the letter, you can access the survey from a link.

If you have any questions, please contact me at 229.344.3926, [cs0045@auburn.edu](mailto:cs0045@auburn.edu) or Dr. Chris Clemons at 334.844.4411, [cac0132@auburn.edu](mailto:cac0132@auburn.edu).

Thank you for your help and consideration,

Calahan Kendrick  
Doctoral Candidate  
Auburn University  
[Csh0045@auburn.edu](mailto:Csh0045@auburn.edu)  
229.344.3926

Chris Clemon, Ph. D.  
Associate Professor  
Auburn University  
[cac0132@auburn.edu](mailto:cac0132@auburn.edu)  
334.844.4411

Calahan Kendrick

**The Georgia Secondary Agricultural Education Teachers Perception of Mentoring Programs of Agricultural Education**

\*\*This survey should take approximately 10 minutes to complete. This research study seeks to investigate the perceptions of mentoring programs amongst the Georgia Secondary Agricultural educators and develop an ideal mentoring program to be utilized within the profession. Your participation is voluntary, and you may stop participating at any time. Your personal identifiable information will not be collected, and all responses are anonymous. Please do not hesitate to contact Calahan Kendrick or Ph.D. Chair, Dr. Clemons if you have any questions about this research project. For further information, click the "Informed Consent" link below.

Informed Consent

This survey should take approximately 10 minutes to complete.

Thank you!

Calahan Kendrick Ph.D. Candidate Agriscience Education Auburn University 229.344.3926, [csh0045@auburn.edu](mailto:csh0045@auburn.edu)

Christopher A. Clemons, Ph.D. Associate Professor Agriscience Education Auburn University 334.844.4411,  
[chrisclemons@auburn.edu](mailto:chrisclemons@auburn.edu)

Directions: For each statement below (Section Two) please select your perceived level of importance (1= Not Important, 2= Of Little Importance, 3= Somewhat Important, 4= Important, 5= Very Important)

Different scale on Section 1

<b>Section One: Determine your experience with mentoring program for Secondary Agricultural Education.</b>					
Mentoring program you went through was effective					
Mentoring Program was specifically agriculture related					
Mentoring Pair- was it purposeful? (IE Same Subject taught)					
Positive relationship with mentor					
Was mentoring program considered “formal”					

Was mentoring program considered "informal"					
How often did you meet?					

Section 2: Determine the "Ultimate" Mentorship Program Development with emphasis on the following (Likert Scale- 1-5)

Directions: For each statement below (Section Two) please select your perceived level of importance (1= Not Important, 2= Of Little Importance, 3= Somewhat Important, 4= Important, 5= Very Important)

Sections in Bold	1. NI	2. OLI	3. SI	4. I	5. VI
<b>Standard Classroom</b>					
Developing Class Specific Curriculum					
General Lesson Planning					
Managing the Agriculture Classroom					

<b>Relationships</b>					
<b>Parent/ Teacher:</b> How to talk to parents					
<b>Administration Relationships:</b> How to develop strong administration relationships					
<b>FFA Development</b>					
Program of Activities					
Developing an Officer Team					
Managing Officer Team					
Chapter Meetings					
Community Involvement					
Connections within Community					
Career Development Event Resources					
<b>Award Applications</b>					
Proficiencies					
SAE Record books					
<b>Supervised Agriculture Experience</b>					
Managing Student Supervised Agriculture Experience					
<b>General</b>					

In- person Observations					
Meetings once a month					
Meetings once a semester					
Virtual Meetings					
Mentoring Pairing					
Same Gender					
Same Content					
Same Level of Teaching (MS/ MS) (HS / HS)					

Section 3: Determine the personal characteristics of secondary agricultural education teachers in Georgia

1. Highest degree completed as of 2023
  - A. Bachelor's
  - B. Masters
  - C. Specialist
  - D. Doctoral
  - E. Other
  
2. Which option best describes your teacher preparation?
  - a. A traditional 4- year teacher program (college or university)
  - b. Alternative Certification

c. Other

3. What is your level of experience in teaching secondary agriculture education?

- a. 1-3 years
- b. 4-9 years
- c. 10-15 years
- d. 16+ years

4. In your experience, have you served as a mentor?

- a. Yes
- b. No

5. In your experience, have you gone through a mentoring process as a mentee?

- a. Yes
- b. No

6. What is your gender?

- a. Female
- b. Male

7. What is your age? (Whole Number)

8. What region for you teach in?

- a. North
- b. Central
- c. South





Completion Date 19-Oct-2023  
Expiration Date 19-Oct-2027  
Record ID 59170370

This is to certify that:

Calahan Kendrick

Not valid for renewal of  
certification through CME.

Has completed the following Citi Program course:

**CITI Conflicts of Interest**

(Curriculum Group)

**Conflicts of Interest**

(Course Learner Group)

**1 - Stage 1**

(Stage)

Under requirements set by:

**Auburn University**

**CITI**  
Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320  
Fort Lauderdale, FL 33301 US  
[www.citiprogram.org](http://www.citiprogram.org)

Generated on 14-Feb-2024. Verify at [www.citiprogram.org/verify/?w197044a6-44a2-4a8b-8398-4a1b69ec4e06-59170370](http://www.citiprogram.org/verify/?w197044a6-44a2-4a8b-8398-4a1b69ec4e06-59170370)



Completion Date 19-Oct-2023  
Expiration Date 19-Oct-2026  
Record ID 59170371

This is to certify that:

Calahan Kendrick

Not valid for renewal of  
certification through CME.

Has completed the following CITI Program course:

**Responsible Conduct of Research**

(Curriculum Group)

**AU Basic RCR Training for ALL Faculty, Staff, Postdocs, and Students**

(Course Learner Group)

**1 - RCR**

(Stage)

Under requirements set by:

**Auburn University**



101 NE 3rd Avenue, Suite 320  
Fort Lauderdale, FL 33301 US  
[www.citiprogram.org](http://www.citiprogram.org)

Generated on 14-Feb-2024. Verify at [www.citiprogram.org/verify/?wcb35669e-f489-4274-8a82-92e3c5a2043e-59170371](http://www.citiprogram.org/verify/?wcb35669e-f489-4274-8a82-92e3c5a2043e-59170371)



Completion Date 20-Oct-2023  
Expiration Date 20-Oct-2026  
Record ID 59188901

This is to certify that:

Calahan Kendrick

Not valid for renewal of  
certification through CME.

Has completed the following CITI Program course:

**IRB Additional Modules**

(Curriculum Group)

**Internet Research - SBE**

(Course Learner Group)

**1 - Basic Course**

(Stage)

Under requirements set by:

**Auburn University**

**CITI**  
Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320  
Fort Lauderdale, FL 33301 US  
[www.citiprogram.org](http://www.citiprogram.org)

Generated on 14-Feb-2024. Verify at [www.citiprogram.org/verify/?w0104aa61-c2e8-4d55-a779-886cbc097e0c-59188901](http://www.citiprogram.org/verify/?w0104aa61-c2e8-4d55-a779-886cbc097e0c-59188901)



Completion Date 20-Oct-2023  
Expiration Date 20-Oct-2026  
Record ID 59188902

This is to certify that:

Calahan Kendrick

Not valid for renewal of  
certification through CME.

Has completed the following CITI Program course:

**IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher**

(Curriculum Group)

**IRB # 2 Social and Behavioral Emphasis - AU Personnel**

(Course Learner Group)

**1 - Basic Course**

(Stage)

Under requirements set by:

**Auburn University**



101 NE 3rd Avenue, Suite 320  
Fort Lauderdale, FL 33301 US  
[www.citiprogram.org](http://www.citiprogram.org)

Generated on 14-Feb-2024. Verify at [www.citiprogram.org/verify/?we8dc335b-0b38-4d94-93d2-8e660a6a5733-59188902](http://www.citiprogram.org/verify/?we8dc335b-0b38-4d94-93d2-8e660a6a5733-59188902)



Completion Date 20-May-2020

Expiration Date 19-May-2024

Record ID 36011300

This is to certify that:

Christopher Clemons

Has completed the following Citi Program course:

**CITI Conflicts of Interest** (Curriculum Group)  
**Conflicts of Interest** (Course Learner Group) **2**  
**- Refresher** (Stage)

Under requirements set by:

**Auburn University**

Not valid for renewal of certification through CME. Do not use for TransCelerate mutual recognition (see Completion Report).

**CITI**  
Collaborative Institutional Training Initiative

Verify at [www.citiprogram.org/verify/?w69571357-20ee-4918-9c86-2887727cd151-36011300](http://www.citiprogram.org/verify/?w69571357-20ee-4918-9c86-2887727cd151-36011300)



Completion Date 24-Aug-2022  
Expiration Date 23-Aug-2025  
Record ID 49526811

This is to certify that:

Christopher Clemons

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

**IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher**

(Curriculum Group)

**IRB # 2 Social and Behavioral Emphasis - AU Personnel**

(Course Learner Group)

**1 - Basic Course**

(Stage)

Under requirements set by:

**Auburn University**



Verify at [www.citiprogram.org/verify/?w5fc560b9-5426-4cb6-aba9-8b3f36450536-49526811](http://www.citiprogram.org/verify/?w5fc560b9-5426-4cb6-aba9-8b3f36450536-49526811)



Completion Date 24-Aug-2022  
Expiration Date 23-Aug-2025  
Record ID 50321242

This is to certify that:

Christopher Clemons

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

**Responsible Conduct of Research**

(Curriculum Group)

**AU Basic RCR Training for ALL Faculty, Staff, Postdocs, and Students**

(Course Learner Group)

**1 - RCR**

(Stage)

Under requirements set by:

**Auburn University**



Verify at [www.citiprogram.org/verify/?wf38edf49-fc87-4885-ac63-912c67eaf0b8-50321242](http://www.citiprogram.org/verify/?wf38edf49-fc87-4885-ac63-912c67eaf0b8-50321242)



Completion Date 24-Aug-2022  
Expiration Date 23-Aug-2025  
Record ID 48743254

This is to certify that:

Christopher Clemons

Has completed the following CITI Program course:

**IRB Additional Modules**

(Curriculum Group)

**Internet Research - SBE**

(Course Learner Group)

**1 - Basic Course**

(Stage)

Not valid for renewal of certification  
through CME.

Under requirements set by:

**Auburn University**

Verify at [www.citiprogram.org/verify/?w9e89b237-a410-4640-9ec0-b961df99c924-48743254](http://www.citiprogram.org/verify/?w9e89b237-a410-4640-9ec0-b961df99c924-48743254)