

Administrators' perceptions of the effectiveness of alternatively certified
agricultural educators in Kansas

by

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Abstract

As the number of alternatively certified educators rises, the effectiveness of these teachers is under investigation. The purpose of this study was to determine the effectiveness of alternatively certified agricultural educators in Kansas as perceived by their administrators. Survey research was used to identify areas of least effectiveness of the alternatively certified agricultural educators under evaluation. The survey was divided into seven construct areas with a total of 35 competencies being evaluated among the constructs. The construct areas under evaluation were; (1) subject area knowledge, (2) classroom management and discipline, (3) instructional planning process and teaching methods, (4) community relationship, (5) professional development, (6) management of the FFA chapter, and (7) management of Supervised Agricultural Experiences. The population consisted of 36 administrators of alternatively certified agricultural educators in Kansas teaching during the 2018-2019 school year. The survey allowed the administrators to identify their perceived level of effectiveness of the alternatively certified agricultural educator under their supervision using a 5-point Likert scale. The survey results indicated that the alternatively certified agricultural educators in Kansas are least effective at managing Supervised Agricultural Experiences (SAEs) and need to improve at requiring all students in the agriculture program to have a SAE, encouraging FFA members to complete award applications for their SAE, and analyzing and reflecting on student data to guide planning, instruction, and student growth. The survey results also showed the alternatively certified teachers are ineffective at conducting SAE visits for each student to learn about their experiences. Alternatively certified agricultural educators in Kansas should take time to attend professional development opportunities focused on Supervised Agricultural Experiences which will allow them to become more effective in that area of their agriculture program.

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Chapter I

INTRODUCTION

Good teachers in the classroom are an important factor when it comes to student success. What makes a good teacher though? Is a good teacher one who attended a university's education program and earned a degree specifically in education? Is a good teacher one who has worked in industry then transitioned into the classroom? The United States Department of Education (USDE) used the *No Child Left Behind* Act (NCLB) to try to put highly qualified teachers into core subject classrooms. In the NCLB Act, "Congress defined highly qualified teachers as those who not only possess full state certification but also have solid content knowledge of the subjects they teach" (U.S. Department of Education [USDE], 2002, p.vii.). The NCLB Act also stated that alternative routes to certification was a "promising system of teacher preparation and certification" (USDE, 2002, p.15) and allowed states to fill positions they might not have been able to otherwise.

Defining alternative certification is complex, as certification varies from state to state. The National Center for Alternative Certification (n.d) has defined alternative certification programs as ones that offer individuals the opportunity to become licensed by meeting requirement set forth by the state regardless of whether they have a background in education or not. Zeichner and Paige (2007) defined the alternative route to teaching as "anything other than a four or five-year undergraduate program in a college or university" (p. 3). In a report titled "Highly Qualified Teachers Enrolled in Programs Providing Alternative Routes to Teacher Certification or Licensure" published by the United States Department of Education in 2015, alternative route programs were recognized as varying in their specific features and requirements, but allow teacher candidates to serve as teachers in the classroom while

completing coursework for a full license. The American Board for the Certification of Teacher Excellence (2015) defined alternative teacher certification as earning a teaching license by an educator outside of a traditional college program. For the purpose of this research, alternative certification will be defined as earning a teaching license in a manner other than completing an undergraduate or graduate agricultural education degree program.

According to the USDE (2013), 20% of new teachers in the United States entering the profession come from alternative preparation programs. During the 2017-2018 school year, 1% of the teachers in Kansas were considered “out of field” teachers meaning they held a valid teaching license, but that license was not for the subject they were teaching at the time. Another 1% of teachers were considered “not standard but qualified” teachers meaning they held a temporary license for the subject they were teaching. The remaining 98% of the teachers were fully licensed teachers (Kansas State Department of Education, 2019c). Bird (2017) and Kim (2015) found that within the classroom, the teacher is the most important factor impacting student gain and success. For these alternatively certified teachers to be effective teachers, they need to be given proper preparation first (Hammond, Holtzman, Gatlin, & Heilig, 2005). Although preparation for alternatively certified teachers looks a little different than the preparation for traditionally certified teachers, the goal is still to produce highly qualified teachers (United States Department of Education, 2002).

Background

When teaching became a more popular occupation in the early nineteenth century, in order to become a teacher, one typically only had to display good moral character, and in some states, pass a general knowledge exam (Messerli, 1965; Ravitch, 2003). If you impressed the school board with your skills, you could be hired on as a teacher without any formal teacher

training. It wasn't until 1934 that Pennsylvania required anyone wanting to become a teacher to pass a test over reading, writing, and arithmetic (Ravitch, 2003). Then it was not until 33 years later that most states required their teachers to pass a test to become state certified. This test was a little more extensive and included U.S. history, geography, and grammar. The way teachers were trained though was inconsistent. Finally, in the early twentieth century, leaders in education took charge of teacher certification and changed the way teachers became certified. They required those interested in teaching to take courses in pedagogy and pass tests of pedagogical theory and states awarded teaching certificates (Ravitch, 2003; Wenglinsky, 2000). They also developed subject-matter based departments that allowed education students to specialize in what they were teaching (Ravitch, 2003).

Today, education majors are still required to take courses in general core areas, their subject matter, as well as courses in pedagogy. The general core classes envelop a variety of basic knowledge such as math, writing, arts, and science. The subject matter courses are dependent on the university the education major attends. The two universities that offer an agricultural education undergraduate degree in Kansas, Kansas State University (KSU) and Fort Hays State University (FHSU), have different requirements even though they are in the same state (National Association of Alternative Certification, n.d.). KSU requires 44 hours of technical agriculture courses to earn the agricultural education degree (Kansas State University, 2018) whereas FHSU requires 41 hours in technical agriculture courses (Fort Hays State University, 2018). Required hours in technical agriculture from both universities include courses in animal science, agronomy, horticulture, food systems, financial management, agriculture production, and power structural and technical systems. The pedagogy courses from each university are slightly different as well. KSU requires 45 hours of teacher education courses (Kansas State

University, 2018) and FHSU requires 37 hours (Fort Hays State University, 2018). Teacher education courses include topics such as educational psychology, foundations of education, educational technology, and methods of teaching.

Kansas now has alternative routes to obtain a teaching certificate. The first route is to obtain a license through the Restricted Teaching License Alternative Pathway (Kansas State Department of Education, 2019d). The universities that participate in this pathway refer to their programs as “Transition to Teaching” programs (Fort Hays State University, 2018b; Pittsburg State University, 2019; Wichita State University, 2018). This program occurs when someone who holds a non-education bachelor’s degree wishes to enter the teaching field. Through the transition to teaching program the teacher candidate must complete 24-29 credit hours of education coursework in a two-year period depending on the program they are in. Fort Hays State University (2018b) requires 24 credit hours for completion while Pittsburg State University (2019) and Wichita State University (2018) require 29 credit hours for program completion. The teacher candidate must then take and pass the Praxis Content test and Praxis Principles of Teaching and Learning test appropriate for the grade level they wish to teach (National Association of Alternative Certification, n.d.). The second route is for someone who holds a bachelor’s degree in education but wishes to teach a subject area different than their initial certification. These teacher candidates are only required to take and pass the Praxis content test for the subject they want to teach (Kansas State Department of Education, 2019b). For example, if a teacher was certified in social studies but wished to teach agriculture, they would only have to take and pass the Praxis agriculture content test to become certified in agricultural education. The third route for alternative certification is through an emergency substitute license. These teacher candidates must have 60 semester hours from an accredited private four-year college or

university, and coursework cannot be related to education (Kansas State Department of Education, 2019a).

The debate of the effectiveness of alternatively certified teachers has been one since the certification option became available. The debate stems around the teacher's pedagogy, classroom management, and the knowledge of the teaching and learning process in general (Mahatha, 2005). According to the National Education Association (NEA) (n.d),

...the NEA believes that alternative pathways must be equal in rigor to traditional programs and that every teacher candidate must meet identical standards and measures in order to receive a professional teaching license in a given state. These standards and measures should ensure that processes for teacher licensure adequately address the skills, knowledge, and dispositions needed for effective teaching (para. 5).

Those with authority in the education world know the importance of filling teaching positions and recognize alternative certification as a means for doing so, but they also recognize that in order to maintain the integrity of education and the school system, those filling the teaching positions through alternative certification need to be highly qualified.

Statement of the Problem

The agriculture industry supported 248,216 jobs (12.9%) of the workforce in Kansas in 2018 (Kansas Department of Agriculture, 2018). The industry also contributed to \$65.7billion (40.4%) of the state's economy (Kansas Department of Agriculture, 2018). Agriculture not only fills the increasing demand for animal protein, but also provides raw materials for products such as chemicals, fibers, and fuels. The students in today's agricultural education courses could be the ones to help meet the ever-growing need for agriculture products. Agricultural education has been an integral part of education as it teaches students teamwork, collaboration, and other life

skills that allow the student to be an effective member of society (Dailey, Conroy & Shelley-Tolbert, 2001). Mouser, Sheng, and Thoron (2019) assessed that students in agriculture were more career ready than their peers, especially in math. Knobloch, Ball, and Allen (2007) found that teaching agriculture in elementary and middle schools helps students understand and appreciate the world they live and gave them a sense of connectiveness to life. Former United States Department of Education Secretary Arne Duncan stated at the 2010 National FFA Convention, “We need you. Our nation needs your skills and talents to compete and prosper in the global economy. Our communities need your leadership and commitment to civic engagement to thrive. And our families need you to succeed in college and careers—so that one day you can support your own families and strengthen your own community”. The demand for agricultural educators continues in an upward trend as agricultural education programs grow and expand, teacher retire, and opening become available (National Association of Agricultural Educators, 2018).

By comparing the number of agricultural education positions posted on the Agricultural Education Vacancies bulletin with the number of student teaching interns listed on Kansas State University’s Agricultural Education Student Intern page and talking to faculty at Fort Hays State University, one can see that the universities are not producing enough new agricultural educators to fill all the open positions. There have been 55 agricultural education positions open in Kansas for the 2019-2020 school year (Kansas Agricultural Education Vacancies, 2019). According to Kansas State University’s Agricultural Education website and their Teaching Interns page (2019), they had 17 student teaching interns during the 2019 spring semester. Fourteen of the student teaching interns took jobs filling Kansas Agricultural Education positions (Kansas Agricultural Education Vacancies, 2019). Fort Hays State University graduated two agricultural

educators December 2018, and none in May 2019 (J. Ryan, personal communication, July 30, 2019). That left 39 positions to be filled by either experienced teachers changing schools, teachers coming out of retirement, or those coming from industry or another subject area – the alternatively certified teachers (Kansas Agricultural Education Vacancies, 2019).

Last year, the 2018-2019 school year, there were 54 agricultural education positions open in Kansas according to the Kansas Agricultural Education Vacancies bulletin (2018). Of those 54 openings, eight positions were filled with transition to teaching teachers, four positions were filled with experienced teachers whom were new to teaching agriculture, one position was filled within the school using the science teachers to cover the agriculture classes, and one position was filled by a long-term sub. Newly graduated certified agricultural educators filled 17 positions and experienced agricultural educators filled the remaining 23 positions (Kansas Agricultural Education Vacancies, 2018).

The National Association of Agricultural Educators (NAAE) (2018) discovered there were 363 (2.6%) alternatively certified agricultural educators and 111 (0.8%) non-licensed agricultural educators nation in 2018. They also found 61 full-time agricultural education positions and 10 part-time agricultural education position were left unfilled in 2018. NAAE highlighted that “school districts are hiring an unprecedented number of alternatively certified and non-licensed teachers to fill positions due to demand” (p. 1).

The frantic search for an agricultural educator has led several school districts to reach outside of the education world to find someone willing to fill the open teaching position (Rocca & Washburn, 2006). The alternative certification program began in the 1980s to combat an anticipated shortage of teachers as those graduating college with a four-year degree in education were not graduating in large enough quantities to fill all needed teaching positions (Mahatha,

2005). By creating an alternative certification route to find teachers, those who had at least a bachelor's degree could become teachers to fill teaching positions. According to the National Center for Alternative Certification (n.d.), all states including the District of Columbia, have some sort of alternative certification in place. Even though all states have alternative certification programs, each state defines alternative certification uniquely and have varied requirements for becoming alternative certified. Nonetheless, alternative certification methods streamline the process of getting a qualified educator into the classroom.

Studies have been conducted regarding the effectiveness of these alternatively certified teachers. The literature shows an equal split between finding alternatively certified teachers as effective or ineffective (Tissington & Grow, 2007). In years past, alternatively certified teachers were not effective in some areas such as professional knowledge but were effective in others such as communication and general knowledge (Boser, Wiley & Pettibone, 1986). Of course, those in the community and even those traditionally certified, had beliefs about the effectiveness of alternatively certified teachers in the beginning stages of the programs (Stoddard & Floden, 1995). The effectiveness of these alternatively certified teachers is often evaluated by the school's administrators as they oversee teacher evaluations for licensing (United States Department of Education, 2002). This study focuses on the perspective of these administrators when evaluating the effectiveness of the alternatively certified teachers.

Significance of the Study

The data collected from school administrators regarding the effectiveness of alternatively certified agricultural educators will be analyzed and used by those charged with developing professional development opportunities for agriculture teachers in Kansas. Kansas State University Agricultural Education Department and the Kansas Association of Agricultural

Educators (KAAE) Board Members will use the information collected to tailor professional development experiences to areas of least effectiveness of the teachers. These professional development needs can be met at the KAAE Mid-Winter Symposium, the Kansas Association for Career and Technical Education (K-ACTE) Summer Conference, or even as a separate professional development workshop event specifically targeting the alternatively certified teachers.

The data analysis will also be shared with the school administrators allowing them to see common trends of effectiveness, or lack of effectiveness, so that they may encourage their alternatively certified teachers to attend professional development events in the areas of greatest need. By knowing where alternatively certified agricultural educators lack in their instruction, the administrators can support the teachers in a way to increase the effectiveness of these areas. Sharing the collected data would also allow administrators to see other considerations they should make before hiring an alternatively certified agricultural educator.

Identifying the areas of least effectiveness of alternatively certified agricultural educators would also allow the opportunity for supplemental materials to be constructed to be given to those in the Transition to Teaching program or those becoming certified through what is referred to as Praxis Plus. This route to certification takes place when an already licensed teacher needs to add a teaching endorsement by testing. Perhaps a graduate student could develop supplemental information to be delivered to alternatively certified teachers. Or the Kansas State Department of Education could construct these materials as part of an ongoing program to strengthen the alternative certification programs throughout the state. Regardless of who constructs the supplementals, the data collected through this study would aid in the development of topics and areas of instruction.

Identifying the needs areas of alternatively certified agricultural educators in Kansas could allow the state and school districts to develop methods that would fill vacant positions with highly qualified teachers. Alternative certification programs will not improve the quality of teachers they produce if they do not know where those agricultural educators struggle within their agriculture programs.

Objectives

The rise of alternatively certified teachers brings along doubt and angst among educators, parents, and the general public (Schlechty & Vance, 1983). Not much of the research published focuses solely on the effectiveness of alternatively certified agricultural educators in their entire agriculture program. So far, none of the research published has focused strictly on agricultural educators in Kansas either. The purpose of this study was to determine the perceived effectiveness of agricultural educators in Kansas in seven different parts of their total agriculture program. The specific objectives for the study were:

1. Describe the most common method of license obtainment by alternatively certified agricultural educators in Kansas.
2. Describe the perceived levels of effectiveness of alternatively certified agricultural educators in Kansas as identified by their administrators.
3. Determine the crucial needs of the alternatively certified agricultural educators in Kansas.

Definition of Terms

1. Alternative Certification – A process by which an individual may acquire a teaching certificate through an alternative certification program rather than earning a degree in education (National Education Association, n.d.).

2. Alternative Certification Program – A program designed to produce teachers who have been prepared as a result of state alternative certification provisions and offers a non-traditional route to regular certification. In Kansas, these programs include Transition to Teaching, Praxis Plus, and Emergency Certification (National Education Association, n.d.).
3. Kansas Educator Evaluations Protocol (KEEP2) – An online evaluation system used by administrators to evaluate educators and other personnel that provides a uniform evaluation process using rubrics (Kansas Department of Education, n.d.).
4. Traditional Certification – A process by which an individual acquires a teaching certificate by attending an approved teacher training program at a college that requires the completion of coursework and a student teaching internship and offers an undergraduate degree in education (Mahatha, 2005).
5. Teacher Certification – earning a teaching license by completing the required college coursework and state approved testing (Kansas State Department of Education, 2019a).
6. Teacher Effectiveness – In this study, a teacher’s performance as rated by his/her respective administrator, based primarily off areas of evaluation noted in the Kansas State Department of Education KEEP2 teacher evaluation program.
7. The National FFA Organization– An intracurricular youth organization that prepares members for premier leadership, personal growth, and career success through agricultural education (National FFA Organization, n.d.).
8. Supervised Agricultural Experience (SAE) – A required component of the agricultural education program that allows students to consider multiple careers, learn expected

workplace behavior, develop specific skills within an industry, and apply academic and occupational skills in the workplace (National Council for Agricultural Education, 2015).

Assumptions

For this study, the following were assumed: (a) the participating administrators responded to the survey in an open minded and honest manner, and their responses were an accurate measure of the effectiveness of the alternatively certified agricultural educator; (b) the responses of the administrators are an accurate representation of the perceptions of the non-respondent administrators regarding the effectiveness of alternatively certified agricultural educators; (c) the information collected will be used to better prepare and support alternatively certified agricultural educators; (d) alternatively certified agricultural educators perform differently in the classroom than traditionally certified agricultural educators; (e) the administrators have observed the alternatively certified agricultural educator and can identify their needs appropriately.

Limitations

There are a few factors that might decrease internal validity of this study. The study was confined to the following limitations: (a) differences in participating administrator beliefs and perspectives; (b) alternatively certified teachers' demographics including age and level of experience in their field of study outside of education or their field of education other than agriculture; (c) the teaching environment when considering the teacher's pay/benefits, availability of mentor teachers, school size, and administrator competence and support; (d) the inability to identify all alternatively certified agricultural educators in Kansas not in their first year or two of teaching; (e) participants not understanding all aspects of the agricultural education program, especially FFA and SAEs; (f) effectiveness of the alternatively certified agricultural educator is based on the administrator's personal opinion; (g) the survey being

administered after the end of the school year. Another limitation would be that the study was not restricted to only first year teachers because of the limited population, and it has been shown that the longer a teacher is in the profession, the more effective they become. This could skew the results as all teachers are compared equally.

Delimitations

The study was delimited to the subject area of agricultural education in grades 6-12 in Kansas. The participants in the study were limited to those high school administrators tasked with evaluating their school's alternatively certified agricultural educator. Since the study is limited to the evaluation of agricultural educators, the results may not be applicable to other subject areas with alternatively certified teachers, especially those not associated with a student organization. The study was also limited to alternatively certified agricultural educators teaching during the 2018-2019 school year in Kansas so the results may not be applicable to states that do not have similar programs.

Chapter II

Review of Literature

A review of literature has been conducted to identify research and knowledge regarding an array of aspects involving alternatively certified teachers. Some of these aspects include the need for highly qualified teachers, the history of alternative certification, the effectiveness of alternatively certified teachers, and alternative certification of agricultural educators. The literature reviewed either directly or indirectly aided in the understanding of alternative teacher certification and the effectiveness they have in their classrooms.

The demand for highly qualified teachers pushed by the *No Child Left Behind* Act has caused states to develop alternative certification programs (U.S. Department of Education, 2002). Today, every state in the U.S., and Washington D.C., has some sort of alternative teacher certification (National Education Association, n.d.). Each state has a prescribed set of requirements the teacher candidate must meet in order to become a certified teacher. The state education departments have developed these requirements in hopes of filling the teaching vacancies all while producing teachers of high quality (U.S. Department of Education, 2002).

The *No Child Left Behind Act* has since been replaced with *Every Student Succeeds Act* (ESSA) of 2015. This law shifted most of the control over public education back to the states and even local school districts. ESSA looked to improve the quality and effectiveness of teachers by reforming teacher preparation program standards, expand alternative routes to state certification, and developing quality teacher trainings and resources (United States Department of Education, 2015a).

Teacher Certification

The certification of elementary and secondary teachers in the United States is variable by state, meaning each state has their own right to develop teacher certification requirements and guidelines. The USDE does regulate the actions of the state departments but their reach is not nearly as far as the states'. In 2016, The USDE revised the Higher Education Act (HEA) of 1965 to include new requirements for teacher preparation programs. These new regulations according to the Office of Postsecondary Education, Department of Education (2016) included:

1. Establish necessary definitions and requirements for Institutions of Higher Education (IHEs) and States related to the quality of teacher preparation programs and require States to develop measures for assessing teacher preparation performance (p.75495).
2. Establish indicators that States must use to report on teacher preparation program performance, to help ensure that the quality of teacher preparation programs is judged on reliable and valid indicators of program performance (p.75495).
3. Establish the areas States must consider in identifying teacher preparation programs that are low-performing and at-risk of being low-performing, the actions States must take with respect to those programs, and the consequences for a low-performing program that loses State approval or financial support. The final regulations also establish the conditions under which a program that loses State approval or financial support may regain its eligibility for title IV, HEA funding (p.75495).
4. Establish a link between the State's classification of a teacher preparation program's performance under the title II reporting system and that program's identification as "high-quality" for TEACH Grant eligibility purposes (p.75495).

5. Establish provisions that allow TEACH Grant recipients to satisfy the requirements of their agreement to serve by teaching in a high-need field that was designated as high-need at the time the grant was received (p.75495).
6. Establish conditions that allow TEACH Grant recipients to have their service obligations discharged if they are totally and permanently disabled. The final regulations also establish conditions under which a student who had a prior service obligation discharged due to total and permanent disability may receive a new TEACH Grant (p.75495).

These updated regulations were put into place in order to coincide with the NCLB Act stating teachers of high quality needed to be continually placed into schools. The USDE believes that in order to produce teachers of high quality, the teacher preparation programs need to be top notch (USDE, 2002).

Traditionally, the first step in obtaining a teaching degree is to earn a degree in a teacher preparation program. Some states only require a bachelor's degree while other require a master's degree. The major should be chosen based on the grade level and subject area the candidate wishes to teach. At the end of the preparation program, the candidate must complete a student teaching experience in the content area of the license. This student teaching experience length varies by state as well as type of teaching license. On average, most programs require at least 15 weeks of student teaching (Teacher Certification Degree, 2019). The final step is to pass a state required exam. All but four states use the Praxis series test as their state required test. Those states either make their own tests or use a combination of their own as well as the Praxis Core test. These Praxis tests can include the Praxis Core Academic Skills for Educators (Core), the Praxis Subject Assessment, the Praxis Content Knowledge for Teaching Assessments, and the Praxis Principles of Learning and Teaching (PLT). The Praxis tests do cost money to take and

can cost between \$150 to \$300 per test depending on the test type and the state (Teacher Certification Degree, 2019). Though the requirements of teaching certificates vary from state to state, the goal is to ensure teachers are adequately prepared (Teacher Certification Degree, 2019).

The History of Alternative Certification

In the 1983 report from the National Commission of Excellence in Education (NCEE), *A Nation at Risk*, the Commission found that,

...not enough of the academically able students are being attracted to teaching; that teacher preparation programs need substantial improvement; that the professional working life of teachers is on the whole unacceptable; and that a serious shortage of teachers exists in key fields. (p. 20)

The Commission's research indicated that the teacher preparation programs were more focused on educational methods rather than subject area knowledge. They found there was a major shortage of teachers in the subject areas of mathematics, science, and foreign language. Lastly, the Commission learned that "half of the newly employed mathematics, science, and English teachers are not qualified to teach these subjects..." (NCEE, 1983, p.20). The report sparked concern and caused the public to question what was happening in the educational system (Arrington, 2010).

The report pushed states to better their teacher preparation programs as well as find ways to fill the teaching vacancies. This led to the establishment of an alternative certification program in New Jersey in 1985. The program was known as the Provisional Teacher Certification Program (Arrington, 2010). This program required teacher candidates to have a bachelor's degree, complete 200 hours of instruction, pass a competency test, and be approved by district administrators (Dill, 1996). In the beginning, the alternative certification programs included

college course work, mentoring from principals or college professors, and supervision for the first year in the classroom (Mahatha, 2005). These programs were meant to draw in professionals outside the education sector.

The number of alternative certification programs increased even more after The No Child Left Behind Act of 2001 passed and required every teacher to be “highly qualified” by 2005 (Arrington, 2010). The No Child Left Behind Act focused on all teachers being certified in the area they were to teach. Schools worked to meet this mandate by shuffling teachers to a different subject, hiring new/more qualified teachers, and getting their unqualified teachers to meet the highly qualified standards (USDE, 2002). The alternative certification programs “streamline the process of certification to move qualified candidates into the classroom on a fast-track basis” (USDE, 2002, p.15). The alternatively certified teachers still must take the same pedagogical and content tests as traditionally certified teachers, but their hours of coursework in pedagogy, content, and teaching methods is lessened. The reduced hours allowed teacher candidates to quickly earn their teaching license and fill the voids.

In 2001, Hess challenged the way we traditionally certified teachers because he felt the states were not doing what they could for applicants to be successful in their certification. He stated, “certification does not ensure mastery of essential skills or knowledge, does little to weed out unsuitable applications, and is an unconvincing and ineffective way to bolster popular respect or teachers or teaching” (Hess, 2001, para. 10). Hess suggested expanding alternative certification programs as well as making them more assessible and providing more funding for improving teacher quality. His idea of certification was to allow anyone who passed a background check, held at least a bachelor’s degree from a recognized college or university, and passed essential skills and knowledge competency tests should be able to become certified

teachers. This would allow for qualified professionals outside of education to fill the need of highly qualified teachers (Hess, 2001). Hess ended his White House Conference by saying, “In the 21st century, having finally recognized that accountability and flexibility allow educators to serve children better than bureaucracy and regulation, can’t we do better?” (Hess, 2001, para. 39).

According to the KSDE (2019) there were 34,129 fulltime teachers in the state of Kansas during the 2018-2019 school year. These teachers included practical arts/career/technical education, special education, prekindergarten, kindergarten, and all other subject areas. Around 341 (1.00%) of those teachers were considered “out of field” meaning they had a valid Kansas teaching license, but the license was not for the subject they were currently teaching. Another 341 (1.00%) teachers were considered “not standard but qualified” meaning they held a temporary license, such as a restricted license given to those going through the Transition to Teaching program. According to the Kansas Association of Agricultural Educators Annual Report from 2018, there were 40 alternatively certified agricultural educators teaching in Kansas during the 2017-2018 school year. These teachers varied in their teaching experience and were not all first-year teachers. Twenty-six of the alternatively certified teachers were in the Transition to Teaching program, 13 were Praxis Plus certified, and one earned their emergency certification license in order to fill a position (Kansas Association of Agricultural Educators, 2018).

The Need for Highly Qualified Teachers

The United States Department of Education (2005) defined highly qualified teachers as those holding a bachelor’s degree, a full state license, and proving they know the subject(s) they teach. Thompson, Greer, and Greer (2004) conducted research as to the characteristics teachers needed to possess in order to be classified as highly qualified. Using the NCLB Act’s qualities of

a highly qualified teacher and interviews from students, Thompson et al. (2004) compiled a list of 12 characteristics of quality teachers: fairness, positive attitude, preparedness, adding a personal touch, sense of humor, creativity, willingness to admit mistakes, forgiving, respect, high expectations, compassion, and creating a sense of belonging. These 12 characteristics aligned with the qualities of effective teachers before this research. Cruickshank, Jenkins, and Metcalf (2003) found effective teachers to be caring, supportive, concerned with the welfare of their students, knowledgeable about their subject matter, willing and able to get along with parents, excited about their job, and can help students learn. Noddings (2001) suggested teachers who are attentive and receptive, responsive to student needs and feelings, and teachers who care for their students are ones who are of the highest quality. “Nurturing” (p.53) is the word Norlander-Case, Reagan, and Case (1999) used to describe quality teachers after completing research on what was necessary to teach in teacher preparation programs. Borich (2000) used the word “excited” (p.25) when describing characteristics of teachers that met the needs of schools at the time.

The debate of whether highly qualified teachers make an impact on student success has been one since the *No Child Left Behind* Act entered the scene (Thompson, Greer & Greer, 2004). Darling-Hammond (2002) found that highly qualified, well prepared teachers have an influence on student achievement. Darling-Hammond (2002) also showed that teacher quality had a higher impact on student success than student background factors such as poverty, native language, and racial classification. Wright, Horn, and Sanders (1997) discovered in their research that teacher effectiveness was found to be the main factor affecting student achievement and that students with ineffective teachers had a harder time catching up to their peers of the same grade level who had an effective teacher. Sanders and Rivers (1996) reported a student with an ineffective teacher showed residual effects as they proceed through the following grade level

even if their new teacher was effective. The ineffective teachers showed to be “ineffective in all achievement levels of students” (p.4) as well, indicating that ineffective teachers have a great impact on their students. Jordan, Mendro, and Weerssinghe (1997) found in their research that while teacher quality did impact student success, there were four aspects of teacher quality that were significant predictors of student achievement. The four aspects of teacher quality included major or minor in subject area taught, years of teaching experience, percentage of teachers who hold National Board Certification, and student-teacher ratio.

In the end, through all the research collected, it has been shown that student achievement is directed impacted by the quality of the teacher (Jordan, Mendro & Weerasinghe, 1997: Sanders & Rivers, 1996; Wright, Horn & Sanders, 1997). This reminds us that in order for our students to be successful and achieve their greatest potential, we have to supply them with teachers who are properly trained and teachers who know how to connect with students and teach them the information and skills they need in order to be successful.

Teacher Certification in Kansas

To obtain a teaching license in Kansas one must have a bachelor’s degree, verification of completion of an accredited teacher education program, verification of successful completion of a pedagogical and content assessments, and verification of eight semester hours of recent credit (Teacher Certification Degree, 2019). There are 24 accredited teacher preparation programs in Kansas that span from universities to private colleges, two colleges that are part of a consortium, and one college that is accredited with stipulations (KSDE, 2019). Only two of those programs have an Agricultural Education degree, Kansas State University and Fort Hays State University (KSDE, 2019).

Teachers wishing to obtain a license in Kansas must take one of the four Principles of Learning and Teaching (PLT) Praxis tests dependent upon which grade level they wish to certify in. The PLT tests include Principles of Learning and Teaching: Early Childhood, Principles of Learning and Teaching: Grades K-6, Principles of Learning and Teaching: Grades 5-9, Principles of Learning and Teaching: Grades 7-12 (Praxis Kansas, n.d.). The qualifying score for a PLT test is 160. Teacher candidates must also take a Praxis test specific to their license area. Teacher candidates wishing to become agricultural educators must take the Agriculture Praxis test and receive a score of 147 or higher (Praxis Kansas, n.d.).

An alternative teaching certification route in Kansas is one in which is used in a school district needing to fill vacancies they cannot fill with qualified teachers. According to the Kansas State Department of Education (2019) “It is designed to recruit mid-career professionals who have a bachelor’s, master’s degree, or equivalent coursework in a content area they want to teach and are seeking a career change” (para.1). This alternative license program in Kansas is only available for secondary areas. In the state of Kansas, in order to become alternatively certified you must first have received a bachelor’s degree or higher from an accredited university. The degree should be in an area of relevance to the content area the candidate wishes to teach in. For instance, if an individual wants to become an alternatively certified agricultural educator, possessing a degree in horticulture, agribusiness, or animal science would be acceptable. The individual wishing to obtain the alternative certification also must have a GPA of at least 2.75 from the last 60 hours of their college coursework. The teacher candidate must complete coursework in teacher education that will be finished in not more than two years, must obtain a passing score on the Praxis II content assessment as well as the Praxis II Principles of Learning

and Teaching test, and must have a mentor in the school they are employed (National Association of Alternative Certification, n.d.).

There are currently only three universities in Kansas that offer a Transition to Teaching program: Fort Hays State University (FHSU), Pittsburg State University (PSU), and Wichita State University (WSU). FHSU requires an on campus four-day introduction course (two credit hours), then 22 online credit hours in teacher education courses over a two-year period (National Association of Alternative Certification, n.d.). PSU requires 36 credit hours of teacher education courses online over a two-year period (National Association of Alternative Certification, n.d.). WSU requires three courses (eight credit hours) on campus during June and July prior to entering the classroom, then 21 hours of teacher education courses online over a two-year period (National Association of Alternative Certification, n.d.).

Once an individual has been accepted into an alternative certification program, they will be granted a Restricted Teaching License. In order to obtain a restricted teaching license the individual must have a teaching position at an accredited high school in Kansas with at least 50% of their teaching in the area of content interest, must have a passing score on the Praxis II content test, must complete a background check, and must have two recommendation forms (National Association of Alternative Certification, n.d.). The restricted teaching license allows individuals to have immediate access to the classroom while working through the Transition to Teaching program in which they have been admitted.

The other option for becoming alternatively certified occurs when an individual already has a four-year degree in education then takes the Praxis II exam in the content area they wish to teach. For example, individuals would take the Agriculture Praxis II exam and pass with a score required by the Kansas State Department of Education. The Praxis subject assessments measure

subject specific knowledge, as well as general and subject-specific teaching skills needed by beginning teachers (Praxis Kansas, n.d.). To become certified as an agricultural educator the individual must pass the Agriculture Praxis II with a score of 147 (Praxis Kansas, n.d.).

Alternatively Certified Agricultural Educators

The research on alternatively certified agricultural educators is rather sparse. Most of the research focuses on either the inservice and professional development needs or the teacher efficacy of the alternatively certified agricultural educators compared to traditionally certified teachers. Miller, Kahler, and Rheault (1989) worked to identify the characteristics of effective agricultural educators. They found that an effective agriculture teacher was one who had productive teaching behaviors, had organized, structured class management, had positive interpersonal relationships, fulfilled their professional responsibilities, and displayed quality personal characteristics.

Roberts and Dyer (2004) studied the inservice needs of alternatively certified agriculture teachers in the United States. The needs areas were determined by an expert panel that consisted of two university teacher educators, two state FFA supervisory staff members, four county level agricultural administrators, and 28 agricultural educators located in Florida. In the area of FFA and SAE Supervision, the highest needs areas for alternatively certified agricultural educators were preparing proficiency award applications and preparing for career development events. In the area of Instruction and Curriculum, the greatest inservice need was in changing curriculum to meet changes in technology. In Technical Agriculture, the highest need for alternatively certified agricultural educators was advances in biotechnology. There was a high need for writing grant proposals, building the image of the agriculture program, and recruiting and retaining quality students in the area of Program Management and Planning. Reducing work-related stress, and

time management techniques were the highest needs areas in the area of Teacher Professional Development.

Wall (2010) found alternatively certified Agriscience teachers in Texas felt incompetent in the areas of analyzing course evaluation data, conducting needs assessments, exposing students to relevant SAE and other work-based programs, selecting reference materials, teaching record keeping skills, assisting students in completing FFA applications, organizing and maintaining an advisory committee, and serving on a school's staff committee. The evaluated alternatively certified Agriscience teachers also identified critical needs competency areas. These areas were identified as important by a panel of experts and the teachers lacked in competence of them: developing a budget, analyzing course evaluation data, employing various teaching methods within lessons, enforcing student behavioral expectations, addressing special needs, coaching career development events, teaching record keeping skills, recruiting students for the program, developing public relations information, and participating in professional organizations.

Rocca and Washburn (2006) looked at teacher efficacy of Florida alternatively certified agriculture teachers. They found that, "Alternatively certified teachers' lack of formal instruction in agricultural education, teaching methods, and pedagogy did not manifest into lower feelings of teacher efficacy" (p.65). Duncan and Ricketts (2008) also studied teacher efficacy of alternatively certified agriculture teachers and found they were less efficacious in the areas of technical content knowledge, conducting activities related to FFA, leadership development, and SAE, as well as program management, but were most efficacious in pedagogical strategies.

Research on the Effectiveness of Alternative Certification Programs

After reviewing the literature pertaining to alternatively certified teachers and their effectiveness, it is evident the topic is heavily debated as research backs both sides of the issue. In their research, Miller, McKenna, and McKenna (1998), stated that research on alternatively certified programs was “inconclusive and somewhat contradictory” (p.166) because a variety of methods were being used to evaluate alternative certification programs and different operational definitions were used to define variables in use. Bowling and Ball (2012) also identified a lack of consistency in alternative teacher preparation programs. Hawley (1990) reported similar information stating that alternatively certified teachers were not compared appropriately to traditionally certified teachers.

Positive Effectiveness of Alternatively Certified Teachers. One of the first studies conducted about the effectiveness of alternatively certified teachers took place in 1989 by Lutz and Hutton. Their focus was on the quality of an alternatively certified teacher preparation program in Dallas, Texas and how well its prepared teachers for the classroom. They questioned if the program produced quality teachers and if the program produced enough teachers to combat the teacher shortage. Lutz and Hutton (1989) found that the alternative certification programs would assist with filling the teacher shortage, especially in high needs areas. They also found that the alternatively certified interns did just as well as the interns who went through a traditional certification program. “They were rated as high or higher than were first-year teachers by their principals and mentor teachers. They scored as high or higher on standardized measures of teaching ability/performance” (Lutz & Hutton, 1989, p. 252).

Several studies found that alternatively certified teachers when scored through standardized tests and college coursework grade point averages, were considered better than

average in content knowledge (Adelman, Michie & Bogart, 1986; Hutton, 1987; Peck, 1988; Barnes, Salmon & Wale, 1989; Hawk & Schmidt, 1989). Arrington (2010) found that the experiences brought to the classroom by alternatively certified teachers were an advantage over traditionally certified teachers. Arrington (2010) also found alternatively certified teachers were just as strong in their student engagement, and time management skills as their traditionally certified counterparts. Torres (2006) found that alternatively certified teachers in Florida were equal or better to traditionally certified teachers when evaluating overall performance. Constantine et al. (2009) also found that there was no significant difference in student performance between students taught by alternatively certified teachers and traditionally certified teachers. Alternatively and traditionally certified teachers held comparable feelings of self-efficacy and held similar feelings in their ability to teach (Rocca & Washburn, 2006). Robinson and Edwards (2012) recorded that alternatively certified teachers indicated the largest growth in self-efficacy when compared to traditionally certified teachers. McCarty and Dietz (2011) concluded alternatively certified teachers in Nebraska were comparable in quality as their traditionally certified counterparts after their first year of teaching. Lastly, Mahatha (2005) discovered alternatively certified teachers were perceived as being just as professional as traditionally certified teachers in terms of conducting themselves in meetings, maintaining student records, and responding to district policies.

Negative Effectiveness of Alternatively Certified Teachers. Just as research supports the positive effectiveness of alternatively certified teachers, there is research stating that alternatively certified teachers are not of the same high quality as traditionally certified teachers. There was skepticism about alternative certification from several in the education world. Brewer (2003) wanted to ensure the alternative routes were not put in place just to have “warm body fill-ins”

(p.9). Berry (2001) believed most alternative certification programs were subpar as they tried to prepare the teacher candidates too quickly which resulted in low quality teachers. Darling-Hammond (1994) took a dig at the alternative certification program, Teach for America, stating teachers who entered classrooms after going through the program were unprepared and inadequate.

Darling-Hammond, Wise, and Kline (1999) also discovered teachers from alternatively certified teachers lacked in curriculum development, pedagogical knowledge, classroom management, and attention to learning styles. Alternatively certified teachers have been identified as less effective in the classroom than traditionally certified teachers (Bowling & Ball, 2018; Wenglinsky, 2002). Mahatha's (2005) research confirmed Wenglinsky's results by observing principals in New Orleans perceived the alternatively certified teachers under their supervision to be less effective than the traditionally certified teachers in content knowledge, management of the classroom, instructional planning, professionalism. Darling-Hammond, Chung, and Frelow (2002) recognized that alternatively certified teachers felt less prepared in the classroom and Nakai and Turley (2003) revealed that alternatively certified teachers did not possess an attitude and disposition that allowed them to be successful teachers. Research conducted by Robinson and Edwards (2012) indicated that alternatively certified teachers were outperformed by traditionally certified teachers in the areas of student achievement, student engagement, instructional practices, classroom management, and teacher products (lesson plans, assessments, etc.).

Theoretical Framework

The framework used to develop the research came from the National Board for Professional Teaching Standards (NBPTS). The NBPTS are based off the National Board's

“Five Propositions of Accomplished Teaching” found in the policy *What Teachers Should Know and Be Able to Do* (2002). The National Board established standards specifically for Career and Technical Education (CTE) courses, which encompasses agricultural education. These standards include: (1) Knowledge of Students, (2) Responding to Diversity, (3) Knowledge of Content, (4) Learning Environments and Instructional Practices, (5) Assessments, (6) Postsecondary Readiness, (7) Program Design and Management, (8) Partnerships and Collaborations, (9) Leadership in the Profession, (10) Reflective Practice (National Board for Professional Teaching Standards, 2014).

The second component of the framework, KEEP2, was developed by the Kansas Department of Education (KSDE) to be used to evaluate the performance of teachers in Kansas with the goal in mind of ensuring educators are producing “valid outcomes” (KSDE, 2016, p.1). The evaluation system was developed using the Interstate Teacher Assessment and Support Consortium (InTASC) Standards designed by the Council of Chief State School Officers (KSDE, 2016). The InTASC Standards were established to aid schools in defining effective teaching and are designed to assist with teacher licensing standards. KSDE stated that the system, “is both flexible enough to support existing evaluation processes in schools and districts, and sufficiently robust to support the improvement of practice” (KSDE, 2016, p.1). KEEP2 uses a Summative Evaluation Rating Matrix to evaluate educators on a combination of Student Performance (SP) as well Instructional Practice Protocol (IPP). The student performance portion of the summary rating is determined using student performance measures. These student performance measures can include state assessments, commercially purchased assessments, or locally developed performance methods. The instructional practice protocol of the summary rating includes evaluation of student learning, content knowledge, instructional practice, and professional

responsibility. The matrix measures teachers' skills as Ineffective, Developing, Effective, and Highly Effective and combines their rates in SP and IPP to identify their Final Summative Rating (KSDE, 2016). Figure 1 shows how each measure is derived at through the ratings of Student Performance, and Instructional Practice Protocol.

SP 1	SP 2	SP 3	SP Summary Rating	Student Learning	Content Knowledge	Instructional Practice	Professional Responsibility	IPP Summary Rating	Final Summative Rating
Met	Met	Met	Highly Effective	HE	HE	HE	HE	Highly Effective	Highly Effective
Met	Met	Met	Highly Effective	E	E	E	E	Effective	Highly Effective or Effective
Met	Met	Met	Highly Effective	D	D	D	D	Developing	Effective or Developing
Met	Not Met	Met	Effective	E	HE	HE	HE	Highly Effective	Highly Effective or Effective
Not Met	Met	Met	Effective	E	D	E	E	Effective	Effective
Met	Met	Not Met	Effective	D	E	D	D	Developing	Effective or Developing
Not Met	Not Met	Met	Developing	E	E	E	E	Effective	Effective or Developing
Not Met	Met	Not Met	Developing	E	D	D	IE	Developing	Developing
Not Met	Not Met	Met	Developing	IE	IE	D	IE	Ineffective	Developing or Ineffective
Not Met	Not Met	Not Met	Ineffective	D	D	D	D	Developing	Developing or Ineffective
Not Met	Not Met	Not Met	Ineffective	IE	IE	IE	IE	Ineffective	Ineffective

1. Recommended educator meets 3 SPs to be considered highly effective or its equivalent.
2. Must meet at least two SPs to be considered effective or its equivalent for the SP Summary Rating.
3. Must meet at least one SPs to be considered developing or its equivalent for the SP Summary Rating.
4. The Final Summative Rating can only be rated one performance level higher than the lowest summary rating.
5. When both summary ratings are the same, that rating becomes the Final Summative Rating.

NOTE: One Kansas State Assessments are required as an SP for teachers of tested grades and subject only.

IE = Ineffective
D = Developing
E = Effective
HE = Highly Effective

Figure 1 KEEP2 Performance Matrix (Kansas State Department of Education, n.d.)

The standards created by NBPTS and InTASC are a common source of guidelines for administrators to use to evaluate educators under their supervision. This creates a sense of consistency when looking at teacher evaluations across the United States. The two standard systems were put together to create the competencies used by the administrators to evaluate the alternatively certified agricultural educators.

Summary

Alternative teaching certification programs arose because of a lack of qualified teachers entering classrooms across the United States. Legislature allowed the states the right to develop their own alternative licensing routes to fill the need of their state's education system. The *No*

Child Left Behind Act was a driving force behind developing the alternative certification programs and pushed them to develop highly qualified teachers.

There is research backing both perspectives of alternatively certified teacher effectiveness. The research is evenly split between alternatively certified teachers being effective and not effective. The research focused mainly on comparing alternatively certified teachers to traditionally certified teacher in the areas of efficacy and effectiveness, or on the inservice needs of alternatively certified teachers compared to traditionally certified teachers. Supporters of alternative certification believe these teachers are just as capable, if not more, of ensuring student success compared to traditionally certified teachers. Supporters also found alternatively certified teachers brought more valuable experiences to the classroom.

Those opposed to alternative certification identify alternatively certified teachers as lacking in content knowledge, classroom management, and instructional methods. They also suggest that alternatively certified teachers do not possess the attitude and mindset to be successful teachers.

There has been little research solely on alternatively certified teachers without comparing them to traditionally certified teachers. There also is not any research on alternatively certified agricultural educators in Kansas and which areas they need the most support. This allows the question to remain – What is the perceived effectiveness of alternatively certified agricultural educators in Kansas?

Chapter III

Methodology

The purpose of this study was to investigate administrators' perceptions of alternatively certified agricultural education instructors and how effective they are in various areas of their program. Administrators were asked to identify whether they agreed or disagreed with the effectiveness of the alternatively certified agricultural education instructor in the categories of subject area knowledge, classroom management and discipline, instructional planning process and methods, community relations, professional development, management of the FFA chapter, and management of SAE programs. Data was collected through an online survey sent to the administrators of the alternatively certified teacher.

This chapter of the study contains the procedures used to gather the data and the methods utilized for the analysis of the data collected through the surveys. It begins with the design of the research, moves to discussing the population studied, continues with the method of research collection and the development and administration of the survey, the validity and reliability of the survey instrument, and concludes with the data analysis plan. This chapter will also touch on how the study was conducted while ensuring participant information is protected and participants granted consent.

Research Design

The study was a descriptive research study that used the survey method to collect data. Survey research is designed to collect information about attitudes and beliefs as well as collect data about a sample and make inferences about a larger population (Gall, Borg & Gall, 1996; McMillian & Schumacher, 2000). Survey research can be used to assist in future planning and decision making for the population being studied (Isaac & Michaels, 1989).

In this study, the researcher utilized a 41-question online survey to gather demographic information about the administrators as well as gather information about the effectiveness of the alternatively certified agricultural educator under their evaluation. The survey was sent through email.

Population and Responding Sample

The population for this study was 36 administrators of alternatively certified agricultural educators in Kansas teaching during the 2018-2019 school year. The names of the alternatively certified agricultural educators and the school they teach at was collected with the help of the Agricultural Education Program Consultant at the Kansas Department of Education and the Kansas Agricultural Educators Annual Report data from 2017-2018. Their administrator and the administrator's email address were identified using their school websites. The high school principals were contacted about their observations of the agricultural educator during the 2018-2019 school year. The principals contacted came from schools that varied in size from an enrollment of 26 students to an enrollment of 2,041 students. Some schools are in a rural community while others are in larger cities.

There were 14 respondents to the survey. One of the respondents stated the agricultural educator under their supervision had received licensing through an agricultural education bachelor's degree and another responded they did not have an agricultural educator under their supervision, so no further data was collected from those respondents and they were considered unusable. This left 12 usable surveys, or 33.3% of the population to use for data analysis.

All 12 administrators responded to the demographics portion of the survey. Half of the respondents were male ($n = 6$, 50.0%) while the other half were female ($n = 6$, 50.0%). The years of administrative experience ranged from fewer than five years ($n = 5$) to 20-24 years ($n = 1$).

Over a third of the administrators ($n = 5$, 41.7%) had 11-20 teachers under their evaluation while all administrators (100%) had 1-5 alternatively certified teachers under their evaluation.

Instrumentation

A note explaining the purpose of the survey and its data benefits was included at the beginning of the survey. All responses were kept confidential and the names of the administrators and their school district were not included on the instrument. The survey included competencies in similar areas found in the Kansas Educator Evaluations Protocol (KEEP2) system utilized by administrators to evaluate educators in their respective school districts. The construct areas and their components established by KEEP2 are: (1) Learner and Learning – Learner Development, Learner Differences, Learning Environment; (2) Content Knowledge – Content Knowledge, Innovative Applications of Content Knowledge; (3) Instructional Practice – Planning for Instruction, Assessment, Instructional Strategies; (4) Professional Responsibility – Reflection and Continuous Growth, Collaboration and Leadership.

The Instructional Practice Protocol within the KEEP2 system is made up of four constructs the educators are evaluated on. Each construct is comprised of various components and the average measure of the components is used to determine the construct's overall rating.

The KEEP2 evaluation system was designed using the Interstate Teacher Assessment and Support Consortium (InTASC) Standards developed by the Council of Chief State School Officers (KSDE, 2016). InTASC is a consortium of state, higher, and national education institutions. InTASC was used as a research resource to develop an underlying guide for the KEEP2 rubric. The InTASC Standards were designed to aid schools in defining effective teaching and are designed to assist with teacher licensing standards. There are nine InTASC Model Core Teaching Standards and the KEEP2 evaluation aligned their four main constructs

with the standards and aligned some of the components of each construct with the Standards as well.

The survey used was also based off a survey developed by Jacquelyn Mahatha during her research “*Principal’s Perceptions of the Effectiveness of Alternatively Certified Teachers in New Orleans Public Schools*” (2005). Mahatha’s survey was designed based off nine performance-based standards composed the National Board for Professional Teaching Standards (NBPTS) specifically for CTE teachers. The NBPTS are based off the National Board’s “Five Propositions of Accomplished Teaching” found in the policy *What Teachers Should Know and Be Able to Do* (2002).

The fundamental requirements for proficient teaching are relatively clear: a broad grounding in the liberal arts and sciences; knowledge of the subjects to be taught, of the skills to be developed, and of the curricular arrangements and materials that organize and embody that content; knowledge of general and subject-specific methods for teaching and for evaluating student learning; knowledge of students and human development; skills in effectively teaching student from racially, ethnically, and socioeconomically diverse backgrounds; and the skills, capacities and dispositions to employ such knowledge wisely in the interest of students. (Mahatha, 2002, p.8)

Mahatha’s research compared alternatively certified teachers to traditionally certified teachers so modifications were made to better fit the purpose of this research study. Figure 2 shows the standards from each evaluation system and how they were tied together to produce the instrument used in this research.

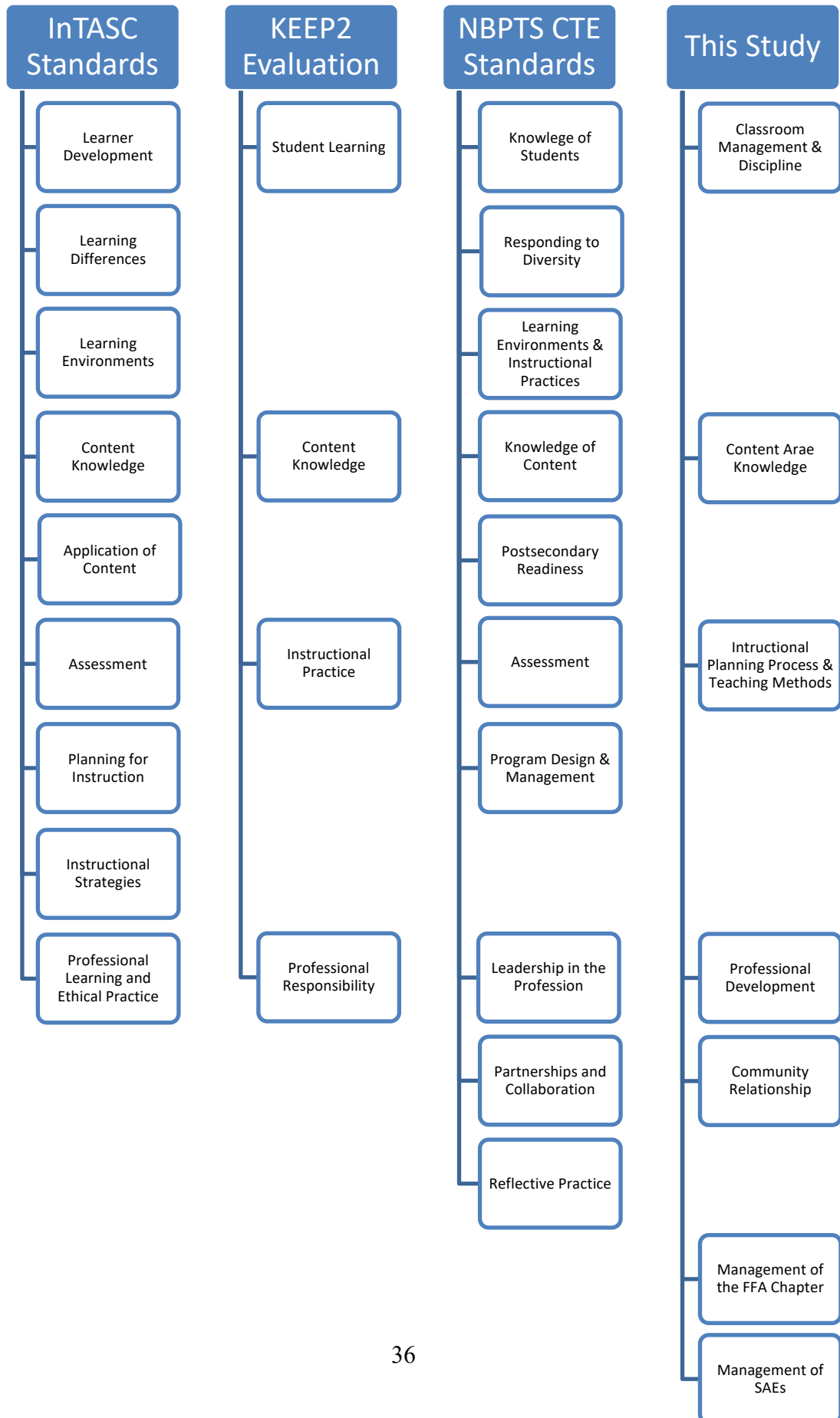


Figure 2 Framework Standards

The survey was comprised of six demographic based questions to get an understanding of the administrator and how their agricultural educator obtained their agriculture teaching license. The survey was then comprised of 35 competencies that allowed the administrator to focus on the alternatively certified teacher and their abilities without directly comparing them to traditionally certified teachers. The 35 competencies were organized into seven construct areas: (1) Subject Area Knowledge; (2) Classroom Management and Discipline; (3) Instructional Planning Process and Methods; (4) Community Relations; (5) Professional Development; (6) Managing the FFA chapter; (7) Managing SAE programs. Constructs 1-5 were developed using the KEEP2 evaluation system (KEEP, 2016). Constructs 6-7 were developed using Wall's instrument in her 2010 research on *The Needs of Non-Traditionally Certifying Agri-Science Teachers in Texas*.

Respondents rated the alternatively certified agricultural educator on a five-point Likert scale with 1 being "Strongly Disagree" and 5 being "Strongly Agree." The first construct, subject area knowledge, consisted of five competencies evaluating areas such as the teacher's knowledge of content, their ability to apply new knowledge, and a real-world application of content for students. The second construct, classroom management and discipline, consisted of five competencies focusing on topics such as a conducive classroom environment, effective discipline, and student ownership of learning. The teacher's instructional planning process and methods, the third construct, was made up of nine competencies ranging from long-range planning, to relevant lessons, and to variation of assessments. The fourth construct, community relations, had three competencies directly related to how the teacher utilizes community members and promotes their program to the community. The fifth construct of professional

development covered four competencies that identified how the teacher reflected on their teaching, analyzed student data, and collaborated with others. Managing the FFA chapter, the sixth construct, consisted of five competencies that analyzed contest preparation, fulfillment of degrees and awards, and opportunities for student leadership. Lastly, the seventh construct, managing SAE programs, was comprised of four competencies in areas such as SAE visits, and incorporating SAEs into classroom curriculum. The competencies found in each construct are identified in Table 1.

Table 1

Constructs and Competencies used for the Evaluation of Alternatively Certified Agricultural Educators in Kansas

Construct	Competences
(1) Subject Area Knowledge	<p>Demonstrates a thorough knowledge of content.</p> <p>Keeps current in instructional field and applies new knowledge</p> <p>Provides a variety of innovative applications of knowledge.</p> <p>Uses strategies to build a deep understanding of content for all students.</p> <p>Provides opportunities to students for real world application.</p>
(2) Classroom Management and Discipline	<p>Recognizes and fosters individual differences to establish a positive classroom culture.</p> <p>Establishes a classroom environment conducive to learning.</p> <p>Focuses students to tasks at the beginning of the lesson and maintains focus throughout.</p> <p>Effectively addresses classroom discipline.</p> <p>Collaborates with students to promote student ownership of learning.</p>
(3) Instructional Planning Process and Teaching Methods	<p>Plans instruction based on the learning and development levels of all students.</p> <p>Utilizes curriculum guides/competency profiles to implement state required objectives.</p> <p>Shows evidence of long-range planning.</p> <p>Plans for individual instruction differences among students.</p>

Table 1 (continued)

Constructs and Competencies used for the Evaluation of Alternatively Certified Agricultural Educators in Kansas

Construct	Competences
(3) Instructional Planning Process and Teaching Methods	<p>Uses methods and techniques that are effective in meeting student needs.</p> <p>Uses a variety of assessments to measure learner progress.</p> <p>Utilizes instructional assistants and resources appropriately and effectively.</p> <p>Makes lessons relevant to the learners.</p> <p>Presents concepts and skills in a clear, coherent, and logical manner using correct and appropriate techniques and professional practices.</p>
(4) Community Relationship	<p>Utilizes community members to build instruction and student knowledge.</p> <p>Promotes classroom and FFA events in the community.</p> <p>Involves community members and businesses in activities held within the classroom and FFA.</p>
(5) Professional Development	<p>Engages in ongoing, purposeful professional development relevant to student learning.</p> <p>Regularly reflects on teaching practices and seeks opportunities for improvement.</p> <p>Analyzes and reflects on student data to guide planning, instruction, and student growth.</p> <p>Participates in collaboration and leadership opportunities with colleagues and stakeholders.</p>
(6) Managing of the FFA Chapter	<p>Prepares students for Career Development Events.</p>

Table 1 (continued)

Constructs and Competencies used for the Evaluation of Alternatively Certified Agricultural Educators in Kansas

Construct	Competencies
(6) Managing of the FFA Chapter	<p>Takes students to a variety of Career Development Events throughout the year.</p> <p>Guides students in fulfilling FFA degrees and awards.</p> <p>Effectively teaches career and 21st century skills through FFA events.</p> <p>Ensures students are given opportunities to develop leadership skills.</p>
(7) Managing Supervised Agricultural Experiences	<p>Requires all students in the agriculture program to have a SAE.</p> <p>Conducts SAE visits for each student to learn more about their experiences.</p> <p>Encourages FFA members to complete award applications for their SAE.</p> <p>Incorporates SAEs into classroom curriculum.</p>

Mahatha's survey was evaluated by an expert panel to determine content validity. Experienced administrators classified the competencies into domains, or constructs. The administrators also suggested the rewording of statements for clarifying purposes. "Means and standard deviations were computed from the level of association of statements with domains and the clarity of survey statements" (Mahatha, 2005, p.43). This enhanced the content validity by reallocating, rewriting, rewording, or deleting statements. The reliability of the instrument was measured by using a reliability coefficient. "If the competency statements in a given domain were highly correlated, it was probable that the survey participants viewed the construct

associated with the domain statements similarly” (Mahatha, 2005, p. 43). The validity and reliability of the KEEP2 evaluation systems has been determined by the Kansas State Department of Education as well as the Council of Chief State School Officers, and the National Board for Professional Teaching Standards whom collectively worked together to develop the KEEP2 evaluation system (Kansas State Department of Education, 2016). The survey used in this study, a combination of Mahatha’s and the KEEP2 system, was reviewed by the committee to determine its validity.

Data Collection

The respondents were sent an initial email explaining the purpose of the study, how the data would benefit them and the alternatively certified agricultural educators, and when they could expect the survey to reach their inbox. The survey was sent one day following the initial email to the participants through a web-based survey system, Qualtrics®. One week and two days after the initial email was sent the link was sent a second time as a reminder to those who needed to complete the survey. A third email was sent two weeks after the initial email to follow up with the non-respondents. One final email was sent four days following the third email to encourage the last several non-respondents to participate in the survey. The total time for data collection was approximately three weeks.

Table 2

Survey Distribution Timeline

Action	Date of Action	Amount of Time Elapsed Between Actions
Pre-notice Email	June 16, 2019	
Initial Survey Link Sent	June 17, 2019	1 day after pre-notice email
First Reminder Email	June 26, 2019	9 days after initial link sent
Second Reminder Email	July 1, 2019	7 days after first reminder sent
Final Reminder Email	July 5, 2019	4 days after second reminder sent

Data Analysis

Responses from the survey were analyzed in the Qualtrics® survey system and SPSS® Statistics Data Editor. Objective one was to describe the most common method of license obtainment by alternatively certified agricultural educators in Kansas. The mode of each type of alternative certification route was found in order to identify which method of license obtainment was used most frequently. Objective two was to describe the perceived levels of effectiveness of alternatively certified agricultural educators in Kansas as identified by their administrators. Each construct of the survey consisted of competencies in which the administrators used a 5-point Likert scale to evaluate the effectiveness of the agriculture educators.

The mean score from the competencies in each construct was calculated through SPSS®. Sheskin (2004) determined real limits to use as cut off points for interpreting Likert scale data. The real limits were established as 1.00 – 1.49 = strongly disagree, 1.50 – 2.49 = disagree, 2.50 – 3.49 = neither agree nor disagree, 3.50 – 4.49 = agree, 4.50 – 5.00 = strongly agree (Sheskin, 2004). Based off these set real limits, the competencies with a mean score of less than 3.50 were considered need areas for alternatively certified agricultural educators as the administrator's saw

them as ineffective. The mean score of each construct was also evaluated to identify the construct areas needing the most improvement by alternatively certified agricultural educators. This engulfed objective three by determining the crucial needs of the alternatively certified agricultural educators in Kansas.

Conclusion

The purpose of this survey was to identify the areas in which administrators identified alternatively certified agricultural educators as effective and ineffective. The online survey was administered to the principals of the known alternatively certified agricultural educators in Kansas. The results were analyzed to determine which competencies the alternatively certified agricultural educators are the least effective in and for which overall construct the teachers needed the most professional development and resources.

Chapter IV

Findings

This study was designed to collect and assess administrators' perceptions of the effectiveness of alternatively certified agricultural educators in Kansas. Perceptions of effectiveness were measured by a 41-question survey designed to focus on any alternatively certified agricultural educator in Kansas teaching during the 2018-2019 school year. There were seven construct areas in which the alternatively certified agricultural educator was evaluated on by their administrator: (1) Subject Area Knowledge; (2) Classroom Management and Discipline; (3) Instructional Planning Process and Methods; (4) Community Relations; (5) Professional Development; (6) Managing the FFA chapter; (7) Managing SAE programs.

Finding for Objective One

Objective one sought to describe which method of certification most alternatively certified agricultural educators became licensed through. There are three main ways to become alternatively certified in agricultural education: (1) earn a bachelor's degree in education in an area other than agricultural education then pass the agriculture Praxis test; (2) work through the Transition to Teaching program; (3) secure an emergency certification. Of the 12 alternatively certified agricultural educators under evaluation, five (41.7%) held a bachelor's degree in education in an area other than agriculture then took and passed the agriculture Praxis test. The remaining seven (58.3%) worked through the Transition to Teaching program to become certified in agricultural education as shown in Table 3.

Table 3

Frequency of Alternative Certification Method (n = 12)

Certification Method	<i>f</i>	%
Transition to Teaching program	7	57.3
Earned a bachelor's degree in education in an area other than agriculture then passed the agriculture Praxis test	5	42.7
Emergency certification	0	0.0

Findings for Objective Two

Objective two focused on the perceived effectiveness of the alternatively certified agricultural educators. There were seven constructs comprised of 35 competencies that the administrators evaluated the teachers' effectiveness of. Each objective was scored 1-5 with 1 representing "Strongly Disagree," 2 representing "Somewhat Disagree," 3 representing "Undecided," 4 representing "Somewhat Agree," and 5 representing "Strongly Agree." The mean of each competency, as shown in Table 18, was calculated and any competency with a mean less than 3.5 was considered ineffective.

Construct 1: Subject Area Knowledge consisted of five competencies. The mean of Construct 1 was 4.18 ($SD = 0.80$). Table 5 shows the lowest competency mean score of 3.75 ($SD = 1.14$) for *using strategies to build a deep understanding of content for all students* and the highest competency mean score of 4.75 ($SD = 0.45$) for *providing opportunities for real world application of content*.

Table 4

Frequency of Scores of Competencies in Construct 1: Subject Area Knowledge (n = 12)

Competencies in Construct 1	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Provides opportunities to students for real world application.	0	0.0	0	0.0	0	0.0	3	25.0	9	75.0
Demonstrates a thorough knowledge of content.	0	0.0	1	8.3	0	0.0	7	58.3	4	33.3
Keeps current in instructional field and applies new knowledge.	0	0.0	2	16.7	0	0.0	4	33.3	6	50.0
Provides a variety of innovative applications of knowledge.	0	0.0	2	16.7	0	0.0	5	41.7	5	41.7
Uses strategies to build a deep understanding of content for all students.	0	0.0	3	25.0	0	0.0	6	50.0	3	25.0

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 5

Mean Scores of Competencies in Construct 1: Subject Area Knowledge (n = 12)

Competencies in Construct 1	<i>M</i>	<i>SD</i>
Provides opportunities to students for real world application.	4.75	0.45
Demonstrates a thorough knowledge of content.	4.17	0.84
Keeps current in instructional field and applies new knowledge.	4.17	1.12
Provides a variety of innovative applications of knowledge.	4.08	1.08
Uses strategies to build a deep understanding of content for all students.	3.75	1.14

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Construct 2: Classroom Management and Discipline also consisted of five competences.

Construct 2 had a mean score of 3.90 ($SD = 1.05$). The lowest competency mean score was 3.67 ($SD = 1.16$) for *focusing students to tasks at the beginning of the lesson and maintaining focus throughout* and the highest competency mean score was 4.25 ($SD = 0.87$) for *recognizing and fostering individual differences to establish a positive classroom culture*, as seen in Table 7.

Table 6

Frequency of Scores of Competencies in Construct 2: Classroom Management and Discipline
($n = 12$)

Competencies in Construct 2	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Recognizes and fosters individual differences to establish a positive classroom culture.	0	0.0	1	8.3	0	0.0	6	50.0	5	41.7
Collaborates with students to promote student ownership of learning.	0	0.0	2	16.7	1	8.3	3	25.0	6	50.0
Establishes a classroom environment conducive to learning.	1	8.3	1	8.3	1	8.3	6	50	3	25.0
Effectively addresses classroom discipline.	1	8.3	1	8.3	2	16.7	4	33.3	4	33.3
Focuses students to tasks at the beginning of the lesson and maintains focus throughout.	0	0.0	3	25.0	1	8.3	5	41.7	3	25.0

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 7

Mean Scores of Competencies in Construct 2: Classroom Management and Discipline (n = 12)

Competencies in Construct 2	<i>M</i>	<i>SD</i>
Recognizes and fosters individual differences to establish a positive classroom culture.	4.25	0.87
Collaborates with students to promote student ownership of learning.	4.08	1.17
Establishes a classroom environment conducive to learning.	3.75	1.22
Effectively addresses classroom discipline.	3.75	1.29
Focuses students to tasks at the beginning of the lesson and maintains focus throughout.	3.67	1.16

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Construct 3: Instructional Planning Process and Methods, was the largest construct with nine competencies. The mean score for this construct was 3.94 (*SD* = 1.08). There were two competencies with the lowest mean score of 3.67 (*SD* = 1.37), *planning instruction based on the learning and development levels of all students* and *planning for individual instruction differences among students*. The highest competency mean was 4.50 for *making lessons relevant to the learners* (see Table 9).

Table 8

Frequency of Scores of Competencies in Construct 3: Instructional Planning Process and Teaching Methods (n = 12)

Competencies in Construct 3	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Makes lessons relevant to the learners.	0	0.0	1	8.3	0	0.0	3	25.0	8	66.7
Utilizes curriculum guides/competency profiles to implement state required objectives.	0	0.0	0	0.0	2	16.7	4	33.3	6	50.0
Shows evidence of long-range planning	0	0.0	2	16.7	1	8.6	4	33.3	5	41.7
Presents concepts and skills in a clear, coherent, and logical manner using correct and appropriate techniques and professional practices.	0	0.0	2	16.7	0	0.0	5	41.7	5	41.7
Utilizes instructional assistants and resources appropriately and effectively.	0	0.0	2	16.7	2	16.7	4	33.3	4	33.3
Uses methods and techniques that are effective in meeting student needs.	1	8.3	1	8.3	3	25.0	1	8.3	6	50.0
Uses a variety of assessments to measure learner progress.	0	0.0	3	25.0	3	25.0	0	0.0	6	50.0
Plans instruction based on the learning and development levels of all students.	0	0.0	4	33.3	1	8.6	2	16.7	5	41.7
Plans for individual instruction differences among students.	1	8.3	2	16.7	2	16.7	2	16.7	5	41.7

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 9

Mean Scores of Competencies in Construct 3: Instructional Planning Process and Teaching Methods (n = 12)

Competencies in Construct 3	<i>M</i>	<i>SD</i>
Makes lessons relevant to the learners.	4.50	0.91
Utilizes curriculum guides/competency profiles to implement state required objectives	4.33	0.78
Shows evident of long-range planning.	4.00	1.13
Presents concepts and skills in a clear, coherent, and logical manner using correct and appropriate techniques and professional practices.	3.92	1.24
Utilizes instructional assistants and resources appropriately and effectively.	3.83	1.12
Uses methods and techniques that are effective in meeting student needs.	3.83	1.40
Uses a variety of assessments to measure learner progress.	3.75	1.36
Plans instruction based on the learning and development levels of all students.	3.67	1.37
Plans for individual instruction differences among students.	3.67	1.44

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Construct 4: Community Relations was made up of just three competencies. The mean Construct score was 4.58 (*SD* = 0.55). There were zero “Strongly Disagree” or “Disagree” ratings for the competencies in this construct as represented in Table 10. All three competencies had the same mean score of 4.58 as shown in Table 11.

Table 10

Frequency of Scores of Competencies in Construct 4: Community Relationship (n = 12)

Competencies in Construct 4	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Involves community members and businesses in activities held within the classroom and FFA.	0	0.0	0	0.0	0	0.0	5	41.7	7	58.3
Promotes classroom and FFA events in the community.	0	0.0	0	0.0	1	8.3	3	25.0	8	66.7
Utilizes community members to build instruction and student knowledge.	0	0.0	0	0.0	1	8.3	3	25.0	8	66.7

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 11

Mean Scores of Competencies in Construct 4: Community Relationship (n = 12)

Competencies in Construct 4	<i>M</i>	<i>SD</i>
Involves community members and businesses in activities held within the classroom and FFA.	4.58	0.52
Promotes classroom and FFA events in the community.	4.58	0.67
Utilizes community members to build instruction and student knowledge.	4.58	0.67

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Construct 5: Professional Development had four competencies for evaluation, as shown in Table 12 and Table 13. The overall construct score was 4.02 (*SD* = 1.07). The lowest competency score was 3.58 (*SD* = 1.17) for *analyzing and reflects on student data to guide planning, instruction, and student growth*. The highest scored competency, *engages in ongoing,*

purposeful professional development relevant to student learning, had a mean of 4.33 ($SD = 1.16$)

Table 12

Frequency of Scores of Competencies in Construct 5: Professional Development (n = 12)

Competencies in Construct 5	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Engages in ongoing, purposeful professional development relevant to student learning.	1	8.3	0	0.0	0	0.0	4	33.3	7	58.3
Participates in collaboration and leadership opportunities with colleagues and stakeholders.	1	8.3	0	0.0	0	0.0	5	41.7	6	50.0
Regularly reflects on teaching practices and seeks opportunities for improvement.	1	8.3	1	8.3	0	0.0	6	50.0	4	33.3
Analyzes and reflects on student data to guide planning, instruction, and student growth.	1	8.3	1	8.3	2	16.7	6	50.0	2	16.7

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 13

Mean Scores of Competencies in Construct 5: Professional Development (n = 12)

Competencies in Construct 5	<i>M</i>	<i>SD</i>
Engages in ongoing, purposeful professional development relevant to student learning.	4.33	1.16
Participates in collaboration and leadership opportunities with colleagues and stakeholders.	4.25	1.14
Regularly reflects on teaching practices and seeks opportunities for improvement.	3.92	1.24
Analyzes and reflects on student data to guide planning, instruction, and student growth.	3.58	1.17

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Construct 6: Management of the FFA Chapter was comprised of five competencies. The mean construct score was 4.43 (*SD* = 0.76). Table 14 shows none of the competencies were scored a “Strongly Disagree” rating. Two competencies had a score of 4.33, *prepares students for CDEs* and *guides students in fulfilling FFA degrees and awards*. Table 15 shows the remaining three competencies had a mean score of 4.50.

Table 14

Frequency of Scores of Competencies in Construct 6: Management of the FFA Chapter (n = 12)

Competencies in Construct 6	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Effectively teaches career and 21 st century skills through FFA events.	0	0.0	0	0.0	1	8.3	4	33.3	7	58.3
Ensures students are given opportunities to develop leadership skills.	0	0.0	1	8.3	0	0.0	3	25.0	8	66.7
Takes students to a variety of Career Development Events throughout the year.	0	0.0	1	8.3	0	0.0	3	25.0	8	66.7
Prepares students for Career Development Events.	0	0.0	1	8.3	0	0.0	5	41.7	6	50.0
Guides students in fulfilling FFA degrees and awards.	0	0.0	1	8.3	1	8.3	3	25.0	7	58.3

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 15

Mean Scores of Competencies in Construct 6: Managing the FFA Chapter (n = 12)

Competencies in Construct 6	<i>M</i>	<i>SD</i>
Effectively teaches career and 21 st century skills through FFA events.	4.50	0.67
Ensures students are given opportunities to develop leadership skills.	4.50	0.91
Takes students to a variety of Career Development Events throughout the year.	4.50	0.91
Prepares students for Career Development Events.	4.33	0.89
Guides students in fulfilling FFA degrees and awards.	4.33	0.99

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

The last construct, Construct 7: Management of SAE programs had four competencies. The construct mean score was 3.54 ($SD = 1.01$). There were two “Strongly Disagree” ratings and eight “Disagree” ratings (see Table 16). Table 17 shows the lowest competency score was 3.33 ($SD = 1.37$) for *conducts SAE visits for each student to learn more about their experience*. The highest competency score was 3.75 ($SD = 1.14$) for *incorporates SAEs into classroom curriculum*.

Table 16

Frequency of Scores of Competencies in Construct 7: Managing Supervised Agricultural Experiences (n = 12)

Competencies in Construct 7	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Incorporates SAEs into classroom curriculum.	0	0.0	2	16.7	3	25.0	3	25.0	4	33.3
Encourages FFA members to complete award applications for their SAE.	0	0.0	2	16.7	4	33.3	3	25.0	3	25.0
Requires all students in the agriculture program to have a SAE.	0	0.0	3	25.0	2	16.7	5	41.7	2	16.7
Conducts SAE visits for each student to learn more about their experience.	2	16.7	1	8.3	2	16.7	5	41.7	2	16.7

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Table 17

Mean Scores of Competencies in Construct 7: Managing Supervised Agricultural Experiences (n = 12)

Competencies in Construct 7	<i>M</i>	<i>SD</i>
Incorporates SAEs into classroom curriculum.	3.75	1.14
Encourages FFA members to complete award applications for the SAE.	3.58	1.09
Requires all students in the agriculture program to have a SAE.	3.50	1.09
Conducts SAE visits for each student to learn more about their experiences.	3.33	1.37

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Findings for Objective Three

Objective Three was to determine the crucial needs of the alternatively certified agricultural educators in Kansas. Any area with a score of less than 3.50 would be considered an area of ineffectiveness for the alternatively certified agricultural educator, meaning it was an area of crucial needs. In Table 19 below, each construct is displayed with its mean Likert rating. None of the constructs were below the 3.50 effectiveness. The construct the educators were least effective at was Construct 7: Managing Supervised Agricultural Experiences, having a mean score of 3.54 ($SD = 1.01$). The construct of most effectiveness was Construct 4: Community Relationship with a mean of 4.58 ($SD = 0.55$).

Table 18

Mean Scores of Constructs Used to Evaluate the Effectiveness of Alternatively Certified Agricultural Educators in Kansas (n = 12)

Constructs	<i>M</i>	<i>SD</i>
4: Community Relationship	4.58	0.55
6: Managing the FFA Chapter	4.43	0.76
1: Subject Area Knowledge	4.18	0.80
5: Professional Development	4.02	1.07
3: Instructional Planning Process and Teaching Methods	3.94	1.07
2: Classroom Management and Discipline	3.90	1.05
7: Managing Supervised Agricultural Experiences	3.54	1.01

Note: 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Undecided, 4 = Somewhat Agree, 5 = Strongly Agree

Chapter V

Conclusions and Recommendations

This study identified the effectiveness of alternatively certified agricultural educators in Kansas as perceived by their administrators. The number of alternatively certified agriculture teachers has increased in response to the need to fill vacant teaching positions (Rocca & Washburn, 2006). The *No Child Left Behind* Act of 2001 also pushed for the betterment of teacher education programs to provide more high-quality teachers (United States Department of Education, 2002).

The literature is heavily focused on comparing alternatively certified teachers to traditionally certified teachers in terms of their ability to run a successful classroom (Boser, Wiley, & Pettibone, 1986; Constatine, Player, Silva, Hallgren, Grider, & Deke, 2009; Darling-Hammond, Chung, & Frelow, 2002; Hawk & Schmidt, 1989; Miller, McKenna, & McKenna, 1998; Peck, 1988; Rocca & Washburn, 2006; Stoddart & Floden, 1995). Much of the research is mixed between the effectiveness of alternatively certified teachers with some research stating alternatively certified teachers are not effective in the classroom and some research stating they are effective (Hawley, 1990; Miller, McKenna, & McKenna, 1998; Robinson & Edwards, 2012; Weigers, 1966). There is a limited amount of research specifically evaluating alternatively certified agricultural educators (Duncan & Ricketts, 2008; Miller, Kahler, & Rheault, 1989; Robert & Dyer, 2004; Rocca & Washburn, 2006; Wall, 2010). That research mainly focused on the inservice needs of alternatively certified agricultural educators as well as their teacher efficacy.

The survey for this research consisted of seven constructs and 35 competencies that administrators used to evaluate their alternatively certified agricultural educator. The evaluation occurred using a 5-point Likert scale. The mean score for each competency and each construct was calculated to identify need areas.

Purpose and Objectives

The purpose of this study was to determine the perceived effectiveness of alternatively certified agricultural educators in Kansas, in seven different areas of their agriculture program, according to their administrator. The specific objectives for the study were:

1. Describe the most common method of license obtainment by alternatively certified agricultural educators in Kansas.
2. Describe the perceived levels of effectiveness of alternatively certified agricultural educators in Kansas as identified by their administrators.
3. Determine the crucial needs of the alternatively certified agricultural educators in Kansas.

Conclusions Related to Objective One

Objective one was to determine the most common alternative mode of entry for agricultural educators in Kansas. The three routes for alternative certification are receiving a bachelor's degree in education in an area other than agriculture then passing the agriculture Praxis test, working through the Transition to Teaching program, or securing an emergency substitute license.

The Transition to Teaching program was the most common method of license obtainment by alternatively certified agricultural educators in Kansas as reported by the administrators. Over half ($n = 7$, 58%) of the agricultural educators being evaluated received their license through this route. The remaining agricultural educators received their license by taking the agriculture Praxis

test. None of the agricultural educators being evaluated were teaching on an emergency substitute license.

The Transition to Teaching programs in Kansas to become certified in agricultural education are being used most frequently. This means that more people are coming from industry to become agricultural educators than they are from other educational subject areas. The school districts are more commonly bringing in people from the community to fill open agricultural education programs, Transition to Teaching teachers, than they are filling the position from already practicing educators. Arrington (2010) found this to be a major strength of alternatively certified teachers from industry as they brought real world experiences to education.

Conclusions Related to Objective Two

Objective two was to determine the perceived effectiveness of alternatively certified agricultural educators in Kansas according to their administrator for 35 competencies. The competencies were scored using a 5-point Likert scale with 1 standing for “Strongly Disagree” with the teacher’s effectiveness of that competency and 5 standing for “Strongly Agree” with the teacher’s effectiveness of that competency. The competencies with a score of 3.50 or less were considered areas of ineffectiveness for alternatively certified agricultural educators.

One competency was rated below a 3.5, meaning the teachers were ineffective in this area. The competency was “*Teacher conducts SAE visits for each student to learn more about their experience*” from Construct 7: Managing Supervised Agricultural Experiences. This competency had a mean score of 3.33 ($SD = 1.37$). Two teachers (16.7%) were evaluated at a 1 rating in this competency by their administrators (see Table 16). Three competencies had the highest mean score of 4.58. These competencies all came from Construct 4: Community Relationships.

The construct with the lowest rating, the least effective area, was Construct 7: Managing Supervised Agricultural Experiences. The overall mean score for this construct was 3.54 ($SD = 1.01$). The construct with the highest mean score, the area the teachers were the most effective at was Construct 4: Community Relationship. The construct mean score was a 4.58 ($SD = 0.55$).

A strong area of the alternatively certified agricultural educators as observed by their administrators is managing the FFA chapter. The administrators rated the teachers with a mean score of 4.43 ($SD = 0.76$), showing high effectiveness in this area. Roberts and Dyer (2004) and Wall (2010) found that alternatively certified agricultural educators showed a high need for improvement in preparing FFA members for Career Development Events. However, the results from this study indicated the alternatively certified agricultural educators are effective at preparing FFA members for contests at that competency's mean score was 4.33 ($SD = 0.89$). This could indicate that the alternative certification programs are either doing a better job of teaching the educators how to manage FFA chapters, or there are more resources available to the alternatively certified agricultural educators today than there were in the past.

Wall's (2010) research showed alternatively certified agricultural educators in Texas were given a mean score of 4.07 ($SD = 1.00$) for the competency *conduct community presentations/meetings*, a mean score of 4.21 ($SD = 1.19$) for the competency *solicit business, industry, and labor support*, and a mean score of 4.29 ($SD = 0.99$) for the competency *develop public relations information* using the same 5-point Likert scale utilized in this study. The results from the community relations portion of Wall's study are backed by the finding of this study in that alternatively certified agricultural educators are effective at working with and in the community.

It is quite evident that the alternatively certified agricultural educators in Kansas are effective at utilizing community members in their program as well as promoting their program within the community. Perhaps because a majority of alternatively certified agricultural educators are coming from the community through the Transition to Teaching program, this allows them to have a better connection with local supporters.

Conclusions Related to Objective Three

Objective Three was to determine crucial needs of alternatively certified agricultural educators in Kansas. One of the competencies fell below the effectiveness level meaning it would be considered a crucial need. The competency needing the most improvement is “Teacher conducts SAE visits for each student to learn more about their experience” from Construct 7: Managing Supervised Agricultural Experiences as it scored a mean of 3.33 ($SD = 1.37$), the lowest mean score out of all competencies.

Though the alternatively certified agricultural educators were scored effective in all overall construct areas, the area that needs the most attention in order to increase effectiveness is the competencies in Construct 7: Managing Supervised Agricultural Experiences. The next area that could use some improvement is Construct 2: Classroom Management and Discipline. These two areas were rated between 3 and 4, putting them on the edge of effectiveness and just above the crucial need line, as shown in Table 18.

The area of Supervised Agricultural Experiences (SAEs) in the agricultural program is the area of least effectiveness for alternatively certified agricultural educators in Kansas.

Retallick (2010) and Wilson and Moore (2007) found similar data in that teachers saw the importance of SAEs and knew they were an essential part of the agriculture program, but they faced barriers when implementing SAEs and are not carrying out quality SAEs. If SAE's are a

major portion of agricultural education programs, a lack of effectiveness in this area could have negative consequences on the overall agriculture program.

The remaining data from this study indicates the alternatively certified agricultural educators in Kansas are receiving the support they need to have a successful agriculture program. The mean scores of the constructs show the educators are effective in all areas. This leads one to believe they are learning the necessary information to run a successful program in the alternative certification courses they take as well as through their required mentoring.

Recommendations for Research

Additional research should be conducted to validate the findings of this study and to continue to identify the effectiveness of alternatively certified agricultural educators in Kansas. Further research is necessary in order to better understand the perceptions of effectiveness of alternatively certified agricultural educators. This study could have used a larger respondent population for a higher level of confidence, more precise mean calculations, and a smaller influence from outliers (Anderson, Kelley & Scott, 2017).

It is highly recommended that the scale used to score the perceived effectiveness of the agricultural educators be refined in order to truly capture the administrators' beliefs and perceptions. The researcher did not feel as though the 5-point Likert scale and the real limits used as cut off points for interpreting the means was representative of the total population's perceptions of effectiveness. Using the 5-point Likert scale, administrators were able to choose the option "Undecided" when evaluating the alternatively certified agricultural educators. When analyzing the data, "Undecided" could be moved either way on the scale when observing effectiveness and left an unclear perception. It was also felt by the researcher that when

comparing “Agree” to “Strongly Agree” and “Disagree” to “Strongly Disagree”, it was hard to distinguish just how the administrator felt about the teacher’s effectiveness.

It is suggested that further research uses a scale that matches the KEEP evaluation rubric. The KEEP rubric evaluates teachers as “Ineffective – educator rarely exhibits an adequate level of performance on this component”, “Developing – educator sometimes exhibits an adequate level of performance on this component”, “Effective – educator usually exhibits a more than adequate level of performance on this component”, and “Highly Effective – educator consistently exhibits a high level of performance on this component” (Kansas State Department of Education, 2016). By using the KEEP scale, the data would be more easily interpreted to accurately match the administrator’s perceptions.

A similar study could take place in other states to evaluate differences between state created alternative certification programs. Additional research could also include surveying the alternatively certified agricultural educator themselves to identify how they perceive their own effectiveness. Further research based around effective and ineffective areas of agricultural education programs headed by alternatively certified teachers would be beneficial in tailoring alternative certification programs in Kansas as well as professional development opportunities.

Research could be conducted specifically on alternatively certified agricultural educators and the Supervised Agricultural Experience portion of their agriculture program since this study showed ineffectiveness in this area. This research could focus on the teacher’s effectiveness in the following aspects of SAEs: (1) helping students understand what a SAE is and the value it provides, (2) ensuring every student in the agriculture program has a SAE, (3) connecting SAEs to the school district’s priorities, (4) providing supervision of all SAEs, including making SAE visits, and (5) integrating SAEs into the classroom grading system (National Council for

Agricultural Education, 2015). The research on SAEs over the past few years has not been specifically focused on alternatively certified agricultural educators and their implementation of SAEs. By analyzing all components of SAE programs, researches could narrow down which parts of SAEs the alternatively certified agricultural educators are ineffective at, providing more purposeful resources and professional development.

Additional research could also be conducted which evaluates the experience of the alternatively certified agricultural educator prior to teaching agricultural education. This would narrow the research when looking at the needs of the alternatively certified teachers and how they develop their skills over time. Future research could also identify how long the respondents have taught in order to gain a clearer picture of how teaching experience effects the effectiveness of teaching. It has been found that years of teaching experience are positively associated with student achievement (Irvine, 2019; Kini & Podolsky, 2016). These findings led the researcher to believe that the alternatively certified agricultural educators would have been rated as more effective and could have skewed the data from the actual perceptions of the administrators. Perhaps by identifying the experience of the teachers, more personalized professional development could be constructed to specifically meet each background's needs.

Research could be conducted to compare the effectiveness differences between alternatively certified agricultural educators that were licensed through the Transition to Teaching program or the Praxis agriculture test. Identifying the high needs areas of each licensing method would allow for further tailoring of professional development experiences to help each type of teacher. Currently more alternatively certified agricultural educators are becoming certified through the Transition to Teaching programs. Knowing where these educators lack effectiveness and knowing what strengths they have compared to the teachers

going through the Praxis Plus route, we can again plan individualized professional development opportunities to fill their needs. This would also allow us to see where our alternative teacher preparation programs can improve in their curriculum plans which in turn would produce more high quality alternatively certified agricultural educators to fill the open positions in Kansas.

Recommendations for Practice

Alternatively Certified Agricultural Educators

This study suggests that alternative certification programs for agricultural education are effective in teaching content knowledge, instructional planning process and teaching methods, community relationships, and managing the FFA chapter. They are also effective in the areas of classroom management and discipline as well as managing Supervised Agricultural Experiences, however, those areas could use improvement to become more effective.

The study shows that alternatively certified agricultural educators need to work most on further developing their knowledge when it comes to Supervised Agricultural Experiences (SAEs). In 2011, the National Council for Agricultural Education began working on the *SAE for All* guidebook to assist educators with implementation of SAEs in their curriculum (National Council for Agricultural Education, 2012). The Educational Program Consultant at Kansas Department of Education, holds/hosts SAE workshops usually once per year, to help teachers understand how to use SAEs in their classroom for every student. It is recommended that alternatively certified teachers attend the SAE workshops. It is also recommended that teachers utilize the *SAE for All* teacher and student guidebooks on the National Council for Agricultural Education's website.

Supervised Agricultural Experiences are diverse and can be modified to each student. Since the experiences can vary so much, alternatively certified agricultural educators should

utilize more experienced agricultural educators in their district or across the state to help them understand what SAEs can look like for their students. A mentoring teacher can allow the alternatively certified agricultural educators to strengthen the SAE portion of their agriculture program.

Administrators

The second construct needing improvement revolved around classroom management and discipline. This construct consisted of the teacher recognizing and fostering individual differences to establish a positive classroom culture, establishing a classroom conducive to learning, focusing students to tasks at the beginning of the lesson and maintaining focus throughout, effectively addressing classroom discipline, and collaborating with students to promote student ownership of learning.

Administrators could address these competencies in professional in-services within their school districts and play a bigger role in mentoring the alternatively certified agricultural educators who come into their districts. It is the administrator's duty to ensure they are hiring highly qualified teachers, so it is the administrator's duty to ensure the teachers are receiving the training they need in order to be successful.

Kansas Association of Agricultural Educators

It was evident from this study that the area of Supervised Agricultural Experiences was needing more improvement as it was the lowest rated construct. It is recommended that the KAAE hosts more professional development opportunities focused on SAEs in order to better prepare alternatively certified agricultural educators to use SAEs as part of their total agriculture program. This professional development could look like a mentoring program in which alternatively certified agricultural educators are paired with a more experienced teacher that has

an established and well recognized SAE program. The mentoring partnership could be the mentee visiting the mentor's program to observe SAE work in action, as well as monthly meetings either other phone, or computer, and then meeting up at the mid-winter symposium and summer conference. The program could run on an as needed basis as the number of new alternatively certified agricultural educators entering the profession each year would be an uncertainty until after the new school year has begun.

Discussion

The results from this study coincide with previous research about alternatively certified agricultural educators in the sense that they are effective in several areas of their total agriculture program. Wall's (2010) research on the effectiveness of alternatively certified agricultural educators indicated a need for improvement in classroom discipline, just as this study has shown. Schonfeld, and Feinman (2012) also found alternatively certified teachers were more likely to face classroom management problems.

Clemons, Heidenrich, and Linder (2018) and Roberts and Dyer (2004) determined agriscience teachers, traditionally and alternatively certified, showed high needs in the areas of preparing SAE award applications and developing SAE opportunities for students. This suggests Supervised Agricultural Experiences are an area of high needs for all agricultural educators, not just those who are alternatively certified. This study offered that alternatively certified agricultural educators in Kansas are effective in the area of SAEs but are needing to further their knowledge in the area in order to become more effective.

While the mean scores of the competencies and constructs were high overall, there was one administrator who consistently ranked their alternatively certified agricultural educator as ineffective. The administrator perceived the agricultural educator to be ineffective in 29 of the 35

competencies. This indicates not all alternatively certified agricultural educators in Kansas are perceived as effective in their agriculture programs as this research suggests. This shows that perhaps professional development be tailored to meet the abilities of the alternatively certified agricultural educator. The frequency tables show differences between ratings for each competency, indicating not every administrator had the same perception of effectiveness. This would lead one to consider that each alternatively certified agricultural educator has different needs areas that would specially need addressed on an individualized basis.

It is in the researcher's beliefs that there are several factors that contribute to the effectiveness of teachers, especially alternatively certified teachers which makes it difficult for accurate, consistent research to be completed. The teacher's background, experiences prior to teaching, attitudes, beliefs, and personality could all come into play when evaluating a teacher's effectiveness. The school in which the teacher is employed could also have an impact on the teacher's effectiveness. If the school has a supportive culture under strong leadership, the teacher is probably more likely to succeed and become effective. While the route taken to obtain a teaching license might have some effect on teacher effectiveness, it likely isn't a major factor on student success. This leads the researcher to suggest that while research should be continued in order to determine the needs of alternatively certified agricultural educators, the results should not be used to compare alternatively certified teachers to traditionally certified teachers. Instead, the data should be used to improve alternative certification programs, provide more and better resources, and develop professional development opportunities to ensure the alternatively certified agricultural educators are highly qualified and are striving for student success.

The debate of the effectiveness of alternatively certified teachers will probably never be resolved, but further research of the topic can help to enhance the alternative teacher preparation

programs allowing them to continue producing highly qualified teachers. As the teacher shortage keeps rising, it is important to remember that alternative certification routes are a step in the right direction to filling these vacancies. The goal for all should be to supply classrooms with highly qualified teachers who allow all students to be successful.

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Appendix A

Effectiveness of Alternatively Certified Agricultural Educators Instrument

I am a graduate student in Agricultural Education at Kansas State University working with Dr. Hock, Associate Professor of Agricultural Education. We are looking at the effectiveness of alternatively certified agricultural educators in Kansas as it is important for us to understand which areas of the agricultural education program those teachers excel at and which areas need improvement. Using the data collected from the survey, we will be able to see the needs of these alternatively certified teachers and can tailor professional development experiences to meet their needs.

The survey should take less than 10 minutes to complete. Confidentiality of your responses will be insured as we will not collect your name or school. Your participation is completely voluntary, and you may skip any questions you feel are inappropriate or make you feel uncomfortable.

By completing and submitting this questionnaire you are giving consent for Kansas State University to use your responses from this instrument in the study. Your data will never be reported on an individual basis; rather it will only be displayed as group data.

If you have questions you may contact:

Gaea Hock, ghock@ksu.edu 785-532-1166

Arika Haresnape, arikah@ksu.edu 785-620-7557

University Research Compliance Office, comply@k-state.edu 785-532-3224

How many years of school administrator experience do you have?

- ☐ Fewer than 5 years
- ☐ 5-9 years
- ☐ 10-14 years
- ☐ 15-19 years
- ☐ 20-24 years
- ☐ 25+ years

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Prefer not to answer

How many **teachers** are currently under your evaluation?

- ☐ None
- ☐ 1-10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ 51+

How many **alternatively certified** teachers are currently under your evaluation?

- ☐ None
- ☐ 1-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21+

Do you currently (or in the past 2018-2019 school year) have an **agricultural educator** (i.e. vocational agriculture, agriculture teacher) under your supervision?

- ☐ Yes
☐ No

How did the agricultural educator under your supervision receive their **agriculture teaching license**?

- ☐ Bachelor's Degree in Agricultural Education
☐ Bachelor's Degree in an area other than Agricultural Education then passed the Agriculture Praxis Test
☐ Transition to Teach Program
☐ Emergency Sub Certification

Teacher Subject Area Knowledge

Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's **subject area knowledge**.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher demonstrates a thorough knowledge of content.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher keeps current in instructional field and applies new knowledge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
innovative applications of knowledge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher uses strategies to build a deep understanding of content for all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher provides opportunities to students for real world application of content.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher Classroom Management and Discipline

Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's **classroom management and discipline**.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher recognizes and fosters individual differences to establish a positive classroom culture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher establishes a classroom environment conducive to learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher focuses students to tasks at the beginning of the lesson and maintains focus throughout.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher effectively addresses classroom discipline.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher collaborates with students to promote student ownership of learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher Instructional Planning Process and Methods

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Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's instructional planning process and teaching methods.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher plans instruction based on the learning and development levels of all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher utilizes curriculum guides/competency profiles to implement state required objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher shows evidence of long-range planning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher plans for individual instruction differences among students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher uses methods and techniques that are effective in meeting student needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher uses a variety of assessments to measure learner progress.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher utilizes instructional assistants and resources appropriately and effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher makes lessons relevant to the learners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher presents concepts and skills in a clear, coherent, and logical manner using correct and appropriate techniques and professional practices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher Community Relations

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Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's **community relationship**.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher utilizes community members to build instruction and student knowledge (guest speakers, field trips, curriculum planning, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher promotes classroom and FFA events in the community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher involves community members and businesses in activities held within the classroom and FFA.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher Professional Development

Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's **professional development**.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher engages in ongoing, purposeful professional development relevant to student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher regularly reflects on teaching practices and seeks opportunities for improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher analyzes and reflects on student data to guide planning, instruction, and student growth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher participates in collaboration and leadership opportunities with colleagues and stakeholders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher Management of FFA Chapter

Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's **management of the FFA chapter**.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher prepares students for Career Development Events (contests).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher takes students to a variety of Career Development Events (contests) throughout the year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher guides students in fulfilling FFA degrees and awards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher effectively teaches career and 21st century skills through FFA events.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher ensures students are given opportunities to develop leadership skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Directions: Please select the most appropriate option to indicate your level of agreement for the alternatively certified agricultural educator's management of Supervised Agricultural Experiences (SAEs).

Note: A Supervised Agricultural Experience (SAE) involves real-world agricultural activities done by students outside of planned classroom and laboratory time. SAEs provide a method for students to receive practical skill sin a part of agriculture in

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which they are interested. SAEs can be entrepreneurship/ownership, placement/internship, research, school business enterprises, or service learning.

	Strongly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Strongly Agree
Teacher requires all students in the agriculture program to have a SAE.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher conducts SAE visits for each student to learn more about their experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher encourages FFA members to complete award applications for their SAE.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher incorporates SAEs into classroom curriculum.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

We appreciate your time in completing this survey. You are helping us improve the Kansas Agricultural Education and support our alternatively certified agriculture teachers. We will use these results to help plan professional development workshops and training to support the development of alternatively certified teachers.

If you have questions or concerns, please contact:

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Appendix B Human Subject Approval



University Research Compliance Office

TO: Dr. Gaea Hock
Communications and Agricultural Education
315 Umberger Hall

Proposal Number: 9790

FROM: Rick Scheidt, Chair
Committee on Research Involving Human Subjects

DATE: 06/14/2019

RE: Proposal Entitled, "Administrator's Perceptions of the Effectiveness of Alternatively Certified Agricultural Educators in Kansas"

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written - and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §46.101, paragraph b, category: 2, subsection: ii.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.