Perceptions of Soft Skill Development in Secondary Agricultural Education Programs by Agricultural Teachers

by

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Abstract

The research embodying this study replicates the study performed by Mitchell (2008), which explored the essential successes of soft skills in the twenty-first century workforce as perceived by Alabama business/marketing teachers. However, the primary focus of this study was regarding the perceptions that secondary agricultural teachers have on the incorporation of soft skill development within their agricultural/FFA program. Alabama agricultural teachers (N=125) were surveyed at their regional Association of Alabama Agricultural Educators (AAAE) meetings using the Twenty-First Century Workforce Soft Skills Assessment survey (TCWSSA), originally created by Mitchell (2008), providing a 97.6 percent response rate. The fourteen soft skills surveyed were oral communication, general communication, written communication, general ethics, diversity, time management, teamwork, problem solving/critical thinking, organization, leadership, reliability, adaptability, conflict resolution, and business etiquette.

Alabama agricultural teachers had a very high perception of the importance of the integration of soft skills into agricultural curriculums ($M \geq 4.75$). Correspondingly, Alabama agricultural teachers were shown to integrate the same soft skill concepts into either a daily or weekly schedule. Moreover, participating agricultural teachers perceived all 14 soft skill categories to be very important, based on a Likert-type scale of 1: Not Important to 5: Extremely Important ($M \geq 4.22$). The results yielded that the number of years teaching, highest degree held, administrational certification, grade level taught, school location, and type of school

regarding the perceptions of secondary Alabama agricultural teachers on the importance of soft skills for success in the twenty-first century workforce were not statistically significant.

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Chapter I

Introduction

Employers frequently use educational accomplishments as a measurement of workforce preparation and an indicator of job-readiness. However, they often fail to encapsulate the variety of skills that are needed for potential employment (Provasnik & Xie, 2016). The evolutionary route that workforce preparation and development has taken is demanding that twenty-first century employees be competent in both technical skills and interpersonal skills (Winstead, Adams & Sillah, 2009). Technical skills assist an individual in comprehending the extent of assigned tasks (Bin Ajib, 2015), whereas interpersonal skills incorporate qualities such as people skills, and personal attributes that an individual possesses (Robles, 2012).

The skills that once thrived as part of America's workforce have evolved alongside its society. Throughout history, interpersonal skills, or soft skills, have been regarded as less important than the higher esteemed technical skills for many technical disciplines (Bancino & Zevalkink, 2007); however, as a means for businesses to compete in the fast-paced marketplace, they are now more critical than ever before (Bancino & Zevalkink, 2007). Gore's (2013) explanation of the complexity that the twenty-first century workforce is encountering is described as being unlike what the previous century's workforce experienced. Happ (2013) asserted that if employees are seeking to contribute to the workforce they must possess the skillsets of collaboration, communication, creativity, and critical thinking.

The development of soft skills is preconceived to not only equip, but to strengthen personal development, employment success, and participation in learning (Gibb, 2014). Nontechnical (soft) skills that serve as an accompaniment to technical skills increase collaboration and personal productivity (Bancino & Zevalkink, 2007). Sharma (2009) identified soft skills as an umbrella term, by which life and survival skills are demonstrated, such as team skills, negotiation skills, time management, communication skills, interpersonal skills, emotional intelligence, and business etiquette. Sutton (2002) identified soft skills as the number one differentiator for job applicants in all types of industries. Furthermore, according to Sharma (2009), there is a necessity and prerequisite for skills other than those considered hard skills in order to achieve success in the workplace.

With the increment of soft skill attainment at rapid growth in our society, it is essential to understand how and where students attain these skills. Career and Technical Education provides students with opportunities to achieve career preparation and awareness by means of equipping them with the academic and technical knowledge and work-related skills that are requisite for success in postsecondary education, training and employment (United States Department of Education, 2012). Section 3(29) of the Carl D. Perkins Vocational and Technical Education Act of 1998 defined vocational and technical education as

> Organized educational activities that offer a sequence of courses that provides individuals with the academic and technical knowledge and skills the individuals need to prepare for further education and for careers in current or emerging employment sectors; and include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-

solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, of an individual. (Section 112.29(A))

In an effort to compete in the twenty-first century workforce, Career and Technical educators must be aware of what is expected of the students soon to be acquiring those positions. Additionally, with the growing expectations for our future workforce, efforts for equipping hard and soft skill sets in Career and Technical Education programs throughout the United States has intensified. More specifically, the Alabama State Department of Education (ALSDE), which is the only state-level educational agency in the United States to have received certification from the International Organization for Standardization (IOS) for its business/industry certification (BIC) process, uses the BIC certification to certify Career and Technical Education programs for industry compliance (Alabama Career Tech, 2015).

Statement of Problem

Brown and Thakur (2006) stated that the challenges society's youth have encountered are extensive due to disconnect between the nation's employment and educational systems. Furthermore, throughout the United States, businesses are looking for employees who possess softs skills as a supplement to the hard skills needed to successfully fill the position (Ellis & Hackworth, 2014). In accordance, Sharma (2009) discerned that business and industry leaders concur that "soft skills are an indispensable requirement at the workplace and its training must be a part of the curriculum during education" (p. 20).

Expectations rely heavily on educators to adequately train and prepare the workforce of the present and future not only in the hard skills that are needed for employment but also soft skills (Ellis & Hackwork, 2014), which are imperative to workplace success (Sharma, 2009). The research problem being investigated in this study was a determination of the perceptions and

degrees of importance of soft skill integration into the Alabama agricultural curriculum. The concepts, activities, and techniques (measured by the Twenty-First Century Workforce Soft Skills Assessment Survey created by Gina Mitchell, 2008) used by Alabama agricultural teachers to assimilate soft skills specifically identified in the survey will be determined. Additionally, a lack of literature existed in the following soft skill areas: reliability and business etiquette.

Purpose of the Study

In the past, the processes of employment recruitment and selection focused heavily on finding individuals who comprised the desirable technical or domain skills (Kyllonen, 2013). The preconceived notion of workforce preparation has evolved in the twenty-first century in regards to the United States' transition into a knowledge economy, and with it has brought ubiquitous concern that America's young adults are embarking into the workforce without employer recognized interpersonal skills (Cochran & Ferrari, 2009). Redmann and Kotrlik (2004) expressed that although the old way of doing things may be effective, they are not efficient due to the tremendous changes that the twenty-first century workforce has experienced due to technological advances.

The demand for training and development of soft skills is persistently increasing (Adams, 2014). With the numerous requirements set before individuals to be considered college and career ready, competencies such as academic knowledge, technical proficiencies, and a set of general, amalgamating abilities referred to as employability skills may be required (Perkins Collaborative Resource Network, 2015). Therefore, the purpose of this study was to investigate the perceptions that secondary Alabama agricultural teachers have on the attainment of soft skills. With the implementation of hard and soft skills in agricultural programs statewide, Agricultural teachers have the ability and opportunity to drastically impact student attainment

through Career Readiness Indicators (CRI), as well as through the integration of the FFA and Supervised Agricultural Experiences (SAE).

Research Questions

The research questions embodying this study replicate the study performed by Mitchell (2008), which explored the essential successes of soft skills in the twenty-first century workforce as were perceived by Alabama business/marketing teachers. However, the primary focus of this study was regarding the perceptions that secondary agricultural teachers have on the incorporation of soft skill development within their agricultural/FFA program. Therefore, the following research questions were used in this study:

1. To what extent do secondary Alabama agricultural teachers regard the importance of (a) specific soft skills by which to succeed in the twenty-first century workforce and (b) the integration of soft skills into the agricultural education curriculum?
2. Are the perceptions of secondary Alabama agricultural teachers different regarding the importance of soft skills for success in the twenty-first century workforce in the following demographics: (a) number of years teaching, (b) highest degree held, (c) administrational certification, (d) grade level taught, (e) school location, and (f) type of school?
3. Is there a relationship between concepts and techniques that are identified as important by secondary Alabama agricultural teachers and what extent are the concepts and techniques integrated into the agricultural education program?

Definition of Terms

Adaptability: The ability to adapt as a means of meeting modified conditions.

Agricultural Education: A portion of the Career and Technical Education curriculum that prepares students for successful careers as well as providing informed choices concerning global agriculture, food, fiber and natural resource systems (National FFA Organization, 2015).

Business Etiquette: The ability to apply basic social skills in business situations (as defined by TCWSSA Survey; Mitchell, 2008).

Career and Technical Education (CTE): "Organized education activities that— (A) Offer a sequence of courses that— (i) Provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; (ii) Provides technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree; (iii) May include prerequisite courses (other than a remedial course) that meet the requirements of this subparagraph; and (B) Include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual" (Carl D. Perkins Act, 2006).

Career Readiness Indicator: credential/certifications that are made available to all students who are enrolled in a program where career and technical skill proficiencies are aligned with industry-recognized standards (Alabama State Department of Education, 2013).

Conflict Resolution: The ability to facilitate the peaceful ending of conflict (as defined by TCWSSA Survey; Mitchell, 2008).

Diversity: The ability to work with and appreciate differences in others (as defined by TCWSSA Survey; Mitchell, 2008).

General Communication: The ability to communicate with clients, colleagues, and the general public (as defined by TCWSSA Survey; Mitchell, 2008).

General Ethics: The ability to do "the right thing" in business situations (as defined by TCWSSA Survey; Mitchell, 2008).

Hard Skills: The technical knowledge and expertise that is needed for a job (Robles, 2012).

Leadership: The ability to emerge as a leader and effectively leads others (as defined by TCWSSA Survey; Mitchell, 2008).

Organization: The ability to put in order and/or arrange in an orderly way (as defined by TCWSSA Survey; Mitchell, 2008).

Reliability: The ability of a person to perform a required function under stated conditions for a specified period of time.

Soft Skills: Incorporate interpersonal qualities, regarded as people skills, and personal attributes that someone possesses (Robles, 2012).

Teamwork: The ability to work effectively with a group in order to achieve team goals (as defined by TCWSSA Survey; Mitchell, 2008).

Time Management: The ability to effectively manage time and complete tasks within a specified time frame (as defined by TCWSSA Survey; Mitchell, 2008).

Twenty-First Century Workforce: An employed individual who has the expectation to be efficient in technical skills, as well as interpersonal skills.

Workforce Development: The preparation of an individual for obtainment of skill sets that are necessary for employment (Alabama Department of Economic and Community Affairs, 2015).

Written Communication: The ability to write business correspondence like memos, letters, and reports using correct grammar and format (as defined by TCWSSA Survey; Mitchell, 2008).

Limitations

Limitations are a set of conditions that exceed the control of the researcher thereby placing possible restrictions on the conclusions of the study, as well as their implementation to other situations (Mitchell, 2008). This study was limited to agricultural teachers in the state of Alabama, thus limiting the amount of possible survey participants to 300 Agricultural teachers ranging over 67 counties. Further limitations provided in this study include the Agricultural teachers' attendance at their Association of Alabama Agricultural Educators (AAAE) fall 2016 meeting. Accordingly, all agricultural teachers that participated in Association of Alabama Agricultural Educators (AAAE) fall 2016 meeting were given an opportunity to partake in this study; however, agricultural teachers who did not attend were not provided the same opportunity.

Delimitations

The delimitations of this study are set at including only Alabama agricultural teachers at a secondary level who chose to attend their Association of Alabama Agricultural Educators (AAAE) fall 2016 meeting. Due to the delimitations set forth, no generalizations may be formed outside of the population of this study conducted with Alabama agricultural teachers.

Assumptions

The assumption guiding this research is that survey participants will answer all questions within the survey, as well as precisely answering each question as adjudged to their professional abilities.

Organization of the Study

Chapter 1 introduces the study, stating the problem, purpose, research questions, definition of terms, limitations, delimitations, and assumptions. Chapter 2 provides a review of literature related to the study regarding soft skills, career and technical education, and certain legislative acts and amendments. Chapter 3 outlines the procedures used in this study, including the sample, research design, instrumentation, validity and reliability, data collection, and data analysis. The results of the study are presented in Chapter 4. Chapter 5 provides a summary of the findings, conclusions, and recommendations for further research.

Chapter II: Review of Literature

Introduction

Shortly into the twenty-first century, diverse groups began investigating certain skills that would be needed by twenty-first century employees (Lear, Hodge & Schulz, 2014). According to the National Association of Career and Technical Education Consortium (2014), a skills gap has emerged within the United States due to the discrepancy of skills possessed by current employees, or job seekers and the demanded skill sets that employers are seeking. The evolutionary route that workforce preparation and development has taken requires that twenty-first century employees be competent in both technical and interpersonal skills (Winstead, Adams & Sillah, 2009).

Numerous American and international labor economists identify the necessity of the continuation of skill development beyond those required for a particular job (Alston, Cromartie, Wakefield & English, 2009). Furthermore, Alston et al. (2009) discerned that employees would use such skills to exhibit their value to their employers. Although numerous companies may furnish their employees with certain technical skill training that is needed to execute their particular position, there are markedly fewer employers who present such opportunities to enhance employability skill development (Robinson, Garton & Terry, 2007).

Throughout history, interpersonal skills, or soft skills, have been regarded with less significance than the higher esteemed technical skills for many technical disciplines (Bancino & Zevalkink, 2007). Moreover, the development of soft skills is preconceived to not only equip, but

also to strengthen personal development, employment success, and participation in learning (Gibb, 2014). Bancino and Zevalkink (2007) observed that in order for businesses to be able to compete in the fast-paced marketplace, soft skills are more critical now than ever before. Verma and Bedi (2008) described soft skills as personality-specific, which is an active determination of an individual's resilience as a manager, leader, listener, decision maker, negotiator, and conflict manager.

The demand for training and development of soft skills is steadily increasing (Adams, 2014). Therefore, with the increment of soft skill attainment at rapid growth in our society, it is essential to understand how and where students attain these skills. Career and Technical Education provides students with opportunities to achieve career preparation and awareness by means of equipping them with the academic and technical knowledge and work-related skills that are requisite for success in postsecondary education, training and employment (United States Department of Education, 2012). With the numerous requirements set before individuals to be considered college and career ready, competencies such as academic knowledge, technical proficiencies, and a set of general, amalgamating abilities, referred to as employability skills, may be required (Perkins Collaborative Resource Network, 2015).

A study conducted by Alston, Cromartie, Wakefield, and English (2009) surveyed thirty-seven different government and corporate organizations, which surveyed employer concerns regarding interpersonal skills and communication skills. Concerning interpersonal skills, employers discerned dedication and teamwork as extremely important. Moreover, employers deduced the following as being crucial for an employees efficiency: problem solving, leadership, creativity, appearance, etiquette, initiative, decision-making, organizational skills, global awareness, and open-mindedness. Additionally, employers observed understanding instructions,

verbalizing, and listening as vital communication skills. In addition, employers discerned the following skills as very important within the workforce: telephone, creative writing, technical writing, and presentation skills.

Purpose of the Study

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Soft Skills

Oral Communication

Communication skills have long been an issue within industry. Estes (1946) attributes poor communication as one of the primary causes of deficiency within labor management relations. In the twenty-first century workplace, there are increasing expectations of students

entering into the workforce to possess exceptional communication skills (Mitchell, 2008). Lear, Hodge, and Schulz (2014) noted that good communication skills are indispensible when searching for employment and being successful at the job. Furthermore, according to Ortiz, Region-Sebest, and MacDermott (2016), a key competency that is desired by employers is effective oral communication. Coffelt, Baker, and Corey (2016) illustrate oral communication skills as qualities and attributes, which include: public speaking, the ability to lead meetings, and how to negotiate a contract. Correspondingly, other studies have identified oral competencies, such as networking, telephone etiquette, interpersonal communication, persuasion, and collaboration, as pivotal in meeting employer demands and expectations (Ortiz, Region-Sebest & MacDermott, 2016).

A central aspect of economic life is conversation (Stein, 2008). Therefore, communication skills are not only required in numerous job types, but they also serve as the qualifying characteristic of an employee's ability to communicate and cooperate within a company (Wahl, Kaufmann, Eckkrammer, Mense, Gollner, Himmler, Rogner, Bairerl & Slobodian, 2012). Oftentimes, a successful career is contingent upon strong oral communication skills (Lear et al., 2014). Moreover, Ortiz et al. (2016) noted that in order for a graduate to succeed, they must, "effectively engage in such forms of business discourse and execute various types of oral business communication" (p. 321). It is surmised that individuals are granted an interview due to their hard skills; whereas, soft skills help individuals both acquire and maintain their jobs (Robles, 2012). According to Mitchell (2008), there is a continuous need for oral communication skills to be reinforced in order to prepare students for success in the workforce.

Written Communication

According to Kleckner and Marshall (2014), the cost linked to underdeveloped communication skills has evolved into a concern for industrial employers. Despite the immense emphasis associated with communication skills, numerous applicants fail to possess the requisite skills needed for success in the workforce (Mitchell, 2008). Selvalakshmi (2012) asserted that communication skills are a determination of the attitude and altitude of an individual. Therefore, employers need employees who possess basic competencies such as reading, writing, and computation (Tribble, 2009). Lear et al. (2014) associated effective and efficient communication to the skill of being able to communicate a certain thought or idea in such a manner that the recipient understands the intended meaning.

Lear et al. (2014) defined traditional written communication as memos, letters, and reports; however, fewer aspects of business have been as drastically impacted by the implementation of technology as communication, especially written communication (Roach & Anderson, 2007). Written communication technologies include email, instant messaging, text messaging, blogs, and social media, which includes Facebook, Twitter, and LinkedIn (Lear et al., 2014). Verma and Bedi (2008) asserted that skills such as email communications, reports, PowerPoint presentations, and newsletter articles are pivotal when interacting with individuals within the organization. Nevertheless, despite being in a business environment focused on technology, employers still value traditional writing skills (Coffelt et al., 2016). Beason's (2001) research conducted on fourteen business professionals reported the five most common grammatical errors by which they were bothered: (1) fragments, (2) misspellings, (3) word-ending errors, (4) fused sentences, and (5) quotation mark errors. Roman (2006) stated that

individuals are prone to judge one another by their ability to express themselves through both oral and written communication.

General Ethics

Ethics is derived from the Greek term "ethos," which is translated as character, spirit, and attitudes of a certain group of people or culture (Leung & Cooper, 1994). Pelton and True (2004) identified ethics as issues associated with personal character, organizational integrity, and moral leadership that are deemed important in our society. Mitchell (2008) deduced that ethics are embedded within professionalism and are a key component to the success of a business. Within the United States, businesses and industries are subjected to laws and governed by a code of ethical standards (Mitchell, 2008). Hartman (2001) inferred that citizens are coerced to be ethical by implementing deterrents or punishments.

In accordance to Pelton and True's (2004) research, those born between the years of 1977 and 1995, also referred to as Generation Y, compose the largest population of students enrolled in business education in American history; thus, they serve as a portion of the population who will have decision-making roles that pertain to ethical conflicts. Therefore, adhering to their findings, Generation Y is an ethically diverse generation with the potential to change the landscape of the marketplace. Hartman (2001) proposed that our personal perceptions of ourselves, the perceptions of others on us, as well as our perception of the universal law are all influenced from ethical decisions. In relation to academic institutions, businesses, and industries, ethical conduct is a monumental concern causing various strategies to be adopted by administrators and managers in an effort to reduce unethical behavior (McCabe, Trevino & Butterfield, 1996).

Diversity

Despite diversity being used as common terminology in today's current workforce and in managerial positions, the understanding of the term is often misconstrued (Neault & Mondair, 2011). Mitchell (2008) defined diversity as an ability to work alongside and appreciate the differences in others. Moreover, Neault and Mondair (2011) noted the benefits of a diversified workforce as providing access to a multitude of perspectives and providing opportunities to share knowledge and creativity, thus augmenting overall performance and productivity. It is essential for those in leadership and/or managerial positions to acknowledge the growing diversity in the workplace, and the means by which it is evolving (Schmidt, 2009). Each employee has their own, unique life experiences, which they are able to bring to the job (Lein, 2004).

According to Combs (2002), the emerging challenges affiliated with the "effects and interactions of globalization, expanded markets, and changing workforce demographics" (p. 2) employers must be able to harness and utilize the positive influences that occur in differences. Lein (2004) explored the possibility that numerous employers may place a high value on a diversified staff as a better business practice, allowing them to serve a broader range of customers. Furthermore, Toosi (2002) found labor force profiles and projections were created on a decennial basis, ranging from 1950-2050. Findings from her study indicated that changes in the United States' population growth rate and labor force participation rates have generated a steadily increasing labor force that, unlike in 1950, is older, more diversified, and is escalating in the number of women.

Teamwork

For the majority of career pathways, individuals are destined to spend a large amount of time working with other people (Cummings, 2000). Deepa and Seth (2013) noted that although

many organizations do not design team-oriented jobs, in order to successfully carry out the requirements of the job, a reasonable amount of interaction between people within and across the professional field is required. Furthermore, a significant portion of communication encompasses collaboration through teamwork (Lazarus, 2013). Joseph and Sree Sai (2011) marked teamwork as the most powerful element required for accomplishment.

An organization's ability or inability to be skilled at teamwork and construct high performance teams could grant them the competitive edge or cause them failure due (Warrick, 2016). Verma and Bedi (2008) described vital skills for successful teams as unity, sharing, listening, participating, communicating, respecting, protecting rights, and having approachable teammates. Similarly, Warrick (2016) deduced that implementing teamwork could considerably enhance performance, morale, effectiveness, efficiency, job satisfaction, innovative thinking, unity of purpose, communications, quality, and loyalty to an organization and speed in accomplishing tasks. Cooperation with a common goal and purpose is the quintessence of teamwork (Love, 2014). In accordance with interpersonal skills needed for teamwork Love (2014) stated, "Over the past decade with growing demands to do more with less, outsourcing, and the rapidly changing highly interdependent world of collaborative entities and networks, interpersonal skills are critical in the job market where teams are the primary work unit" (p. 36).

Educating and engaging youth on the importance of teamwork is a critical component of positive development and creates an opportunity for them to interact amongst each other (Cater & Jones, 2014). Skills that may be fostered during teamwork include, but are not limited to, interpersonal skills, conflict resolutions techniques, group management practices and group decision-making processes (Cater & Jones, 2014). Moreover, Slavin (2014) describes teamwork

skills that need to be taught as knowing how to encourage and support teammates, how to respectfully disagree, and how to maintain and promote an auspicious attitude within the group.

Time Management

According to Pothukuchi (2008), the working environment has undergone a momentous change due to the globalization and liberalization of the economy, thus creating more pressure on time due to the ever-increasing demands of higher work levels. Verma and Bedi (2008) described time management as the prioritization of an individual's task for the needs of the organization or the needs of the project, followed by an execution of the needs in their descending order of priority. Similarly, Josepth and Sree Sai (2011) illustrated time management as punctuality, meeting deadlines, attendance, and a demonstration of one's professionalism. Furthermore, better execution of time management reduces the amount of time spent on less important tasks (Pothukuchi, 2008).

During Krug's study *People Skills: The Last Time Management Course* (2007), he reported four keys to effective time management. First, effective time management is realizing how your time is spent. Second, terminate items that waste your time. Third, know the necessary task and prioritize them. Finally, speak or interview other individuals who seem extremely productive and who complete tasks on time. According to Pothukuchi (2008) time management skills are trainable; therefore, educators have the opportunity to help students by integrating time management skills into courses (Chaney, 1991). With the implementation of time management into an individual's lifestyle, a greater balance between work and leisure can be achieved, thus resulting in less stress on the individual (Pothukuchi, 2008).

Reliability

In the twenty-first century workforce, effective working patterns are directly proportional to individuals excelling in their job performance (Joseph & Sree Sai, 2011). Irlbeck and Akers (2009) studied maturity, reliability, professionalism, self-motivation, work ethic, common sense, ease to work with, trainability, creativity, organization, and trustworthiness as desirable workplace habits. Their findings indicated that national agricultural communication industry organizations ranked reliability the third highest desirable workplace habit. Employees who are unreliable are associated with certain undesirable behaviors, which include, but are not limited to, drug and alcohol abuse, theft, lying, insubordination, vandalism, sabotage, absenteeism, and assaultive actions (Hogan & Hogan, 1989).

Leadership

In our global society, there has been a rising need to be able to describe and comprehend the necessity of leadership (Smalley, Retallick, Metzger & Greiman, 2016). However, despite the acceptance of certain traits such as wisdom, compassion, and high energy levels, there fails to be a universally accepted definition of leadership (Lazarus, 2013). Nor is there an agreement on the most effective style (Lazarus, 2013). Likewise, Moore, Odom and Moore (2013) compared the definition of leadership to the human race in the sense that it is unique, differing in culture and country, background and gender.

According to Beebe, Mottet and Roach (2004), leadership and communication skills are essential soft skills that are valued within the workplace. Furthermore, Brungartdt (2011) noted that an employee seeking to accomplish a certain goal or to promote positive changes must rely on the relational procedure of leadership. Brungardt (2011) would also acknowledge that education concentrates on the development of soft skills such as leadership, which is a

component of relationships amongst human interaction that is required to achieve positive outcomes. One such component of education seeking to promote personal growth and the enhancement of leadership skills among youth is the FFA (Ahrens, Cox, Burris & Dykes, 2015).

In accordance to Hoover, Scholl, Dungian and Mamontova (2007), the historical significance of leadership and curriculum development was evident prior to the commencement of our nation's youth organizations. A central reason in the development of youth organizations, such as the FFA and 4-H, was to develop leaders (McElravy & Hastings, 2014). Moreover, the foundational mission and vision of these organizations are not only to promote agriculturally related knowledge, but also leadership development (Hoover, Scholl, Dunigan & Mamontova, 2007). Research conducted on leadership development in the FFA is constructed from its implementation of traditional skill development, as well as leadership roles within FFA chapters (Rosch, Simonsen & Velez, 2015). Therefore, due to the prodigious membership of the FFA, it is able to offer nonpareil opportunities for leadership development (Rosch, Simonsen & Velez, 2015).

Business Etiquette

Schaffer and Kelley (1993) defined business etiquette as required or acceptable behaviors, manners, and protocols that are prominent by propriety in a business or profession. Mitchell (2008) expounded business etiquette as the ability to apply basic social skills in business situations. Proper business etiquette on the job site is extremely important (McPherson, 1998). Lazarus (2013) identifies etiquette as "behavior by delineating expectations for appropriate social behavior in contemporary society" (p. 42). Mausehund, Dortch, Brown, and Bridges (1995) identified business etiquette as a soft communication skill and a professional protocol.

Career and Technical Education

The One Hundred and Ninth Congress of the United States defined Career and Technical Education in the Carl D. Perkins Act of 2006 as,

> Organized education activities that— (A) Offer a sequence of courses that— (i) Provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; (ii) Provides technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree; and (iii) May include prerequisite courses (other than a remedial course) that meet the requirements of this subparagraph; and (B) Include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual. (S—250-4)

Career and technical education provides employability and scholastic skills that place a higher emphasis on technical and occupational skills, which are considered foundational and transferable within the twenty-first century economy (National Association of State Directors of Career Technical Education Consortium, 2014). Career and technical education programs are offered at the secondary, post secondary and adult levels at a multitude of settings, such as career academies, regional technical centers, technical high schools, technical and community colleges, and comprehensive high schools (National Association of State Directors of Career Technical Education Consortium, 2013). Nationally, an estimated 12.5 million secondary and post

secondary students are enrolled in career and technical education programs (Career Tech, 2017). In addition, in 2014 the graduation rate for career and technical education concentrators amongst high school graduates was almost 90 percent, placing the career and technical education graduation rate 15 percent higher than the national average (Career Tech, 2017).

More specifically, Alabama has an increasing number of high school students who are obtaining specialized career-related credentials (Alabama State Department of Education, 2013a). In 2013, 461,000 Alabama high school students, which were approximately two out of every three high school students, participated in a career and technical education program (Alabama State Department of Education, 2013a). Furthermore, the Alabama State Department of Education (2013a) defined career and technical education programs within the state as, "a rigorous, progressive, and vital part of the total educational system, which is committed to providing students with rewarding opportunities to learn valuable career and life skills" (p. 1). Moreover, career and technical education programs incorporate problem-solving skills and job specific skill sets, which are extracted from its competency-based applied learning, as a means to accommodate business and industry needs within the state of Alabama (Alabama Community College System, 2016b). Nationally, the Alabama State Department of Education is the only state-level educational agency to have received a certification from the International Organization for Standardization (IOS) for its implementation of the business/industry certification (BIC) process, which is used as a means to certify Alabama's Career and Technical Education programs for industry compliance (Alabama Career Tech, 2015). Recent state investments into the Alabama's Career and Technical Education included a $50 million bond, which was utilized for aligning Career and Technical Education equipment for the twenty-first century industry credentialing standards (Association for Career and Technical Education, 2016).

With the focus set forth by Plan 2020, Alabama's Career and Technical Education has begun utilizing the National Career Cluster Model within its sixteen Career Clusters in an effort to provide an easier transition from secondary to post-secondary education, as well as to eradicate coursework duplication (Career Tech, i.e). Moreover, students are assisted in selecting a program of study that is academically and technically challenging, which will provide the students with post-secondary educational opportunities and/or an entrance into a high-skill, high-demand, and high-wage occupation (Career Tech, i.e). Alabama's sixteen Career Clusters include: (1) Agriculture, Food and Natural Resources, (2) Architecture and Construction, (3) Arts, A/V Technology and Communications, (4) Business Management and Administration, (5) Education and Training, (6) Finance, (7) Government and Public Administration, (8) Health Science, (9) Hospitality and Tourism, (10) Human Services, (11) Information Technology, (12) Law, Public Safety, Corrections and Security, (13) Manufacturing, (14) Marketing, (15) Science, Technology, Engineering and Mathematics, and (16) Transportation, Distribution and Logistics (Career Tech, i.e).

FFA

Agricultural education is grounded on a three-circle integrated model: (1) instruction, (2) Supervised Agricultural Experiences (SAEs), and (3) the participation in an agricultural youth organization such as the National FFA Organization, National Young Farmer Educational Association, and National Post-Secondary Agricultural Student Organization (Ahrens, Cox, Burris & Dykes, 2015; National FFA Organization, n.d.). Agricultural educators provide students with real-life scenarios that provide students with an opportunity to apply knowledge acquired in the classroom (Fristoe, 2017). Croom (2008) noted that FFA programs are designed to promote stronger academic performance for students. Furthermore, through the FFA students are

provided an opportunity to improve their leadership ability, personal communication skills, and personal work habits (Croom, Moore & Armbruster, 2009). In addition to the promotion of personal growth and leadership development, collegiate experiences are enhanced through participation in the FFA (Ahrens, Cox, Burris & Dykes, 2015).

According to Hughes and Barrick (1993) the classroom and laboratory component of the FFA enable students to learn technical competencies, as well as providing students an opportunity to participate in learning activities that promote agricultural literacy, leadership abilities, and personal qualities. FFA assists students entering the workforce by its ability to provide personal and professional development (Croom, Moore & Armbruster, 2009). Students enrolled in agricultural education courses can participate in SAEs, which may otherwise be known as independent learning programs or work based experiences (Croom, 2008; Ramsey & Edwards, 2012). Moreover, the students' experience in the SAE component of the three-circle integrated model is what separates it from other programs or subjects in numerous secondary schools (Ramsey & Edwards, 2012).

Croom et al. (2009) noted that students participating in agricultural education learn skills that are related to specific occupations, thereby enhancing their technical literacy based off of their exposure to the general notion of business and industry. Croom et al. (2009) study of student participation in national career development events, consisting of 2,145 survey participants, concluded that the most significant reason as to why agricultural students participated in national FFA career development events was to learn skills that could potentially translate into a career option after high school graduation. Furthermore, concepts that are taught nationwide in agricultural education programs allow FFA members to construct beneficial dexterity through experimental learning and provide them with an opportunity to display their

competence of their trade through competitions (National FFA Organization, 2015).

School and Industry Relationship

The establishment of a partnership between education and industry has gained considerable support from leaders in both professions (Joerger & Andreasen, 2000). Furthermore, as a means to counter the opposition of an unprepared or unqualified workforce, educational facilities and private sectors are in some circumstances combatting the issue by working together to produce and instill the qualities that they are seeking in an employee (Bevins, Carter, Jones, Moye & Ritz, 2012). Correspondingly, Bancino and Zevalkink (2007) noted that there are three forces driving the demand for broader skill sets from technical professionals: (1) the necessity for improvements to the bottom line, (2) increasing competition, and (3) globalization. The Alabama State Department of Education (2013) acknowledged that American students must be provided with a more diverse educational experience in career-related areas in order to remain competitive in the growing world economy. According to Carnevale, Gainer, and Villet (1990), the economic role of schools is vital in the sense that the students produced within our school systems can contribute to their communities. Carnevale et al. (1990) charge schools with the duty of, "husbanding and disseminating knowledge" (p. 4) that will ostensibly create the next generation of jobs and employers.

High-quality programs cannot be delivered within career and technical education without consequential partnerships with employers (National Association of State Directors of Career and Technical Education Consortium, 2014). Additionally, the partnerships developed ensure the alignment of those programs with the needs of industry (National Association of State Directors of Career and Technical Education Consortium, 2014). The Alabama State Department of Education Division of Career and Technical Education/Workforce Development has provided

any student who is enrolled in a career and technical education program which has a succession of courses that are aligned with a local, state, or a national third-party credentialing agency, an opportunity to obtain a program credential, certification, or license (Alabama State Department of Education, 2016). Such programs are more strictly defined by the Alabama State Department of Education as Career Readiness Indicators, which are grouped into two categories: Stackable Credentials and Career Readiness Indicators (Alabama State Department of Education, 2016). Credentials are certifications that reflect a student's mastery of knowledge and/or skills associated with a particular component of a career and technical education program (Alabama State Department of Education, 2016). In addition, it could eventually lead to an obtainment of a CRI (Alabama State Department of Education, 2016). Nevertheless, a standalone Stackable Credential does not provide evidence that the individual possesses the minimum skills necessary for entry-level employment (Alabama State Department of Education, 2016).

Joerger and Andreason (2000) indicated that the goal of vocational educators has long been obtaining employment for the students in their vocational programs. Deepa and Seth's (2013) study recognized that corporations are now identifying soft skills as a crucial skill at the workplace, as well as that soft skill training is a necessity in the educational curriculum. Similarly, employers rely on educators for teaching future employees skill sets, such as reading, writing and arithmetic, decision making, problem-solving, thinking through a job from start to finish, and how to complete a job with and through other people (Carnevale et al. 1990). The more soft skills are integrated directly into technical programs, the greater the opportunities for students' success and transition into the increasingly demanding, global economy (Bancino & Zevalkink, 2007).

Dual Enrollment

Dual enrollment occurs when a student who is enrolled in credit courses at a secondary institution takes one or more courses at a post-secondary institution during the same term (Ganzert, 2014). To receive credit through dual enrollment, students are allowed to attend public, private and parochial or church/religious schools in conformance to §16-28-1 of Code of Alabama 1975 or are students that are receiving home school instruction/private tutor in conformance with §16-28-5 of the Code of Alabama (Alabama Community College System, 2016c). Furthermore, the State Board of Education Policy 801.03 and 801.04 are responsible for awarding dual enrollment credit in career and technical courses (Alabama Community College System, 2016c). It has been believed for an extended period of time that dual enrollment programs between secondary and post-secondary educational institutions have a positive impact on the educational success of students (Wang, Chan, Phelps & Washbon, 2015). Therefore, this liaison between secondary and post-secondary institutions establishes a smoother pathway for participating students, while also decreasing the fragmentation of the two sectors (Karp, 2015).

According to the Alabama Community College System's "*Dual Enrollment for Dual Credit: Best Practices Handbook"* (2016a), the dual enrollment program has three main objectives: (1) Provide greater opportunities for students in meeting "rigorous educational and career objectives" (p. 4), (2) Provide the opportunity for students whose high schools "have limited curriculum offerings and/or are geographically isolated" (p. 4) an opportunity to have equal learning experiences, and (3) Provide administrators with flexibility. At its core, dual enrollment requires close collaboration between high schools and colleges (Karp, 2015). Furthermore, dual enrollment has now expanded to include college courses for students seeking to enter technical education programs, as well as those who are seeking to enter the workplace

(Wang, Chan, Phelps & Washbon, 2015). Student eligibility is based on the guidelines set forth by Alabama Community College System (Alabama Community College System, 2016a). It requires that the students must maintain a cumulative grade point average of 2.5, as well as be in grade levels 10th, 11th, or 12th (Alabama Community College System, 2016a). Alabama's dual enrollment programs include all of the two-year colleges in the state, with the exception of Ingram State Technical College and Marion Military Institute (Alabama Community College System, 2016e).

The Alabama Future Workforce Initiative was established in 2014 with the task of filling the unmet workforce needs of Alabama's employers (Alabama Community College System, 2016c). One such task was the creation of scholarships for students to enroll in dual enrollment courses in career and technical education programs (Alabama Community College System, 2016c); moreover, the Alabama Future Workforce Initiative has the potential of creating up to $10 million in annual scholarship funds for students to participate in the Career-Technical Education Dual Enrollment Program (Alabama Community College System, 2016c). The initiative provides Alabama's students with an opportunity to obtain high school credits and college credits, of which the college courses have also been approved at 23 of the state's community colleges (Alabama Community College System, 2016d). In addition, the benefits of the Alabama Future Workforce Initiative include providing the state with well-trained employees for fields such as business, agribusiness, agriscience, manufacturing, production, automotive assembly, mechanical production, and numerous other vocations requiring highly skilled employees (Alabama Community College System, 2016d).

Career Readiness Indicators

The Alabama State Department of Education (2016a) defines a Career Readiness Indicator (CRI) as a "Credential/Certification made available to all students enrolled in a program where career and technical skill proficiencies are aligned with industry-recognized standards" (p. 1). The credential/certification achieved on behalf of the student provides evidence that the individual possesses the minimum skills necessary for entry-level employment (Alabama State Department of Education, 2016a). Furthermore, any student who is enrolled in a Career and Technical Education program, which has a succession of courses that are aligned with a local, state, or national third-party credentialing agency to obtain a program credential, certification, or license are made available and offered (Alabama State Department of Education, 2016a).

The 2016-2017 Alabama State Department of Education CRI lists are grouped into two categories: Stackable Credentials and Career Readiness Indicators. Stackable Credentials are certifications that reflect a student's mastery of knowledge and/or skills associated with a particular component of a Career and Technical Education program and may eventually lead to an obtainment of a CRI (Alabama State Department of Education, 2016a). Nevertheless, a stand alone Stackable Credential does not provide evidence that the individual possesses the minimum skills necessary for entry-level employment (Alabama State Department of Education, 2016a).

The 2016-2017 Alabama State Department of Education's Stackable Credentials in the Alabama Agriculture and Natural Resource Pathway include: Alabama Junior Master Gardener, Hazardous Occupations Safety and Training in Agriculture, Hunter Education, Artificial Insemination Technician, OSHA 10 Hour, NCCER Core (one or more modules), Canine Care and Training Program, and Alabama Water Watch Credential (Alabama State Department of Education, 2016a). The 2016-2017 Alabama State Department of Education's Career Readiness

Indicators in the Alabama Agriculture and Natural Resource Pathway include: Forestry Worker Certification, Integrated Pest Management Certification, Briggs and Stratton Technician, Beef Quality Assurance, Pork Quality Assurance, Turf Grass Management Certification, Landscape Design and Plant Materials Certification, and NCCER Core (all modules) (Alabama State Department of Education, 2016). In an effort to determine if a CRI is rigorous and has remained pertinent to Alabama's industries, the Career Readiness Indicator Review Panel annually meets to review each current and all proposed CRIs, deciding if they should maintain their eligibility (Alabama State Department of Education, 2015).

Appropriate CRIs for each program must coincide with community needs, as well as employment possibilities in the area for students pre- and post-graduation. Career and Technical Directors are responsible for ensuring that each program has a measurable method for determining student readiness prior to examinations in order to maintain a high rate of student success (Alabama State Department of Education, 2016a). Additionally, acquired CRI's are recorded on the students' transcripts (Alabama State Department of Education, 2016a).

Plan 2020

Upon the waiver from the United States Department of Education to remove Alabama from the requirements of the No Child Left Behind Act of 2001, Alabama education officials, with the support of the Alabama State Board of Education, developed Alabama's Plan 2020 (United States Department of Education, 2012; Alabama State Department of Education, 2013b). Consequent to its implementation in 2012, the Alabama State Department of Education outlined Plan 2020 as being an eight-year plan (Maples, 2016). Under Plan 2020, students are evaluated by subgroups as a means to accurately assess their educational achievements, which was also completed during No Child Left Behind (Alabama State Department of Education, 2013b).

Nonetheless, unlike No Child Left Behind which expected all subgroups to achieve the set arbitrary goal at the same time or fail, Plan 2020 provides annual measurable objectives for subgroup's that are realistic, acknowledge growth, and also address each subgroups specific needs (Alabama State Department of Education, 2013b). It was strategically designed as a specific tool for measuring the performances of Alabama's public schools (United States Department of Education, 2012; Alabama State Department of Education, 2013b). Furthermore, a new element was added to school requirements and student learning with the adoption of Plan 2020 (Maples, 2016).

Plan 2020 defined a prepared graduate in two criteria. First, a prepared graduate "possesses the knowledge and skills needed to enroll and succeed in credit-bearing, first-year courses at a two- or four-year college, trade school, technical school, without the need for remediation" (Alabama State Department of Education, 2016b, p. 3). Second, a prepared graduate "possesses the ability to apply core academic skills to real-world situations through collaboration with peers in problem solving, precision, and punctuality in delivery of a product, and has a desire to be a life-long learner" (Alabama State Department of Education, 2016b, p. 3). The four key focus areas of Plan 2020 included: (1) Learners, (2) Support Systems, (3) Professionals, and (4) Schools and Systems (Alabama State Department of Education, 2016b). Furthermore, Plan 2020 is comprised of four overall goals: (1) Closing achievement gaps between student populations, (2) Increasing the graduation rate for all students, (3) All students perform at or above proficiency and show continuous improvement, and (4) Making sure that Alabama students are prepared upon graduation for entering college or a career (Alabama State Department of Education, 2013b; Maples, 2016).

Morrill Act 1862

President Abraham Lincoln signed into law the Morrill Act on July 2, 1862 (Library of Congress, 2015). Furthermore, the Morrill Act of 1862, led by Congressman Justin Morrill of Vermont, established the first legislation passed by Congress that enabled agriculture to be studied as a science (Nolin, 2011). Prior to the Morrill Act, education and farming techniques had virtually plateaued, which would be one of the contributing factors leading up to the birth of agricultural education through the ratification of the Morrill Act (Nolin, 2011). In accordance with the provisions provided by the Morrill Act of 1862, each state was provided with 30,000 acres of federal land for every member of the Congressional delegation (Library of Congress, 2015). Consequently, each state sold the land and used the proceeds as a means of funding for public colleges, whose primary focus would be agriculture and mechanical arts (Herren, 2002;Library of Congress, 2015). According to Nolin (2011), these land grant institutions were "charged with developing better methods and techniques for raising crops and animals for human consumption" (p. 13).

Smith Hughes Act 1917

In 1917, Congress passed the Smith-Hughes National Vocational Educational Act in an effort to create funding for vocational programs in secondary public schools, as a means to fulfill skilled workforce demands produced by industrial leaders (Hoover et al., 2007; Fristoe, 2017). In 1917-1918 the Smith-Hughes National Vocational Educational Act appropriated $1.7 million (Friedel, 2011). Additionally, the Federal Board for Vocational Education was created in order to enforce the law and approve state plans (Friedel, 2011). Friedel (2011) noted that the act provided the following annual appropriations: (1) vocational education teacher and director salaries, of which is funded 50 percent by federal funds and 50 percent by the state, (2)

preparation of teachers in the fields of agriculture, home economics, and trade/industry, and (3) support of the Federal Board for Vocational Education activities. Federal funds could be spent on teachers of agriculture, home economics, and trade/industry, but could not be used for academic teacher salaries (Friedel, 2011).

In response to the act, enrollment grew quickly in vocational education programs (Friedel, 2011). According to Nolin (2011), the primary topic of debate amongst educational leaders of the time was how the vocational schools should be setup and which could curriculums they should offer. Friedel (2011) noted that

> The state plans were not intended to be strategic nor were they intended to be responsive to labor market needs or to state priorities. State plans were intended to demonstrate the state's compliance with the federal requirements regarding: the kinds of programs to be supported with the federal funds; the kinds of schools; equipment; courses of study; methods of instruction; qualifications of teachers; and their plans for vocational training. The state plans were submitted for approval to the Federal Board for Vocational Education. (p. 39)

Regarding the impact that the Smith-Hughes Act had Friedel (2011) also noted the provisions established by the act instituted "separate boards for vocational education, the separation of vocational funds, segregation of the vocational curriculum, segregation of vocational education students, separate teacher training and professional development, and separate student organizations" (p. 40), which would all be included in future educational reforms.

Carl D. Perkins Act of 1984

The Carl D. Perkins Act of 1984 amended the Vocational Education Act of 1963 as a means of strengthening the economical foundation of the United States, reducing structural

unemployment, increasing productivity, and assisting each state in providing high-quality vocational education programs (98th Congress, 2004). Additionally, it was the purpose of the Act to

> Assure that individuals who are inadequately served under vocational education programs are assured access to quality vocational education programs, especially individuals who are disadvantaged, who are handicapped, men and women who are entering nontraditional occupations, adults who are in need of training and retraining, individuals who are single parents or homemakers, individuals with limited English proficiency, and individuals who are incarcerate in correctional institutions. (98th Congress, 2004; Section 2)

Carl D. Perkins Vocational And Applied Technology Education Act of 1990

The Carl D. Perkins Vocational and Applied Technology Act of 1990 (Perkins II) amended the Carl D. Perkins Act of 1984 (101st Congress, 1990). The Act created a new era of student workforce preparation (Finch & Crunkilton, 1999). Furthermore, the premise of the Act inferred that "the United States is falling behind other nations in its ability to compete in the global marketplace" (Finch & Crunkilton, 1999, p.8). The purpose of the Carl D. Perkins Vocational and Applied Technology Act of 1990 was

> To make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population. This purpose will principally be achieved through concentrating resources on improving educational programs leading to academic and occupational skill competencies needed to work in a technologically advanced society. (101st Congress, 1990; Section 2)

Carl D. Perkins Career and Technical Education Amendments of 1998

The Carl D. Perkins Vocational and Applied Technology Amendment of 1998 restructured and reformed the Carl D. Perkins Vocational and Applied Technology Act of 1990 (United States Department of Education, 2003). In 2002, the state appropriations resulting from Perkins totaled $1.228 billion, of which allocated $1.18 billion for state basic grants and $108 million for Tech Prep (United States Department of Education, 2002). The purpose of the Amendment was to enhance the academic, vocational, and technical skills of secondary and post-secondary students seeking to enter into vocational and technical education programs (105th Congress Public Law 332, 1998) by

> (1) Building on the efforts of States and localities to develop challenging academic standards; (2) Promoting the development of services and activities that integrate academic, vocational, and technical instruction, and that link secondary and postsecondary education for participating vocational and technical education students; (3) Increasing State and local flexibility in providing services and activities designed to develop, implement, and improve vocational and technical education, including tech-prep education; and (4) Disseminating national research, and providing professional development and technical assistance, that will improve vocational and technical education programs, services, and activities. (105th Congress Public Law 332, 1998; Section 2)

Carl D. Perkins Career and Technical Education Act 2006

On August 12, 2006 President George W. Bush signed into law the Carl D. Perkins CTE Improvement Act, also known as Perkins IV, which was a reauthorization of the Carl D. Perkins Act of 1998 (Threeton, 2007; 109th Congress, 2006). The intention of the Carl D. Perkins CTE

Improvement Act was enhancing the emphasis on responsiveness to the economy, in addition to addressing and constricting accountability of integrating academics and technical standards (Threeton, 2007). Intensified emphases were placed on academic standards within career and technical education with the reauthorization of the Carl D. Perkins Act in 2006 (Nolin, 2011). Moreover, career and technical education was shifted into a new direction due to legislation mandating the integration of academics (Nolin, 2011).

> Section 2 of the Carl D. Perkins Career and Technical Education Act of 2006 defined its purpose as developing "more fully the academic and career and technical skills of secondary education students and postsecondary education students who elect to enroll in career and technical education programs, by—(1) building on the efforts of States and localities to develop challenging academic and technical standards and to assist students in meeting such standards, including preparation for high skill, high wage, or high demand occupations in current or emerging professions; (2) promoting the development of services and activities that integrate rigorous and challenging academic and career and technical instruction, and that link secondary education and postsecondary education for participating career and technical education students; (3) increasing State and local flexibility in providing services and activities designed to develop, implement, and improve career and technical education, including tech prep education; (4) conducting and disseminating national research and disseminating information on best practices that improve career and technical education programs, services, and activities; (5) providing technical assistance that—(A) promotes leadership, initial preparation, and professional development at the State

> and local levels; and (B) improves the quality of career and technical education teachers, faculty, administrators, and counselors; (6) supporting partnerships among secondary schools, post-secondary institutions, baccalaureate degree granting institutions, area career and technical education schools, local workforce investment boards, business and industry, and intermediaries; and (7) providing individuals with opportunities throughout their lifetimes to develop, in conjunction with other education and training programs, the knowledge and skills needed to keep the United States competitive. (S250-2)

An additional aspect of the Carl D. Perkins Act of 2006 was the change from the term Vocational Education to Career and Technical Education (Threeton, 2007). A requirement of the Carl D. Perkins Career and Technical Education Act of 2006 was for states to report on students' academic and technical achievement (Career Tech, 2013); however, it prohibits interference from the federal government from requiring any state to adopt a certain set of career and technical or academic standards (Career Tech, 2013). Furthermore, through Perkins IV all states and local eligible recipients are required to implement a minimum of one program of study, which is intended to align standards for the transition of students from secondary to postsecondary institutions (Career Tech, 2013). In an effort to prepare students for high-skill and high-wage occupations, the legislation from the Perkins IV mandated the integration of academic and career and technical instruction (Threeton, 2007).

Summary

Soft skills are a significant aspect of the twenty-first century workforce. Industrial leaders have acknowledged the necessity of soft skill training and are progressively investing in soft skill training programs (Charoensap-Kelly, Broussard, Lindsly & Troy, 2016). Alston et al. (2009)

portrayed soft skills as a necessity for workplace success at any employment level and for every educational platform. The evolutionary route that workforce preparation and development have taken is demanding that twenty-first century employees be competent in both technical skills and interpersonal skills (Winstead, Adams & Sillah, 2009).

Hard skills, or technical skills, were historically what were required for employment (James & James, 2004). Robles (2012) described hard skills as certain skills that can be learned and enhanced over time. Furthermore, Deepa and Seth (2013) defined hard skills as technical competencies and domain knowledge. In comparison, soft skills are commonly referred to as life skills or behavioral skills, which are, in essence, people skills (Verma & Bedi, 2008). Robles (2012) identified soft skills as transferrable skills in many employment settings. Similarly, soft skills are essentially a combination of people skills, communication skills, interpersonal skills, and emotional intelligence (Deepa & Seth, 2013). In a study conducted by the Partnership for 21st Century Skills and three other organizations, 400 employers were surveyed across various locations in the United States regarding the readiness of high school and college graduates upon entering the twenty-first century workforce (DiMartino & Castaneda, 2007). The results yielded that the skills needed most by new employee entrants are: oral and written communication, time management, critical thinking, personal accountability, problem solving, and the ability to work alongside peers (DiMartino & Castaneda, 2007).

The literature supports the notion that soft skills are a critical component deeply indebted to the success of employees seeking to enter the twenty-first century workforce. It has been identified within this literature that students are provided with an opportunity to obtain and/or enhance various soft skill capabilities such as oral and written communication, general ethics, diversity, teamwork, time management, reliability, leadership, and business etiquette through

career and technical education courses. Turner (2000) noted that the real world concern for students entering the workplace is what they alone bring to the table. Furthermore, the workplace is evolving so educators, trainers, employees and students must evolve alongside of it.

Chapter III: Methods

Introduction

This chapter will address the purpose of the study, research questions, sample, instrumentation, research design, data collection, and data analysis used to conduct and conclude the data.

Purpose of the Study

In the past, the processes of employment recruitment and selection focused heavily on finding individuals who comprised the desirable technical or domain skills (Kyllonen, 2013). The preconceived notion of workforce preparation has evolved in the twenty-first century in regards to the United States' transition into a knowledge economy, and with it has brought ubiquitous concern that America's young adults are embarking into the workforce without employer recognized interpersonal skills (Cochran & Ferrari, 2009). Redmann and Kotrlik (2004) expressed that although the old way of doing things may be effective, they are not efficient due to the tremendous changes that the twenty-first century workforce has experienced due to technological advances.

The demand for training and development of soft skills is persistently increasing (Adams, 2014). With the numerous requirements set before individuals to be considered college and career ready, competencies such as academic knowledge, technical proficiencies, and a set of general, amalgamating abilities referred to as employability skills may be required (Perkins Collaborative Resource Network, 2015). Therefore, the purpose of this study was to investigate

the perceptions that secondary Alabama agricultural teachers have on the attainment of soft skills. With the implementation of hard and soft skills in agricultural programs statewide, Agricultural teachers have the ability and opportunity to drastically impact student attainment through Career Readiness Indicators (CRI), as well as through the integration of the FFA and Supervised Agricultural Experiences (SAE).

Research Questions

The research questions embodying this study replicate the study performed by Mitchell (2008), which explored the essential successes of soft skills in the twenty-first century workforce as were perceived by Alabama business/marketing teachers. However, the primary focus of this study was regarding the perceptions that secondary agricultural teachers have on the incorporation of soft skill development within their agricultural/FFA program. Therefore, the following research questions were used in this study:

1. To what extent do secondary Alabama agricultural teachers regard the importance of (a) specific soft skills by which to succeed in the twenty-first century workforce and (b) the integration of soft skills into the agricultural education curriculum?
2. Are the perceptions of secondary Alabama agricultural teachers different regarding the importance of soft skills for success in the twenty-first century workforce in the following demographics: (a) number of years teaching, (b) highest degree held, (c) administrational certification, (d) grade level taught, (e) school location, and (f) type of school?
3. Is there a relationship between concepts and techniques that are identified as important by secondary Alabama agricultural teachers and what extent are the concepts and techniques integrated into the agricultural education program?

Sample

Alabama agricultural teachers were the population of focus for this study. Moreover, the Alabama agricultural teachers who attended their district fall 2016 Association of Alabama Agricultural Educators (AAAE) meetings were the sample used in the survey distribution. The North, Central, and South FFA districts participated during their designated AAAE meeting dates. Each district held three different meetings in specified locations within the district to accommodate attendees who travel from various locations.

Each attendee was provided with an opportunity to participate in the study. A survey was provided to each agricultural educator who attended their designated AAAE meeting. There was a combined 128 attendees in the seven out of nine AAAE meetings that were attended by the researcher. In addition, 125 of the distributed 128 surveys were completed.

Research Design

A quantitative research design was administered, which surveyed secondary Alabama agricultural educators regarding their perceptions on the attainment of soft skills within their curriculum. Wiersma and Jurs (2009) described quantitative research as having an emphasis on facts, relationships, and causes. According to Arghode (2012), a goal of the quantitative researcher is to prove or disprove their hypothesis, which is accomplished by acquiring a sizeable response from participants. Furthermore, a quantitative researcher should seek "to quantify the participant responses and subsequently interpret them to make good decisions" (Arghode, 2012; p. 156).

The researcher used a quasi-experimental research design to collect data. The only agricultural teachers who were surveyed were those in attendance at their regional fall AAAE meeting. Wiersma and Jurs (2009) defined quasi-experimental research as the use of preexisting

subjects in an experiment as opposed to assigning subjects randomly to experimental treatments. Additionally, Wiersma and Jurs (2009) identified complications that researchers could encounter when examining the validity of quasi-experimental research as "limitations should be clearly identified, the equivalence of the groups should be discussed, and possible representativeness and generalizability should be argued on a logical basis" (p. 166).

The survey implemented in this research was the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which was originally created by Mitchell (2008). Modifications were made to direct the survey towards agricultural teachers rather than business teachers; nonetheless, both curriculums are a part of career and technical education. Hard copy surveys were distributed at the fall 2016 AAAE meetings, of which seven of nine regional meetings were attended.

Instrumentation

Data was collected using a research-designed survey that was originally designed by Dr. Geana W. Mitchell (2008), entitled Twenty-First Century Workforce Soft Skills Assessment (TCWSSA). Dr. Geana W. Mitchell was contacted through email for her permission to use the TCWSSA (Appendix 2). Moreover, this survey instrument was modified to accommodate this study, which surveyed perceptions of soft skill development in agricultural programs by Alabama agricultural educators. The TCWSSA is composed of five sections: Section 1: Demographic and Teacher Background- comprised of demographic and teacher background data; Section 2: Importance of Soft Skills- disclosed data of which soft skills teachers perceived to be the most important to their program; Section 3: Teaching Concepts and Teaching Activities- disclosed the frequency that soft skill concepts and activities are utilized; Section 4: Integration- disclosed the teachers perception of the importance of the integration of each soft

skill within their program; and Section 5: Open-ended Questions- survey participants had the opportunity to list any concepts, methods, or techniques used to integrate soft skills that were not acknowledged in the survey, list any other soft skills that they felt are essential to their agricultural program, as well as recognizing if they have ever had any soft skills training.

Section 1 of the TCWSSA identified how many years of teaching experience the participant had, the highest degree held, whether or not the participant had their administration certificate, what type of school, what grades are taught, and a list of the current classes being taught by the participant. Section 2 and 4 of the survey instrument consisted of a five-point Likert-type scale. Moreover, the participants were asked to assign a value concerning the importance of soft skills: (5) Extremely Important to (1) Not Important. The soft skills being measured are: Oral Communication, General Communication, Written Communication, General Ethics, Diversity, Time Management, Teamwork, Problem Solving/Critical Thinking, Organization, Leadership, Reliability, Adaptability, Conflict Resolution, and Business Etiquette. In Section 3 of the survey instrument the participants were asked to rate the frequency that they integrated soft skill concepts and activities: (1) Daily, (2) Weekly, (3) Periodically, and (4) Never.

Validity and Reliability

The basis of the items embedded within the survey are derived from the TCWSSA originally created by Mitchell (2008) and the review of literature conducted by the researcher. The review of literature was focused upon the areas of oral communication, written communication, general ethics, diversity, time management, teamwork, problem solving/critical thinking, organization, leadership, adaptability, conflict resolution, and business etiquette, in addition to various federal and state legislations. Directions were clearly stated in each of the five

sections in order to facilitate responses. A panel of expert judges assisted in the development of the TCWSSA and determined its validity and usability (Mitchell, 2008). The modifications made to the survey directed its relevance towards agricultural teachers, as opposed to business teachers.

A Cronbach's Alpha reliability analysis was conducted on Section 2, 3, and 4 of the survey responses using the Statistical Package for Social Sciences (SPSS). The Cronbach's Alpha for Section 2: Importance of Soft Skills was .89. The Cronbach's Alpha for Section 3: Teaching Concepts and Teaching Activities were .95. The Cronbach's Alpha for Section 4: Integration was .90.

Data Collection

The researcher began the process of data collection after acquiring permission from the Auburn University Institutional Review Board (Appendix 1). The North, Central, and South FFA district specialists were contacted to obtain permission to administer the survey instrument at the fall 2016 AAAE meetings. Permission was granted from all three specialists. The surveys were administered in paper instead of online in an effort to obtain a greater response rate. Surveys were collected from seven out of the nine AAAE meeting locations. In order to preserve the confidentiality of each participant and maintain the anonymous nature of the survey no names were written on the survey instrument. There were 128 surveys distributed, with 127 surveys returned, two of which surveys were listed as incomplete by the researcher, thus establishing a 97.6% survey response rate with 125 completed surveys.

Data Analysis

According to Wiersma and Jurs (2009) identifying the appropriate statistical analysis can be determined by the researchers answers to three questions: "(1) What information do we want?

(2) What are the levels of measurement of the variables, especially the dependent variable? and (3) What assumptions are met?" (p. 425). Data analysis was conducted through the use of the Statistical Package for Social Sciences (SPSS). Data collected was analyzed with SPSS software using a significance level of .05. Furthermore, descriptive statistics was used as means to determine the frequency of Sections 2, 3 and 4. Due to the fact that the survey participants were specifically chosen for this assignment, potential biases is assumed due to similarity of participants such as age, program style and years of experience.

The Pearson product-moment correlation coefficient (Pearson r) was implemented where both independent and dependent variables were continuous. Ross and Shannon 2008) described Pearson product-moment correlation coefficient as a bivariate statistic used for two continuous variables. The Pearson product-moment correlation coefficient is the most commonly used correlation coefficient (Wiersma & Jurs, 2009; Bishara & Hittner, 2015). Therefore, a Pearson r was used to discern if a statistically significant relationship existed between/amongst the agricultural teachers' perceptions of the importance of soft skills and the number of years that they have been teaching (Mitchell, 2008).

Wiersma and Jurs (2009) defined analysis of variance (ANOVA) as "a statistical technique by which it is possible to partition the variance in a distribution of scores according to separate sources or factors; although variance is partitioned, the statistical test tests for differences between means" (p. 475). Additionally, ANOVA is used to evaluate the differences of groups based on their means (Ross & Shannon, 2008). Therefore, ANOVA was used to discern the relationship between the agricultural teachers' perceptions of the importance of soft skills and the following: highest degree held (Bachelors, Masters, Specialist or Doctorate); whether or not the teacher has an administrative certificate; whether the school is a county or city

school; which grade levels are taught (7-8, 9-12 or other); and which type of school the teacher is currently teaching at (middle school, high school, both middle and high school, vocational center or other).

The Spearman rank order correlation (Spearman rho) was implemented where both independent and dependent variables were continuous. Potter (2017) described the Spearman rank order correlation as "a nonparametric test, that is, the sample does not meet standard assumptions about the sample, such as randomness of the sample, and/or is representative of a normal distribution" (p.71). The Spearman rho was implemented in this study to discern if a statistically significant relationship existed between skills reported to be important and the integration of skills into concepts and activities in the agricultural curriculum (Mitchell, 2008).

Chapter IV: Results

Introduction

This chapter will present a description of the data collected in this study in addition to a statistical analysis of the data.

Purpose of the Study

In the past, the processes of employment recruitment and selection focused heavily on finding individuals who comprised the desirable technical or domain skills (Kyllonen, 2013). The preconceived notion of workforce preparation has evolved in the twenty-first century in regards to the United States' transition into a knowledge economy, and with it has brought ubiquitous concern that America's young adults are embarking into the workforce without employer recognized interpersonal skills (Cochran & Ferrari, 2009). Redmann and Kotrlik (2004) expressed that although the old way of doing things may be effective, they are not efficient due to the tremendous changes that the twenty-first century workforce has experienced due to technological advances.

The demand for training and development of soft skills is persistently increasing (Adams, 2014). With the numerous requirements set before individuals to be considered college and career ready, competencies such as academic knowledge, technical proficiencies, and a set of general, amalgamating abilities referred to as employability skills may be required (Perkins Collaborative Resource Network, 2015). Therefore, the purpose of this study was to investigate the perceptions that secondary Alabama agricultural teachers have on the attainment of soft

skills. With the implementation of hard and soft skills in agricultural programs statewide, Agricultural teachers have the ability and opportunity to drastically impact student attainment through Career Readiness Indicators (CRI), as well as through the integration of the FFA and Supervised Agricultural Experiences (SAE).

Research Questions

The research questions embodying this study replicate the study performed by Mitchell (2008), which explored the essential successes of soft skills in the twenty-first century workforce as were perceived by Alabama business/marketing teachers. However, the primary focus of this study was regarding the perceptions that secondary agricultural teachers have on the incorporation of soft skill development within their agricultural/FFA program. Therefore, the following research questions were used in this study:

1. To what extent do secondary Alabama agricultural teachers regard the importance of (a) specific soft skills by which to succeed in the twenty-first century workforce and (b) the integration of soft skills into the agricultural education curriculum?
2. Are the perceptions of secondary Alabama agricultural teachers different regarding the importance of soft skills for success in the twenty-first century workforce in the following demographics: (a) number of years teaching, (b) highest degree held, (c) administrational certification, (d) grade level taught, (e) school location, and (f) type of school?
3. Is there a relationship between concepts and techniques that are identified as important by secondary Alabama agricultural teachers and what extent are the concepts and techniques integrated into the agricultural education program?

Descriptive Data and Analysis

The survey implemented in this research was the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which was originally created by Mitchell (2008). Modifications were made to direct the survey towards agricultural teachers rather than business teachers; nonetheless, both curriculums are a part of career and technical education. One hundred and twenty-five surveys were collected to obtain the data needed to complete this study. Data were analyzed, organized, summarized, and described using SPSS. Table 1 demonstrates the demographic data from Section 1 of the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which includes what grades are taught, the highest degree held, and whether or not the participant had their administration certificate. The largest percent of survey participants taught grades 9^{th}-12^{th} (76 percent), had a Masters Degree (47.2 percent), and did not have an administration certificate (90.4 percent).

Table 1

Demographic Data of Respondents

Categories	*n*	Percent
Grade Level Taught		
7^{th}-8^{th} Grade	6	4.8
9^{th}-12^{th} Grade	95	76.0
Other	24	19.2
Highest Degree		
Bachelors	54	43.2
Masters	59	47.2
Specialist	11	8.8
Doctorate	1	.8
Administration Certificate		
Yes	12	9.6
No	113	90.4
(*N*= 125)		

Table 2 demonstrates the demographic data from Section 1 of the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which includes the types of schools of Alabama agricultural teachers. The largest percentages of survey participants taught in high schools (61.6 percent), whereas the lowest percentages of survey participants taught at middle schools (4.8 percent).

Table 2

Type of School

Categories	*n*	Percent
Middle School	6	4.8
High School	77	61.6
Both Middle School and High School	21	16.8
Vocational School	13	10.4
Other	8	6.4
(*N*= 125)		

Table 3 demonstrates the demographic data from Section 1 of the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which includes the total number of years that the agricultural teacher had been in his/her profession. The largest percentages of survey participants had been teaching within the range of 1-5 years (40.8 percent), whereas the lowest percentages of survey participants had been teaching 31+ years (4.0 percent).

Table 3

Years of Teaching Experience

Categories	*n*	Percent
1-5 Years	51	40.8
6-10 Years	19	15.2
11-15 Years	11	8.8
16-20 Years	16	12.8
21-25 Years	13	10.4
26-30 Years	10	8.0
31+ Years	5	4.0

(*N*= 125)

Table 4 demonstrates the demographic data from Section 1 of the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which indicates which type of school system that the survey participants teach in. The largest percentages of survey participants teach in county school systems (72.8 percent), whereas the lowest percentages of survey participants teach in city school systems (27.2 percent).

Table 4

City or County School System

Categories	*n*	Percent
City	34	27.2
County	91	72.8

(*N*= 125)

Research Questions

Part (a) of research question 1 is displayed in Table 5 and Table 6. This data is derived from Section 2, questions 8-21 on the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA). Section 2 of the survey instrument consisted of a five-point Likert-type scale ranging in the values from (5) Extremely Important to (1) Not Important. The soft skills being measured are: Oral Communication, General Communication, Written Communication, General

Ethics, Diversity, Time Management, Teamwork, Problem Solving/Critical Thinking, Organization, Leadership, Reliability, Adaptability, Conflict Resolution, and Business Etiquette.

Represented in Table 5 are the frequencies and percentages of specific soft skills that Alabama agricultural teachers perceive extremely important to not important, by which to succeed in the twenty-first century workforce. The values ranged from 1: Not Important to 5: Extremely Important. All soft skill categories had full participation (N =125) except written communication (N =124) and diversity (N =124). Alabama agricultural teachers ranked ethics (80 percent), reliability (72 percent), general communication (71.2 percent), problem solving/critical thinking (68.8 percent), and time management (66.4 percent) as the most important soft skills affecting the success in the workforce. Table 6 displays the mean and standard deviation of the participants' perceived level of importance.

Table 5

Ranking of Soft Skills for Success in the Twenty-first Century Workforce

Categories	*n*	Percent
1	0	0
2	1	.8
3	10	8.0
4	43	34.4
5	71	56.8
Oral Communication (N= 125)		
1	0	0
2	0	0
3	2	1.6
4	34	27.2
5	89	71.2
General Communication (N = 125)		

(Table Continues)

Table 5- Continued

Ranking of Soft Skills for Success in the Twenty-first Century Workforce

Categories	*n*	Percent
1	0	0
2	2	1.6
3	17	13.6
4	47	37.6
5	58	46.4
Missing	1	.8
Written Communication (*N* = 124)		
1	0	0
2	0	0
3	5	4.0
4	20	16.0
5	100	80.0
General Ethics (*N* =125)		
1	0	0
2	1	.8
3	10	8.1
4	36	28.8
5	77	61.6
Missing	1	.8
Diversity (*N* =124)		
1	0	0
2	0	0
3	4	3.2
4	38	30.4
5	83	66.4
Time Management (*N* =125)		
1	0	0
2	0	0
3	5	4.0
4	42	33.6
5	78	62.4
Teamwork (*N* =125)		

(Table Continues)

Table 5- Continued

Ranking of Soft Skills for Success in the Twenty-first Century Workforce

Categories	*n*	Percent
1	0	0
2	0	0
3	5	4.0
4	34	27.2
5	86	68.8
Problem Solving/Critical Thinking (*N* =125)		
1	0	0
2	2	1.6
3	14	11.2
4	55	44.0
5	54	43.2
Organization (*N* =125)		
1	0	0
2	1	.8
3	19	15.2
4	56	44.8
5	49	39.2
Leadership (*N* =125)		
1	0	0
2	0	0
3	2	1.6
4	33	26.4
5	90	72.0
Reliability (*N* =125)		
1	0	0
2	0	0
3	3	2.4
4	55	44.0
5	67	53.6
Adaptability (*N* =125)		
1	1	.8
2	0	0
3	12	9.6
4	49	39.2
5	63	50.4
Conflict Resolution (*N* =125)		

(Table Continues)

Table 5- Continued

Ranking of Soft Skills for Success in the Twenty-first Century Workforce

Categories	*n*	Percent
1	1	.8
2	1	.8
3	12	9.6
4	50	40.0
5	61	48.8
Business Etiquette (*N* =125)		

Table 6

Importance of Soft Skills in the Twenty-first Century Workforce

Categories	*M*	*SD*
Oral Communication	4.49	.670
General Communication	4.72	.471
Written Communication	4.31	.759
General Ethics	4.78	.488
Diversity	4.52	.682
Time Management	4.63	.547
Teamwork	4.59	.570
Problem Solving/Critical Thinking	4.64	.560
Organization	4.29	.733
Leadership	4.22	.730
Reliability	4.72	.488
Adaptability	4.51	.549
Conflict Resolution	4.38	.730
Business Etiquette (*N* = 125)	4.36	.759

Section 3: Teaching Concepts and Teaching Activities, of the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA) were used to answer part (b) of research question one. All categories had full participation (*N* =125) except general communication (*N* = 124). Alabama agricultural teachers had the highest daily soft skill concept integration

percentages in general communication (67.2 percent), oral communication (65.6 percent), time management (56.8 percent), teamwork (55.2 percent), and general ethics (53.6 percent).

Table 7

Integration of Concepts in Agricultural Programs

Categories	*n*	Percent
Daily	82	65.6
Weekly	25	20.0
Periodically	17	13.6
Never	1	.8
Oral Communication Concepts (*N*=125)		
Daily	84	67.2
Weekly	28	22.4
Periodically	11	8.8
Never	1	.8
Missing	1	.8
General Communication Concepts (*N* =124)		
Daily	50	40.0
Weekly	41	32.8
Periodically	29	23.2
Never	3	2.4
Written Communication Concepts (*N* =125)		
Daily	67	53.6
Weekly	37	29.6
Periodically	18	14.4
Never	3	2.4
General Ethics Concepts (*N* =125)		
Daily	44	35.2
Weekly	42	33.6
Periodically	34	27.2
Never	5	4.0
Diversity Concepts (*N* =125)		
Daily	71	56.8
Weekly	36	28.8
Periodically	18	14.4
Never	0	0
Time Management Concepts (*N* =125)		

(Table Continues)

Table 7- Continued

Integration of Activities in Agricultural Programs

Categories	*n*	Percent
Daily	69	55.2
Weekly	42	33.6
Periodically	13	10.4
Never	1	.8
Teamwork Concepts (*n*=125)		
Daily	66	52.8
Weekly	44	35.2
Periodically	14	11.2
Never	1	.8
Problem Solving/Critical Thinking Concepts (*N* =125)		
Daily	60	48.0
Weekly	39	31.2
Periodically	24	19.2
Never	2	1.6
Organization Concepts (*N* =125)		
Daily	53	42.4
Weekly	53	42.4
Periodically	16	12.8
Never	3	2.4
Leadership Concepts (*N* =125)		
Daily	66	52.8
Weekly	44	35.2
Periodically	14	11.2
Never	1	.8
Reliability Concepts (*N* =125)		
Daily	52	41.6
Weekly	51	40.8
Periodically	20	16.0
Never	2	1.6
Adaptability Concepts (*N* =125)		
Daily	42	33.6
Weekly	42	33.6
Periodically	35	28.0
Never	6	4.8
Conflict Resolution Concepts (*N* =125)		

(Table Continues)

Table 7- Continued

Integration of Activities in Agricultural Programs

Categories	*n*	Percent
Daily	26	20.8
Weekly	44	35.2
Periodically	45	36.0
Never	10	8.0
Business Etiquette Concepts (*N* =125)		

Research question 2: Are the perceptions of secondary Alabama agricultural teachers different regarding the importance of soft skills for success in the twenty-first century workforce in the following demographics: (a) number of years teaching, (b) highest degree held, (c) administrational certification, (d) grade level taught, (e) school location, and (f) type of school?

Part (a) of the research question was addressed by utilizing survey question 1 and the sum score of survey questions 8-21, which were derived from Section 2: Importance of Soft Skills in the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA). A Pearson product-moment correlation coefficient was implemented to assess if there was a statistically significant relationship between the number of years the agricultural teacher had been teaching and their perception of the specific soft skills as they relate to employ success in the twenty-first century workforce. The alpha level was set at .05. Moreover, the Pearson product-moment correlation coefficient indicated that the linear relationship was not statistically significant: r= .043, p= .633 (p< .05). Therefore, the number of years that the agricultural teacher has been teaching does not have an affect on their perception of specific soft skills in the twenty-first century workforce. The strength of the linear relationship was determined by correlation determination adjusted r^2= .002, which indicated that 2 percent variance in perceived soft skills can be accounted for by its linear relationship with agricultural teaching. Ross and Shannon

(2011) described correlation determination as "the percent of variance in X that can be accounted for by its linear relationship with Y" (p. 139).

Survey questions 2, 3, 4, 5, and 6 and survey questions 8-21, which were derived from Section 2: Importance of Soft Skills, from the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA) were utilized to answer research question 2 highest degree held, (c) administrational certificate, (d) grade level taught, (e) school location, and (f) school type. An ANOVA design was implemented to discern if a statistically significant relationship existed between demographic factors and agricultural teachers' perceptions of specific soft skills in the twenty-first century workforce. The dependent variable was the specific soft sills derived from Section 2. With the alpha level set at .05, parts (b) highest degree held [F (3, 119) =118, p= .949], (c) administrational certificate [F (1, 121) = 48, p= .828], (d) grade level taught [F (2, 120) = 374, p= .689], (e) school location [F (1, 121) = 1,634, p= .204], and (f) school type [F (4, 118) = 1,596, p= .180], were not statistically significant.

Table 8

The Difference Between Demographic Factors and Perceptions of Soft Skills

Categories	*df*	*F*	*MS*	*p*
Highest Degree Held	3	.118	3.820	.949
Administrational Certificate	1	.048	1.154	.828
Grade Level Taught	2	.374	11.913	.689
School Location	1	1.634	51.308	.204
School Type	4	1.596	49.421	.180

Research Question 3: Is there a relationship between concepts and techniques that are identified as important by secondary Alabama agricultural teachers and what extent are the concepts and techniques integrated into the agricultural education program? This research question was addressed by questions 56-69 in Section 4: Integration on the Twenty-First Century

Workforce Soft Skills Assessment Survey (TCWSSA). The frequencies and percentages of the integration of soft skills into agricultural programs are displayed on Table 9. All soft skill categories had full participation (*N*=125) except leadership (*N*= 123), reliability (*N*= 123), adaptability (*N*= 123), conflict resolution (*N*= 123), and business etiquette (*N*= 123). Alabama agricultural teachers had the highest percentages of the integration of soft skills into agricultural programs in reliability (74.4 percent), general ethics (69.6 percent), general communication (64.8 percent), problem solving/conflict resolution (64.8 percent), and teamwork (64.0 percent). Furthermore, the mean and standard deviation of each soft skill as it relates to integration is displayed on Table 10.

Table 9

Ranking of the Integration of Soft Skills into Agricultural Programs

Categories	*n*	Percent
1	0	0
2	0	0
3	4	3.2
4	45	36.0
5	76	60.8
Oral Communication (*N* = 125)		
1	0	0
2	0	0
3	2	1.6
4	42	33.6
5	81	64.8
General Communication (*N* = 125)		
1	0	0
2	3	2.4
3	13	10.4
4	52	41.6
5	57	45.6
Written Communication (*N* = 125)		

(Table Continues)

Table 9- Continued

Ranking of the Integration of Soft Skills into Agricultural Programs

Categories	*n*	Percent
1	0	0
2	0	0
3	4	3.2
4	34	27.2
5	87	69.6
General Ethics (*N* = 125)		
1	0	0
2	3	2.4
3	12	9.6
4	54	43.2
5	56	44.8
Diversity (*N* = 125)		
1	0	0
2	0	0
3	6	4.8
4	42	33.6
5	77	61.6
Time Management (*N* = 125)		
1	0	0
2	0	0
3	3	2.4
4	42	33.6
5	80	64.0
Teamwork (*N* = 125)		
1	0	0
2	0	0
3	4	3.2
4	40	32.0
5	81	64.8
Problem Solving (*N* = 125)		
1	0	0
2	0	0
3	8	6.4
4	51	40.8
5	66	52.8
Organization (*N* = 125)		

(Table Continues)

Table 9- Continued

Ranking of the Integration of Soft Skills into Agricultural Programs

Categories	*n*	Percent
1	0	0
2	0	0
3	6	4.8
4	45	36.0
5	72	57.6
Missing	2	1.6
Leadership (*N* = 123)		
1	0	0
2	0	0
3	1	.8
4	29	23.2
5	93	74.4
Missing	2	1.6
Reliability (*N* = 123)		
1	0	0
2	0	0
3	6	4.8
4	51	40.8
5	66	52.8
Missing	2	1.6
Adaptability (*N* = 123)		
1	0	0
2	1	.8
3	7	5.6
4	54	43.2
5	61	48.8
Missing	2	1.6
Conflict Resolution (*N*= 123)		
1	1	.8
2	2	1.6
3	8	6.4
4	57	45.6
5	55	44.0
Missing	2	1.6
Business Etiquette (*N* = 123)		

Section 4 of the survey instrument consisted of a five-point Likert-type scale ranging in the values from (5) Extremely Important to (1) Not Important. The soft skills being measured are: Oral Communication, General Communication, Written Communication, General Ethics, Diversity, Time Management, Teamwork, Problem Solving/Critical Thinking, Organization, Leadership, Reliability, Adaptability, Conflict Resolution, and Business Etiquette.

Table 10

Integration of Soft Skills into Agricultural Programs

Categories	*M*	*SD*
Oral Communication	4.58	.557
General Communication	4.63	.516
Written Communication	4.30	.754
General Ethics	4.66	.538
Diversity	4.30	.743
Time Management	4.57	.587
Teamwork	4.62	.536
Problem Solving/Critical Thinking	4.62	.550
Organization	4.46	.616
Leadership	4.54	.591
Reliability	4.75	.454
Adaptability	4.49	.592
Conflict Resolution	4.42	.640
Business Etiquette	4.33	.741
(*N*= 125)		

In order to examine if a relationship existed amongst soft skills perceived to be important by secondary agricultural teachers and the degree of which soft skill concepts and activities are integrated in agricultural programs the following comparison was conducted: question 8 was compared to questions 22, 38, and 39; question 9 was compared to questions 23, 36, and 37; question 11 was compared to questions 25, 40, and 41; question 12 was compared to questions 26, 42, and 43; question 13 was compared to 27, 46, and 47; question 14 was compared to questions 28, 44, and 45; question 15 was compared to 29, 48, and 49; question 17 was

compared to 31, 52, and 53; question 21 was compared to questions 35, 54, and 55. Table 11 displays the results from the Spearman Rank Correlation Coefficient. Written communication, organization, reliability, adaptability, and conflict resolution were not performed by the Spearman Rank Correlation Coefficient in the Activities portion of Section 3: Integration, questions 36-55, of the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA) due to a lack of corresponding questions. Moreover, question 50: Discussing customer values (*N*=125), and question 51: Identifying ways to make customers happy (*N*=124), were also excluded from the Spearman Rank Correlation Coefficient displayed in Table 11. Table 12 displays the frequencies and percentages of the integration of soft skill activities into agricultural programs.

Table 11

Integration of Soft Skills into Agricultural Programs

Categories	Spearman's Rank-Order Coefficients
Concepts	
Oral Communication (*N*=125)	-.215
General Communication (*N*= 125)	-.131
Written Communication (*N*= 125)	-.207*
General Ethics (*N*=125)	-.066
Diversity (*N*=124)	-.125
Time Management (*N*=125)	-.172
Teamwork (*N*=125)	-.136
Leadership (*N*=125)	-.233**
Problem Solving/Critical Thinking (*N*=125)	-.250**
Organization (*N*=125)	-.136
Reliability (*N*=125)	-.161
Adaptability (*N*=125)	-.277**
Conflict Resolution (*N*=125)	-.153
Business Etiquette (*N*=125)	-.232**

(Table Continues)

Table 11- Continued

Integration of Soft Skills into Agricultural Programs

Categories	Spearman's Rank-Order Coefficients
Activities	
Discussing Effective Communication for the Workforce (*N*=125)	-.075
Reinforcing the Need for Concise, Correct Communication (*N*=125)	-.070
Students Presenting a PowerPoint to the Class (*N*=125)	-.145
Students Presenting Completed Projects to the Class (*N*=125)	-.204*
Reasoning Through Ethical Dilemmas in Case Studies (*N*=125)	-.102
Investigating Companies to Examine Ethical Standards (*N*=124)	-.009
Techniques for Conducting International Business (*N*=125)	-.168
Discussing Future Trends for a More Diverse Marketplace (*N*=125)	-.166
Team Projects (*N*=125)	-.043
Student Collaboration (*N*=125)	-.065
Requiring Students to Complete Work by a Deadline (*N*=125)	-.037

(Table Continues)

Table 11- Continued

Integration of Soft Skills into Agricultural Programs

Categories	Spearman's Rank-Order Coefficients
Having Students Organize Work into a Portfolio (*N*=125)	-.074
Students Brainstorming to Problem Solve (*N*=124)	-.166
Identifying Problems and Reasoning Through Issues (*N*=124)	-.103
Discussing Techniques for Effective Leadership (*N*=123)	-.415**
Encouraging Leaders to Emerge in Group Situations (*N*=125)	-.289**
Basic Social Skills in Business Situations (*N*=125)	-.177*
Discussing Techniques for Effective Leadership (*N*=124)	-.037

**. Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

Table 12 identified that Alabama agricultural teachers had the highest daily soft skill activity integration percentages in: requiring students to complete work by a deadline (44.0 percent), discussing techniques for effective leadership (42.4 percent), and student collaboration (36.8 percent). The highest weekly soft skill activity percentages are: team projects (48.8 percent), student collaboration (47.2 percent), reinforcing the need for concise, and correct communication (46.4 percent).

Table 12

Integration of Activities in Agricultural Programs

Categories	*n*	Percent
Daily	31	24.8
Weekly	56	44.8
Periodically	34	27.2
Never	4	3.2
Discussing Effective Communication for the Workforce (*N*=125)		
Daily	32	25.6
Weekly	58	46.4
Periodically	30	24.0
Never	5	4.0
Reinforcing the Need for Concise, Correct Communication (*N*=125)		
Daily	8	6.4
Weekly	18	14.4
Periodically	86	68.8
Never	13	10.4
Students Presenting a PowerPoint to the Class (*N*=125)		
Daily	10	8.0
Weekly	30	24.0
Periodically	83	66.4
Never	2	1.6
Students Presenting Completed Projects to the Class (*N*=125)		
Daily	11	8.8
Weekly	23	18.4
Periodically	62	49.6
Never	29	23.2
Reasoning Through Ethical Dilemmas in Case Studies (*N*=125)		
Daily	8	6.4
Weekly	19	15.2
Periodically	56	44.8
Never	41	32.8
Missing	1	.8
Investigating Companies to Examine Ethical Standards (*N*=124)		

(Table Continues)

Table 12- Continued

Integration of Activities in Agricultural Programs

Categories	*n*	Percent
Daily	8	6.4
Weekly	12	9.6
Periodically	47	37.6
Never	58	46.4
Techniques for Conducting International Business (*N*=125)		
Daily	8	6.4
Weekly	31	24.8
Periodically	60	48.0
Never	26	20.8
Discussing Future Trends for a More Diverse Marketplace (*N*=125)		
Daily	19	15.2
Weekly	61	48.8
Periodically	42	33.6
Never	3	2.4
Team Projects (*N*=125)		
Daily	46	36.8
Weekly	59	47.2
Periodically	18	14.4
Never	2	1.6
Student Collaboration (*N*=125)		
Daily	55	44.0
Weekly	52	41.6
Periodically	17	13.6
Never	1	.8
Requiring Students to Complete Work by a Deadline (*N*=125)		
Daily	17	13.6
Weekly	18	14.4
Periodically	72	57.6
Never	18	14.4
Having Students Organize Work into a Portfolio (*N*=125)		

(Table Continues)

Table 12- Continued

Integration of Activities in Agricultural Programs

Categories	*n*	Percent
Daily	32	25.6
Weekly	53	42.4
Periodically	36	28.8
Never	3	2.4
Missing	1	.8
Students Brainstorming to Problem Solve (*N*=124)		
Daily	26	20.8
Weekly	56	44.8
Periodically	38	30.4
Never	4	3.2
Missing	1	.8
Identifying Problems and Reasoning Through Issues (*N*=125)		
Daily	14	11.2
Weekly	43	28.0
Periodically	50	40.0
Never	17	13.7
Missing	1	.8
Discussing “Customer Values” (*N*=125)		
Daily	14	25.6
Weekly	45	42.4
Periodically	62	28.8
Never	13	2.4
Missing	1	.8
Identifying Ways to Make Customers Happy (*N*=124)		
Daily	23	18.4
Weekly	57	45.6
Periodically	39	31.2
Never	4	3.2
Missing	2	1.6
Discussing Techniques for Effective Leadership (*N*=123)		

(Table Continues)

Table 12- Continued

Integration of Activities in Agricultural Programs

Categories	*n*	Percent
Daily	29	23.2
Weekly	54	39.2
Periodically	40	32.0
Never	2	1.6
Encouraging Leaders to Emerge in Group Situations (*N*=125)		
Daily	28	22.4
Weekly	49	39.2
Periodically	45	36.0
Never	3	2.4
Basic Social Skills in Business Situations (*N*=125)		
Daily	53	42.4
Weekly	44	35.2
Periodically	25	20.0
Never	1	.8
Discussing Techniques for Effective Leadership (*N*=124)		

Chapter V: Conclusions and Recommendations

Introduction

The evolutionary route that workforce preparation and development has taken is demanding that twenty-first century employees be competent in both technical skills and interpersonal skills (Winstead, Adams & Sillah, 2009). Throughout history, interpersonal skills, or soft skills, have been regarded as less important than the higher esteemed technical skills for many technical disciplines (Bancino & Zevalkink, 2007). The demand for training and development of soft skills is persistently increasing (Adams, 2014). Moreover, with the increment of soft skill attainment at rapid growth in our society, it is essential to understand how and where students attain these skills. Career and Technical Education provides students with opportunities to achieve career preparation and awareness by means of equipping them with the academic and technical knowledge and work-related skills that are requisite for success in postsecondary education, training and employment (United States Department of Education, 2012). Furthermore, with the implementation of hard and soft skills in agricultural programs statewide, agricultural teachers have the ability and opportunity to drastically impact student attainment through Career Readiness Indicators (CRI), as well as through the integration of the FFA and Supervised Agricultural Experiences (SAE).

This chapter provides a summary of the author's study, findings and conclusions of the perceptions of soft skill development in agricultural programs by Alabama agricultural teachers.

Purpose of the Study

In the past, the processes of employment recruitment and selection focused heavily on finding individuals who comprised the desirable technical or domain skills (Kyllonen, 2013). The preconceived notion of workforce preparation has evolved in the twenty-first century in regards to the United States' transition into a knowledge economy, and with it has brought ubiquitous concern that America's young adults are embarking into the workforce without employer recognized interpersonal skills (Cochran & Ferrari, 2009). Redmann and Kotrlik (2004) expressed that although the old way of doing things may be effective, they are not efficient due to the tremendous changes that the twenty-first century workforce has experienced due to technological advances.

The demand for training and development of soft skills is persistently increasing (Adams, 2014). With the numerous requirements set before individuals to be considered college and career ready, competencies such as academic knowledge, technical proficiencies, and a set of general, amalgamating abilities referred to as employability skills may be required (Perkins Collaborative Resource Network, 2015). Therefore, the purpose of this study was to investigate the perceptions that secondary Alabama agricultural teachers have on the attainment of soft skills. With the implementation of hard and soft skills in agricultural programs statewide, Agricultural teachers have the ability and opportunity to drastically impact student attainment through Career Readiness Indicators (CRI), as well as through the integration of the FFA and Supervised Agricultural Experiences (SAE).

Research Questions

The research questions embodying this study replicate the study performed by Mitchell (2008), which explored the essential successes of soft skills in the twenty-first century workforce

as were perceived by Alabama business/marketing teachers. However, the primary focus of this study was regarding the perceptions that secondary agricultural teachers have on the incorporation of soft skill development within their agricultural/FFA program. Therefore, the following research questions were used in this study:

1. To what extent do secondary Alabama agricultural teachers regard the importance of (a) specific soft skills by which to succeed in the twenty-first century workforce and (b) the integration of soft skills into the agricultural education curriculum?
2. Are the perceptions of secondary Alabama agricultural teachers different regarding the importance of soft skills for success in the twenty-first century workforce in the following demographics: (a) number of years teaching, (b) highest degree held, (c) administrational certification, (d) grade level taught, (e) school location, and (f) type of school?
3. Is there a relationship between concepts and techniques that are identified as important by secondary Alabama agricultural teachers and what extent are the concepts and techniques integrated into the agricultural education program?

Summary of Findings

Participant Demographics

The survey implemented in this research was the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), which was originally created by Mitchell (2008). Modifications were made to direct the survey towards agricultural teachers rather than business teachers; nonetheless, both curriculums are a part of Career and Technical Education. Hard-copy surveys were distributed at seven of the nine Association of Alabama Agricultural Educators (AAAE) meetings in Fall 2016. One hundred and twenty-five surveys were collected to obtain the data

needed to complete this study. The demographic data derived from the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA) indicated that the majority of agricultural teachers taught grades 9^{th}-12^{th} (76 percent), taught in a high school setting (61.6 percent), had obtained a master's degree (47.2 percent), did not hold an administrational certificate (90.4 percent), had only been teaching 1-5 years (40.8 percent), and taught in a county school system (72.8 percent).

Research Question 1:

In Section 2: Importance of Soft Skills in the Twenty-First Century Workforce Soft Skills Assessment (TCWSSA), the agricultural teachers were asked to identify their perceived importance of the following soft skills: oral communication, general communication, written communication, general ethics, diversity, time management, teamwork, problem solving/critical thinking, organization, leadership, reliability, adaptability, conflict resolution, and business etiquette. Alabama agricultural teachers ranked general ethics (80 percent), reliability (72 percent), general communication (71.2 percent), problem solving/conflict resolution (68.8 percent), and time management (66.4 percent), as the most important soft skills affecting the success of the twenty-first century workforce. Furthermore, the results generated a mean score ($M \geq 4.22$), which were derived from a Likert-type scale with values that ranged from 1: Not Important to 5: Extremely Important.

In Section 3: Teaching Concepts and Teaching Activities of the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA), agricultural teachers were asked to rank how often they integrated specific soft skill concepts into their programs. The values were derived from the following choices: daily, weekly, periodically, or never. The data results yielded that Alabama agricultural teachers had the highest daily soft skill concept integration

percentages in general communication (67.2 percent), oral communication (65.6 percent), time management (56.8 percent), teamwork (55.2 percent), and general ethics (53.6 percent).

Research Question 2:

Part (a) of the research question was addressed by utilizing survey question 1 and the sum score of survey questions 8-21, which were derived from Section 2: Importance of Soft Skills in the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA). A Pearson product-moment correlation coefficient was implemented to assess if there was a statistically significant relationship between the number of years the agricultural teacher had been teaching and their perception of the specific soft skills as they relate to employee success in the twenty-first century workforce. The data concluded that the linear relationship was not statistically significant: $r = .043$, $p = .633$ ($p < .05$); thus, identifying the number of years that the agricultural teacher had been teaching failed to have an effect on their perception of specific soft skills in the twenty-first century workforce.

Survey questions 2, 3, 4, 5, and 6 and survey questions 8-21 were utilized to answer research question 2 parts (b) highest degree held, (c) administrational certificate, (d) grade level taught, (e) school location, and (f) school type. An ANOVA design was implemented to discern if a statistically significant relationship existed between demographic factors and agricultural teachers' perceptions of specific soft skills in the twenty-first century workforce. With the alpha level set at .05, parts (b) highest degree held [$F(3, 119) = 118$, $p = .949$], (c) administrational certificate [$F(1, 121) = 48$, $p = .828$], (d) grade level taught [$F(2, 120) = 374$, $p = .689$], (e) school location [$F(1, 121) = 1{,}634$, $p = .204$], and (f) school type [$F(4, 118) = 1{,}596$, $p = .180$], were not statistically significant.

Research Question 3:

Section 4: Integration on the Twenty-First Century Workforce Soft Skills Assessment Survey (TCWSSA) was used to address this research question. According to the results, Alabama agricultural teachers ranked reliability (74.4 percent), general ethics (69.6 percent), general communication (64.8 percent), problem solving/conflict resolution (64.8 percent), and teamwork (64 percent) as the most important skills to integrate into their agricultural curriculum. Furthermore, the results generated a mean score ($M \geq 4.30$), which were derived from a Likert-type scale with values that ranged from 1: Not Important to 5: Extremely Important.

Three separate analyses were conducted to examine the importance of the integration of soft skill concepts and activities into the curricula of Alabama agricultural teachers. Furthermore, a Spearman Rank Correlation Coefficient was implemented to discern if a statistically significant relationship existed between soft skills reported to be important and the integration of soft skills into concepts and activities in the agricultural curriculum. The results yielded that an insignificant correlation existed amongst the 14 soft skill concepts ($\leq$ -.277). Similarly, the results yielded that an inconsequential correlation existed amongst 17 ($\leq$ -.289) out of the 18 (-.415) soft skill activities. Nonetheless, four soft skill concepts and five soft skill activities were statistically significant, thus indicating that, to an extent, they are being integrated within certain agricultural curriculums. The frequency of the integration of soft skill activities into agricultural programs revealed that agricultural teachers are integrating these activities more frequently on a weekly and periodical basis.

Conclusions

The following conclusions were based on the findings of this study:

1. Agricultural teachers who attended their FFA district's Association of Alabama Agricultural Educators Fall 2016 meeting were willing to participate in the study (97.6 percent response rate). Moreover, participating agricultural teachers perceived all 14 soft skill categories to be very important, based on a Likert-type scale of 1: Not Important to 5: Extremely Important ($M \geq 4.22$).
2. The results yielded that the number of years teaching (1-5, 6-10, 11-15, 16-20, 21-25, 26-30, or 31+ years), highest degree held (Bachelors, Masters, Specialist or Doctorate), administrational certification, grade level taught (7-8, 9-12 or other), school location (city or county school system), and type of school (middle school, high school, both middle and high school, vocational center or other) regarding the perceptions of secondary Alabama agricultural teachers on the importance of soft skills for success in the twenty-first century workforce were not statistically significant.
3. Alabama agricultural teachers were shown to have a very high opinion of the importance of the integration of soft skills into agricultural curriculums ($M \geq 4.75$). Correspondingly, Alabama agricultural teachers were shown to integrate the same soft skill concepts into either a daily or weekly schedule.
4. As was shown in Mitchell (2008), the participants in this study did not consider all of the soft skills equally important. According to the results, Alabama agricultural teachers ranked general ethics, reliability and general communication as the most important soft skills affecting the success in the workforce; whereas, business etiquette, leadership, and written communication were shown to have a lower value of perceived importance.

Recommendations

The following recommendations were based on the findings of this study:

1. Since the majority of agricultural teachers taught grades 9^{th}-12^{th} in this study, thus comprising the age closest to entering the twenty-first century workforce, a more in-depth study of which Career Readiness Indicators (CRIs) are implemented into Alabama agricultural programs and why specific ones are chosen should be conducted.
2. This study should be conducted in agricultural programs in different states, especially in those with larger FFA enrollments.
3. This study should be conducted in other sectors of Alabama's Career and Technical Education curriculums in an effort to determine the department's stance on soft skill attainment and development.
4. Due to the 40.8 percent of participants being in their first five years of teaching, it would be ideal for this study to be conducted again in a minimum of five years in an effort to determine the growth of the educators.
5. An opportunity should be provided for current teachers and/or upcoming teachers for soft skill awareness training and to learn how to integrate soft skills into their programs.

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Appendix 1

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS

REQUEST FOR EXEMPT CATEGORY RESEARCH

For information or help completing this form, contact: **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall
Phone: 334-844-5966 **e-mail:** IRBAdmin@auburn.edu **Web Address:** http://www.auburn.edu/research/vpr/ohs/index.htm

Revised 2/1/2014 **Submit completed form to IRBsubmit@auburn.edu or 115 Ramsay Hall, Auburn University 36849.**

Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

Project activities may not begin until you have received approval from the Auburn University IRB.

1. **PROJECT PERSONNEL & TRAINING**

PRINCIPAL INVESTIGATOR (PI):

Name: Daniel Free | Title: Ph. D Student | Dept./School: EFLT: College of Edu.

Address: 12 Noles Dr. Tallassee, AL 36078 | AU Email: dlf0003@auburn.edu

Phone: 256-558-9237 | Dept. Head: Sherida Downer

FACULTY ADVISOR (if applicable):

Name: James Witte | Title: Professor | Dept./School: EFLT: College of Edu.

Address: 3084 Haley Center

Phone: 334-844-3054 | AU Email: witteje@auburn.edu

KEY PERSONNEL: List Key Personnel (other than PI and FA). Additional personnel may be listed in an attachment.

Name	Title	Institution	Responsibilities
Daniel Free	Ph. D Student	Auburn University	Primary Researcher
James Witte	Professor	Auburn University	Advisor

KEY PERSONNEL TRAINING: Have all Key Personnel completed CITI Human Research Training (including elective modules related to this research) within the last 3 years? ☑ YES ☐ NO

TRAINING CERTIFICATES: Please attach CITI completion certificates for all Key Personnel.

2. **PROJECT INFORMATION**

Title: Perceptions of Soft Skill Development in Agricultural Education Programs

Source of Funding: ☑ Investigator ☐ Internal ☐ External

List External Agency & Grant Number:

List any contractors, sub-contractors, or other entities associate with this project.

List any other IRBs associated with this project (including those involved with reviewing, deferring, or determinations).
Research in Public Elementary and Secondary Schools SBE: Social and Behavioral Emphasis Non-AU Personne

FOR ORC OFFICE USE ONLY

DATE RECEIVED IN ORC: _____ by _____ APPROVA
DATE OF IRB REVIEW: _____ by _____ APPROVA
DATE OF ORC REVIEW: _____ by _____ INTERVAL
DATE OF APPROVAL: _____ by _____
COMMENTS:

The Auburn University Institutional Review Board has approved this Document for use from 09/10/2016 to 09/09/2019 Protocol # 16-326 EX 1609

Appendix 2

Consent To Use TCWSSA

Email asking for permission:

Dr. Mitchell,

I am a Ph.D. student at Auburn University within the Educational Foundation, Leadership and Technology Department. First, let me say that your dissertation was very well written and serves as an excellent guide for me. My research is driven by workforce development within our secondary educational realm as well, with the exception of the focus group being agricultural educators instead of business educators.
With your permission I am requesting the opportunity to use your TCWSSA survey to interview agricultural educators in Alabama during the 2016 CTE Summer Conference. The format will differ to an extent and a few questions that center on agricultural education will be added. I have provided the link for the survey if you would like to look. I will attach your response to my IRB. Thank you for this opportunity and I look forward to hearing from you.

https://auburn.qualtrics.com/SE/?SID=SV_8v1yZtgOhhGWJnL

Sincerely,

Daniel Free
AU Graduate School
dlf0003@auburn.edu
256-558-9237
1 Corinthians 9:24-27

Email Response Granting Consent:
From: Geana Mitchell

Daniel-

You have my permission to use my TCWSSA survey.
I wish you success in writing your dissertation and much luck to you in your future endeavors.

Sincerely,

Geana Mitchell

Appendix 3

Generalized Announcement Used to Recruit Participants

To Be Read To Audience:

Good Morning Alabama Agricultural Educators,

My name is Daniel Free and I am the FFA Advisor in Tallassee. I personally invite you to participate in a research study aimed at the impact that Agricultural teachers have on soft skill development and attainment for students in Agricultural programs. I am conducting this study as a PhD student at Auburn University, under the direction of Dr. James Witte, Associate Professor in Auburn University's Department of Educational Foundations, Leadership, and Technology.

Your participation in this study is completely voluntary. If you decide to participate in this research study, you will be asked to complete an anonymous hard copy survey that is distributed before you. Your total time commitment will be approximately 15 minutes.

The emphasis of this study is to determine the perception level of soft skill development by secondary Alabama Agricultural teachers being incorporated into their Agricultural program. This study also evaluates the importance of soft skill integration into Agricultural programs as regarded by the teachers. Utilizing your experience in agriculture and workforce credentialing, you will provide current and applicable information regarding your perceptions of specific skills that are needed to obtain success in the workforce.

Sincerely,

Daniel Free
Ph. D Student
Auburn University
Educational Foundations, Leadership and Technology

Appendix 4

The Auburn University Institutional Review Board has approved this Document for use from 09/10/2016 to 09/09/2019 Protocol # 16-326 EX 1609

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

INFORMATION LETTER
for a Research Study entitled
"Perceptions of Soft Skill Development in Agricultural Education Programs"

You are invited to participate in a research study aimed at the impact that Agricultural teachers have on soft skill development and attainment for students in Agricultural programs. This study is being conducted by Daniel Free, a PhD student, under the direction of Dr. James Witte, Professor, in the Auburn University Department of Educational Foundations, Leadership and Technology. You are invited to participate because you are an Agricultural teacher and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to complete a survey. Your total time commitment will be approximately 15 minutes.

Are there any risks or discomforts? There are no known risks or discomforts associated with participating in this study.

Will you receive compensation for participating? There is no compensation for participating in this study.

If you change your mind about participating, you can withdraw at any time during the survey. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Educational Foundations, Leadership and Technology.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by keeping it in a locked location. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting.

If you have questions about this study, please ask them now or contact James Witte at (334)-844-3054.

If you have 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 e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

_____

Investigator's signature Date

_____

Print Name

The Auburn University Institutional Review Board has approved this Document for use from 09/10/2016 to 09/09/2019
Protocol # 16-326 EX 1609

Appendix 5

Agricultural Education's Impact on Soft Skill Development

Section 1: Demographic/Teacher Background

Given the following questions indicate your selection by circling your answer choice.

1. How many years have you been teaching Agricultural Education?
   - o 1-5 years
   - o 6-10 years
   - o 11-15 years
   - o 16-20 years
   - o 21-25 years
   - o 26-30 years
   - o 31+

2. What is your highest degree held?
   - o Bachelors
   - o Masters
   - o Specialist
   - o Doctorate

3. Do you have an Administration Certificate?
   - o Yes
   - o No

4. Is your school a city or county school?
   - o City
   - o County

5. Please indicate the grade levels of students in your courses. (Check all that apply).
   - o 7-8
   - o 9-12
   - o Other _____

6. What is the type of school in which you are teaching?
   - o Middle School
   - o High School
   - o Both middle school and high school
   - o Vocational Center
   - o Other _____

7. Please list the classes you are currently teaching:

   _____

   _____

   _____

Section 2: Importance of Soft Skills

In your opinion, how important are the following soft skills in affecting the success in the workforce? *Please circle the number that corresponds with your opinion.*

8. Oral Communication (the ability to present information to a group or speak in public)

Not Important				Extremely Important
1	2	3	4	5

9. General Communication (the ability to communicate with clients, colleagues, and the general public)

Not Important				Extremely Important
1	2	3	4	5

10. Written Communication (the ability to write business correspondence like memos, letters, and reports using correct grammar and format)

Not Important				Extremely Important
1	2	3	4	5

11. General Ethics (the ability to do "the right thing" in business situations)

Not Important				Extremely Important
1	2	3	4	5

12. Diversity (the ability to work with and appreciate differences in others)

Not Important				Extremely Important
1	2	3	4	5

13. Time Management (the ability to effectively manage time and complete tasks within a specified time frame)

Not Important				Extremely Important
1	2	3	4	5

14. Teamwork (the ability to work effectively with a group in order to achieve team goals)

Not Important				Extremely Important
1	2	3	4	5

15. Problem Solving/Critical Thinking (the ability to find effective solutions to problems)

Not Important				Extremely Important
1	2	3	4	5

16. Organization (the ability to put in order and/or arrange in an orderly way)

Not Important				Extremely Important
1	2	3	4	5

17. Leadership (the ability to emerge as a leader and effectively lead others)

Not Important				Extremely Important
1	2	3	4	5

18. Reliability (the ability of a person to perform a required function under stated conditions for a specified period of time)

Not Important				Extremely Important
1	2	3	4	5

19. Adaptability (the ability to change to meet changed circumstances)

Not Important				Extremely Important
1	2	3	4	5

20. Conflict Resolution (the ability to facilitate the peaceful ending of conflict)

Not Important				Extremely Important
1	2	3	4	5

21. Business Etiquette (the ability to apply basic social skills in business situations)

Not Important				Extremely Important
1	2	3	4	5

Section 3: Teaching Concepts/Activities

How often are the following teaching concepts/activities integrated into the courses that you are CURRENTLY teaching? *Please indicate how often you integrate the concept/activity by placing a checkmark in the appropriate column.*

Teaching Concepts/Activities	Daily	Weekly	Periodically	Never
Concepts				
22) Oral Communication				
23) General Communication				
24) Written Communication				
25) General Ethics				
26) Diversity				
27) Time Management				
28) Teamwork				
29) Problem Solving/Critical Thinking				
30) Organization				
31) Leadership				
32) Reliability				
33) Adaptability				
34) Conflict Resolution				
35) Business Etiquette				
Activities				
36) Discussing effective communication for the workforce				
37) Reinforcing the need for concise, correct communication				
38) Students presenting a PowerPoint to the class				
39) Students presenting completed projects to the class				
40) Reasoning through ethical dilemmass in case studies				
41) Investigating companies to examine ethical standards				
42) Techniques for conducting international business				
43) Discussing future trneds for a more diverse marketplace				
44) Team projects				
45) Student collaboration				
46) Requiring students to complete work by a deadline				
47) Having students organize work into a portfolio				
48) Students brainstorming to problem solve				
49) Identifying problems and reasoning through issues				
50) Discusing "customer values"				
51) Identifying ways to make customers happy				
52) Discussing techniques for effective leadership				
53) Encouraging leaders to emerge in group situations				
54) Basic social skills in business situations				
55) Respect for others and conflict resolution				

Section 4: Integration

In your opinion, how important is the INTEGRATION of the following skills into the agricultural education curriculum? *Please circle the number that corresponds with your opinion.*

56) Oral Communication

Not Important				Extremely Important
1	2	3	4	5

57) General Communication

Not Important				Extremely Important
1	2	3	4	5

58) Written Communication

Not Important				Extremely Important
1	2	3	4	5

59) General Ethics

Not Important				Extremely Important
1	2	3	4	5

60) Diversity

Not Important				Extremely Important
1	2	3	4	5

61) Time Management

Not Important				Extremely Important
1	2	3	4	5

62) Teamwork

Not Important				Extremely Important
1	2	3	4	5

63) Problem Solving/Critical Thinking

Not Important				Extremely Important
1	2	3	4	5

64) Organization

Not Important				Extremely Important
1	2	3	4	5

65) Leadership

Not Important				Extremely Important
1	2	3	4	5

66) Reliability

Not Important				Extremely Important
1	2	3	4	5

67) Adaptability

Not Important				Extremely Important
1	2	3	4	5

68) Conflict Resolution

Not Important				Extremely Important
1	2	3	4	5

69) Business Etiquette

Not Important				Extremely Important
1	2	3	4	5

Section 5: Open-ended Questions

The back of this page may be used if you need additional space for the following questions.

70) Please list any other concepts, methods, or techniques that you use to integrate soft soft skills into the agricultural education curriculum.

71) Please list and/or explain any other soft skills that you feel are essential to success in employment.

72) If you have ever had soft skills training, please describe.