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THE ROLE OF CULTURE IN AGRICULTURAL EDUCATION: A synthesis of research

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THE ROLE OF CULTURE IN AGRICULTURAL EDUCATION: A SYNTHESIS OF RESEARCH

THESIS

A thesis submitted in partial fulfillment of the
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By

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Lexington, Kentucky
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ABSTRACT OF THESIS

THE ROLE OF CULTURE IN AGRICULTURAL EDUCATION: A SYNTHESIS OF RESEARCH

Culture is studied across many different disciplines and is viewed as a topic of great and valuable interest within research. Agricultural education has come to recognize the value of embracing a multicultural attitude and the need for recruitment of culturally diverse individuals. While definitions of culture can vary from individual to individual, understanding the degree which a topic has been researched within a discipline is necessary in order to know what direction future research should take. Therefore, this study presents the findings of research on culture within the Journal of Agricultural Education from 1960-2015. This study's findings indicate that culture, as defined as a way of life that outlines how an individual acts, perceives, and believes, has been researched on a very limited basis within the Journal of Agricultural Education. However, findings also indicate that many tenets of culture have been researched and include diversity, multicultural education, inclusion, and teacher preparation. These findings lead to recommendations to expand the research within the topic of culture to include social aspects of culture and youth cultures.

KEYWORDS: Culture, subculture, multicultural, diversity, inclusion

Jonathan Alexander Tubbs

7/07/2015

THE ROLE OF CULTURE IN AGRICULTURAL EDUCATION: A SYNTHESIS OF RESEARCH

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“We only ever truly fail when we give up.”

-Rick Tubbs

To the man I aspire to be like, my hero, my dad.

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CHAPTER I: INTRODUCTION

Background and Setting

Culture in the United States encompasses a rich past, full of change and increasing cultural diversity both prior to and since the colonization of the east coast (Greenberg, 2007; Muggleton, 2000). Since colonization, the demographics of the population have changed through the influx of migrant and guest workers, refugees, tourists, and social workers from around the world. These groups have contributed immensely to what has become the multicultural and multi-ethnic population that we see today (Dowd & Dowd, 2003).

The Historical Impact of Culture on Youth

However, despite the multi-ethnic populace of the United States, human interaction is mostly homogeneous (McPherson et al., 2001), with group dynamics being created early in life. Brown (2004) pointed out that prejudices and predispositions are most often established at an early age. In turn, these prejudices and predispositions can cause discriminatory perception, evasion, and group support tactics. These effects, in turn, create resistance to dealing with others, just as they create resistance to modifying beliefs about self and others. In the classroom, these social factors can have a great effect on student learning. This phenomenon was observed in a 1991 study conducted by Phelan, Davidson, and Cao. In the study, students were observed to have several factors affecting their engagement with learning, including individual meanings, perceptions, understandings, thoughts, feelings, and adaptation strategies: all in relation to family, peers/friends, and school.

The Importance of Culturally Cognizant Teachers

Schools often serve as a microcosm of the broader population (Banks, 2008). As such, a need has been created for teachers who are more culturally and multi-culturally competent. Public education, however, is unsuccessful at addressing and embracing our culturally diverse student populace (Taylor, 2010). The lack of multicultural and cross-cultural competence has been reported as a major concern among pre-service and in-service educators (Brown, 2004). This concern has increased because educators can strongly influence the views, conceptualization of ideas, and behaviors of their students (Talbert & Edwin, 2008; Taylor, 2010). Contemporary teachers accomplish much more than passing along information to students. They also prepare learners for life through enhancement of communication skills, community and political contribution, and successful economic input (Malherbe, 2004). This responsibility cannot be fulfilled without adequate knowledge of their students (Warren & Alston, 2007).

In summary, the influence teachers have on students and student learning has been identified. It is evident that students of diverse backgrounds have the greatest need for quality instruction in the classroom, but it is argued they are least likely to receive it (Taylor, 2010). Without being culturally cognizant, teachers could have a negative influence on a diverse student population, due to a simple lack of understanding. Educators not only need to be culturally savvy, but also need experience in cross-cultural situations in order to create openness to dissimilarity, thus realizing the full potential of a diverse classroom (Hains, Tubbs, & Vincent, 2014; Hartel, Douthitt, Hartel, & Douthitt, 1999; Hobman et al, 2004). Looking again at Phelan, Davidson, and Cao (1991), the authors concluded their study by stating:

> In order to create environments where students are able to work together in classrooms, to solve problems jointly, and to have equal investment in schools and learning, we need to identify institutional structures that operate to facilitate boundary crossing strategies and that do not require students to give up or hide important features of their lives. This requires more than understanding other cultures. It means that students must acquire skills and strategies to work comfortably and successfully with different people in divergent social settings. (Phelan, Davidson, & Cao, 1991, pp. 27)

With the known influence of culture on student learning and the impact teachers have on student learning. As such, understanding and synthesizing existing research within a given field is necessary to ascertain the current level of cultural implementation and research. Therefore, this thesis seeks to answer the question, "what research has been published within the field of Agricultural Education on culture?"

Definition of Terms

Social cultures within the youth population are very dynamic and fluid—ever changing. When looking at this topic analytically, one can begin to draw conclusions through research. To establish a foundation, identifying key terms in the realm of culture, multicultural, and cross-cultural diversity, and gathering definitions for said terms is needed. The following operational definitions are offered within the context of secondary education.

Culture

Culture is operationally defined for the purposes of this study as a way of life that outlines how groups and individuals act, perceive, and believe. When applying this to

youth and the secondary education level, culture is defined as the environment of education where attitudes and beliefs are shaped and formed from social interaction with peers and influenced by teachers and administrators.

Within culture, there are many subunits describing both general and specific portions of the dominant culture. Below are outlined the terms used in this research synthesis.

Subculture

For the purposes of this research, the following definition is utilized for subculture: subcultures are groups within society that are set apart by their own set of customs, attitudes and values, although still measured as a part of the culture from which it results.

Counterculture

Counterculture is defined as a group of individuals brought together by shared qualities and interests and having at least one salient position against mainstream culture.

Crowds

The operational definition utilized by this thesis for crowds is a section of individuals that can be made up of multiple distinct subcultures but have a certain social tie to one another through common events or interests.

Groups

Groups, for the purposes of this study, are students within a particular subculture who are brought together by common interests or activities. The individuals within this group may or may not have significant social affiliation with one another but are considered to be part of the same group.

Cliques

Cliques are a tight knit formation of persons sentimentally tied to one another within a specific subculture and are most clearly identified by the hierarchy recognized within the clique. This hierarchy establishes foundations for in-group and out-group members, as well as identifies leaders and non-leaders within the clique.

Diversity

Diversity, for this research piece, is seen as the multicultural (race, gender, ethnicity, socioeconomic status, class) variations within identified populations.

Cultural Cognizance

For the purpose of this research, cultural cognizance is defined as an individual's ability to interact with those of different cultures through an understanding of one's own views, understanding of other cultural practices and worldviews, and their attitude toward cultural differences.

CHAPTER II: REVIEW OF LITERATURE

Overview of the Literature

Culture, according to Meltzer (1994), is the story we tell about ourselves. In that story can be found the meaning we give our human existence through shared memories and experiences. The culture of the United States is no different; however, it is unique in its own way.

Culture

McLeish (1993) noted that understanding the term culture can be a difficult task, especially when considering that the term is one of the most widely used and misused terms in the English language. Tharp (2009) argued that there is not a single fixed or universal definition to culture, let alone consensus between or within different disciplines. Too often, groups of people utilize and define the term 'culture' to articulate and adhere to their best interest, thus operationalizing a definition that exemplifies a specific group as the prototype for the definition. Definitions of culture are often derived from individual perceptions and therefore differ from author to author and from one research field to another (Banks, 2008; Betancourt & Lopez, 1993). Despite the descriptive confusion, culture can be better understood when holistically examined from within different disciplines. The following definitions highlight the perspectives of culture from varied professional fields.

How do scholars define culture?

Anthropology. According to Tharp (2009), anthropology is the discipline that has most contributed to the practical application of culture within organizational research. Anthropologists Kottak & Kozaitis (2003) defined culture as a way of conveying life

through learning, as it plays an essential role in shaping the attitudes of those within a culture. According to these researchers, culture includes customs, beliefs, and opinions; all which shape and define how individuals within a particular culture should behave (Kottak & Kozaitis, 2003). Still others within the field of anthropology and other behavioral sciences built upon the aforementioned definition and have outlined that customs, beliefs, and opinions were developed over generations, and thus encompass the full range of learned human behavior patterns (Epstein, 1998). Anthropology, it seems, broadly defined culture as how a group of individuals make sense of the world, through learning and over time and generations, and culture was often seen as a foundation for one's moral compass (Gottlieb & Heinsohn, 1973; Fine & Kleinman, 1979). Tharp (2009) best summed up the anthropological definition of culture when he identified that culture involves three simple human activities: what people think, do, and make. Tharp (2009) further noted that some common properties of culture are "culture is shared, learned, transmitted cross generationally, symbolic, adaptive, and integrated" (p.3).

Sociology. Within the field of sociology, culture has many varied definitions as well. Dowd & Dowd (2003), identified culture as a group or organization characterized by a set of shared principles, attitudes, values, goals, and practices. Hofstede (1984) outlined culture as a programming of individuals within a group and stated "Culture can be defined as the collective programming of the mind which distinguishes the members of one category of people from those of another" (p. 389). Similarly, Clarke et al. (1975) described culture as a way of life for a group of people who shared distinct choices and taste. The researchers further identified culture and by the various social categories that made up each culture, whereas Sackman (1992) focused more on the cognitive attributes

of culture. These attributes included perceptions, beliefs, and assumptions. One important aspect of culture, Sackman (1992) continued, was its impact on one's life. Culture did not simply shape the psychological processes of a certain group but also influenced the sociological, political, and economic factors of a given social system (Hofstede & Bond, 1984). Within sociology, it appears, researchers focused upon the psychological influence of culture and the social categories created from such influence.

Culture through a different lens. Similar to the anthropological view, Greenburg (2007) regarded culture as evolving over time. The researcher, however, noted that culture can also change through the perspective in which it is viewed. Culture is often changing so drastically that what is seen as unusual or strange to the dominant culture may eventually come to be considered mainstream over time. However, there exists what is considered the mainstream culture at any given time. Gelder (2007) outlined mainstream culture as the set of cultural norms accepted by a society and ties into both the anthropological and sociological definitions of culture as outlined above. Thus, in identifying culture with separate and distinguishable categories such as mainstream, scholars called into question the subcategories within a culture.

Subculture

Variance in the definition of culture simply indicates a variance in the lenses through which it has been viewed. Muggleton (2000) identified these variances as subcultures. Subcultures often developed and thrived in resistance or opposition to a specific aspect of mainstream culture (Muggleton, 2000). Many subcultures were driven and supported by youth during that time (Gelder, 2007). This opposition eventually

caused the term ‘subculture’ to be viewed in a negative light (Tsolidis, 2006; Yinger, 1960).

Subcultures in the United States. In the 1960s, subcultures were thought to have held a prominent opinion against one or many aspects of the dominant U.S. culture. This resulted in a held definition of subcultures as either deviant, marginalized youth groups or gallant resisters against the hegemonic society of global capitalism (Dowd & Dowd, 2003; Tsolidis, 2006; Yinger, 1960). The Center for Contemporary Cultural Studies publically defined the term as an opposing reaction to the mainstream culture (McArthur, 2008).

Counterculture. Perceptions of subcultures were viewed over a long period as deviant (Dowd & Dowd, 2003; Yinger, 1960). However, as generations showcased variance between subcultures, the term counterculture began to be used to refer to deviant groups (Kipnis, 2001). Counterculture refers to groups that are not only different from the main culture but adamantly and consciously reject certain aspects of the dominant culture. This separation fueled the formation of various groups from one generation to the next (Gelder, 2007). Dowd and Dowd (2003) explained that hippies and gangs are examples of countercultures while Kipnis (2001) placed the Amish in the same category.

The Social Aspect of Subcultures in the United States

Within the United States, social cultures have emerged in response to the decentralization of communities and the social outlets provided through technology (Dowd & Dowd, 2003). As communities have become less and less associated with geographical location (Bhattacharyya, 2004; Garkovich, 2011) and as youth enter

adolescence where family influence diminishes and peer influence increases (Arnett, 1995), social subcultural identity formation comes to the forefront.

Youth social subcultures. Youth social subcultures are specific to the youth demographic and are formed around social conditions such as athletics, hobbies, fashion, transportation, and social media (music, television, entertainment) however; individuals can also belong to multiple subcultures (Epstein, 1998; Gelder, 2007; Greenburg, 2007; Kipnis, 2001; Muggleton, 2000; Venters, 2009; Wilkens, 2008). Youth subculture groups are now typically viewed as a social entity, a group facilitating communication, interaction and sociality (Bishop & Bishop, 2007; Gelder, 2007). According to Arnett (1995) this social perspective is due to the fact that adolescence is a period when vital aspects of socialization are taking place, particularly with regard to identity-related issues, including preparation for occupational endeavors, acclimating to gender roles, and developing individual values and beliefs.

When viewing youth in education, the term culture correlates to the education system to which they belong. The adolescent years have been identified as the time period where identity and social identity are being created (Epstein, 1998; Gavin & Furman, 1989). Identity and social identity are arguably the most important factors in adolescent development and education (Arnett, 1995; Bishop & Bishop, 2007; Ester, 2008). With identity holding such importance with the youth demographic, cliques have been identified as further denominations of subcultures to adhere to adolescent desire for uniqueness (Muggleton, 2000).

The power of cliques. In 2007, Bishop and Bishop concluded that students perceive schools as an opportunity to create their identity through socialization, athletics,

and extracurricular activities. The researchers showed that students noted learning as "only one reason for attending school" (p. 240). Bishop and Bishop (2007) further concluded that identity formation in adolescents creates school norms and social categories. These categories, or cliques, create group norms and perceptions, including peer harassment and popularity. Social groupings in adolescent identity formation also have an impact academically upon students. In a study among students between the ages of 13 and 18, Nichols and White (2001) found that student cliques had a positive influential effect upon academic achievement. Further, students not identifying with any social group did not fare as well academically. Finally, students identifying with multiple cliques excelled academically (Nichols & White, 2001). Hallinan and Smith (1989) concluded that student social formations appeared due "not only in response to the characteristics of students in the class, but also to structural and organizational features of the class itself" (p. 916). The authors went on to conclude that in order to overcome the effect the class itself has on student development, understanding of students from diverse backgrounds is needed to make a difference. These findings outlined the need for multicultural education within schools and classrooms.

Multicultural Education

With an increase in ethnic, racial, cultural, and religious diversity in the United States, the need for competency and education in multicultural issues is very prominent (Banks, 2008; Taylor, 2010; Vincent & Kirby, 2015). Many public education systems that serve increasingly diverse student populations have already had a negative effect on student achievement, and these effects are prompting educators to question their own system of beliefs and established prejudices (Taylor, 2010). Vincent & Kirby (2015)

pointed out that educational research well documents the need for teachers capable of successfully educating students from cultures other than their own. When further considering multicultural education in the context of teacher to student, Brown (2004) asserted, “to be effective, classroom teachers must be multicultural and possess the skills to provide a classroom environment that adequately addresses student needs, validates diverse cultures, and advocates equitable access to educational opportunities for all” (p.325). Banks (2008) fortifies Brown’s comment when writing “An important goal of multicultural education is to help educators minimize problems related to diversity and to maximize its educational opportunities and possibilities” (p. x). Bell (2000) also held this position when indicating that teachers play key roles in multicultural education due to their ability to influence student views, idea and concept formations, and behaviors. The ability to influence student views should be seen as an educator’s ability to assist their students, as well as themselves. However a teachers’ ability to positively influence their students in the realm of cultural competency is often hindered by the fact that many educators are not comfortable with multicultural education themselves (Taylor, 2010). Competency, therefore, extends beyond content and into learning more of one’s own culture and enhancing one’s self-understanding by viewing oneself from other cultural perspectives, another key goal of multicultural education (Banks, 2008). One study conducted by Hains, Tubbs, & Vincent (2013) outlined one method of accomplishing this.

Culturally Responsive Pedagogy

Hains, Tubbs, & Vincent (2013) outlined one method of exposing pre-service teachers to different cultures. To answer the call from researchers that students should be

immersed in diverse cultures to broaden and deepen their understanding of and teaching capacity toward diverse students (Banks, 2008; Talbert & Edwin, 2008), the researchers outlined procedures and an example of doing so. Students were tasked with creating an alter-identity based on a culture unfamiliar to them or one they knowingly held a bias toward. Students then researched the identity and role played it in a public setting, following up the immersion with a reflection. All participating students indicated experiencing a deeper understanding of their selected culture and also expressed understanding for the need of adapting pedagogy to better suit diverse needs (Hains, Tubbs, & Vincent, 2013), thus indicating an enhanced level of cultural competency.

Achieving culturally responsive pedagogy begins with teacher education programs (Taylor, 2010). These programs have a need to embrace culturally responsive pedagogy and impart to pre-service teachers what such culturally responsive pedagogy might look like. According to Taylor (2010), this is a pedagogy that "facilitates and supports the achievement of all students" (p.25). However, although it is clear that cultural competency in education includes a combination of attitudes, knowledge and skill, it is not as clear how and when to implement each of these, nor is it clear how to achieve the correct balance (Seeleman, Suurmond, & Stronks, 2009). In their 2014 descriptive, causal-comparative study, Vincent, Kirby, Deeds, & Faulkner highlight the multicultural teaching concerns of pre-service teachers in the American South, with the greatest concerns being cross-cultural competence, followed by strategies and techniques. Within varying disciplines, such as career and technical education, researchers seek to train individuals to achieve these skills.

Culture in Career and Technical Education

Career and Technical Education (CTE) researchers recognized the need for cultural and multicultural education within their respective disciplines as a way of addressing a diverse society (Braundy, 2000; Friedenberg, 1999). CTE scholars and practitioners also recognized that teachers' perceptions, attitudes, and emphasis on multicultural education have direct implications on pedagogical effectiveness with CTE students (Adams & Hall, 2002; Jones & Black, 1995). Adams and Hall (2002) found that multicultural education encompasses an awareness and knowledge of cultural pluralism and cultural diversity, including issues related to age, race, ethnicity, gender, religion, language, socioeconomic status, and uniqueness. The researchers further found that the diversity of one's students should not only be understood but also valued and integrated into all aspects of the process of education. The above definition is valuable when considering the student populations and increasingly diverse learning needs among students within CTE (Adams & Hall, 2002; Friedenberg, 1999; Lakes & Burns, 2001; Zuga, 1996; Jones & Black, 1995). According to Banks (2008), a school with an empowering culture and community organization allows for an enhanced environment for all students to learn and be empowered, despite differences in race, ethnicity, language, or socioeconomic status. It is the duty of the CTE teacher to provide for these demographically divided cultures an equal opportunity for a quality education (Adams & Hall, 2002).

Summary

Throughout this review, culture was highlighted and studied in multiple disciplines and through multiple lenses. In addition to this was an examination of current

and past research done within education and career and technical education on the topics of culture, diversity, and more specifically youth social subcultures. The review of cultural pluralism within the field of Career and Technical Education provided a holistic view of what research has been done regarding culture. This literature review also outlined the held opinions of researchers within the fields of education and CTE toward what culture is. Both of these set the foundation for the type of research that should be expected within the field of Agricultural Education, a component of CTE. It has already been observed that teachers in general have limited cross-cultural interaction (Brown, 2004) and agriculture teachers from ethnic minority populations are highly underrepresented in education (Warren & Alston, 2007). With these things in mind, the stage is set for answering the question, "what research has been conducted in Agricultural Education concerning culture?"

CHAPTER III: METHODOLOGY

Purpose of the Study

The purpose of this study is to identify and synthesize what research has been conducted about culture within the venue of agricultural education. Based on research conducted within education and agricultural education, there is a need for teachers to be trained and educated on diversity (Woods, 2004) and to participate in immersion experiences focused on diversity (Hains, Tubbs, & Vincent, 2013; Talbert & Edwin, 2008). Currently, a synthesis of cultural studies has not been completed within the agricultural education profession to determine what research has been done or by whom concerning culture and diversity within the profession. This study seeks to examine and establish the baseline of the profession. The results of this synthesis are significant in that they have the potential to greatly affect the future of agricultural education research and could lay the foundation for a different venue of research toward increasing cultural diversity enrollment numbers, and allow for cross-cultural interaction for both the students and the teachers. Based on this purpose, four research questions were raised:

1) What studies have been done within the agricultural education field on the topic of culture?
2) What populations have been studied within the research on culture in agricultural education?
3) What is the purpose of the cultural studies done within agricultural education?
4) What findings and recommendations have been made from studies done within agricultural education on the topic of culture?

Research Methodology

The chosen design for this study was a research synthesis. Research syntheses allow researchers to systematically analyze past research regarding a specific topic (Cooper, 2010). However, the topic of research syntheses used within qualitative research has been a point of contention amongst some. Qualitative research is often seen as non-generalisable, being specific to a certain group, time, a particular context (Thomas & Hardin, 2008). Analyzing a group of qualitative studies, or in the case of this research synthesis combining both qualitative and quantitative studies, leaves the research open to the criticism of de-contextualizing research and assuming incorrectly that the studies in question are related (Thomas & Hardin, 2008). Research syntheses, however, utilize multiple techniques to "collect, catalog, and combine primary research" (Cooper, 2010, p. 7). Within the realm of research syntheses, there are various types that provide researchers more specific focus to their study purposes. The purpose of a thematic synthesis is to formalize and categorize the development of themes within the parameters of a group of studies (Thomas & Hardin, 2008). With both the research purpose and the issue of utilizing a synthesis for qualitative studies in mind, a thematic synthesis was deemed the best approach to this study. This approach aims at evaluating research to bring it together for an audience while also maintaining each study's complexity and specific context (Thomas and Hardin, 2008).

Utilizing thematic synthesis techniques for synthesizing and analyzing over 70 years of research within one journal creates a valuable resource for agricultural education researchers, teachers, and students. The researcher sought to examine past research in

agricultural education using the primary tenets of culture. Therefore, a research synthesis was needed and selected.

Methods and Procedures

Cooper (2010) outlined seven steps when conducting a research synthesis:

1) Formulating the Problem
2) Searching the Literature
3) Gathering Information from Studies
4) Evaluating the Quality of Studies
5) Analyzing and Integrating the Outcomes of Studies
6) Interpreting the Evidence
7) Presenting the Results

Adapting from these seven steps, five steps were used for the purposes of this research synthesis. Methods for the five steps are outlined in the following sections. Steps one through three are explained and specific methods that were used for this synthesis are detailed. Steps four and five are explained but the details of the specific methods used for this study are outlined in chapter four.

Formulating the question. Cooper (2010) outlined that a research synthesis begins by identifying a problem. Cooper also noted that in formulating the problem, researchers identify what question they seek to answer through research. However, since this was an exploratory synthesis, the researcher was formulating a question in lieu of a problem.

In this step, the variables of interest were given clear conceptual definitions. Along with definitions, the question was stated in a way in which the research design can

be specified clearly and be placed in a meaningful historical and practical context. This method was applied to this research synthesis by identifying research in agricultural education.

Within agricultural education, the National Research Agenda for 2011-2015 outlined the importance of cultural understanding in research priority 4: Meaningful, Engaged Learning in All Environments. Research priority 4 outlined the need to research diversity and multiple perspectives across all spectrums of agricultural education. With this in mind, the researcher sought to identify what research had been conducted within agricultural education from a historical perspective in order to better understand where the profession needed to go. This guided the purpose of this study: to understand the historical state of cultural research in agricultural education.

Searching the literature. This step outlined the proper search parameters and exhausts all terms in searches of databases. Step two is also where complimentary and secondary searches were taken into account and rigor is maintained.

Inclusion and exclusion criteria. Cooper (2010) noted that inclusion and exclusion criteria tie directly to the question the researchers are seeking to answer. Establishing the research inclusion criteria prior to the literature review is necessary to maintain consistency throughout the synthesis methods (Cooper, 2010). For the purpose of this research synthesis, inclusion and exclusion criteria stem from the definition of culture generated from the literature review.

The following outlines the specific inclusion criteria for the synthesis:

1) Within the field of Agricultural Education,
2) Included specific culture terms including culture, subcultures, countercultures, and youth cultures (generated from the literature review).
3) Agricultural education within the U.S. as the context for the analysis
4) Published within the *Journal of Agricultural Education*
5) Available and accessible through online database searches
6) Published between 1960 and 2015

Duplications of any research as well as any studies not specifically using the terminology outlined above were excluded from this synthesis. Thirty-nine studies total met the criteria.

Databases. The primary source for article synthesis was the premier venue for domestic research in agricultural education. Therefore, the *Journal of Agricultural Education (JAE)* was used as the sole database to search for articles relating to culture. Since only one venue was being used, search strategies incorporated an exhaustive search of the *JAE* database from 1960-2015. The year 1960 was chosen as the parameter since it is the earliest date that the *JAE* database has available.

Search limitations. This research synthesis was an initial exploratory study to find out if and how culture has been examined in agricultural education. This study was limited to its search parameters and did not reflect all research done within the field of agricultural education. However, the *JAE* is one of the premier venues for research within the profession and does represent the profession at large. Also, within the search databases of the *JAE*, this research synthesis was limited to article availability within the

online database, including the years 1960-2015. This synthesis was further limited by the search capabilities within the online journal database: keyword searches of the titles and abstracts of articles only, not words within the articles themselves.

Searching for studies. A keyword search was conducted within the *Journal of Agricultural Education* database. The keywords included culture, subcultures, countercultures, youth cultures, inclusion, gender, diversity, and multicultural. For the years prior to 1995, each journal link was searched individually by title and abstract, if available, since no abstract is provided on the database. Articles from the search were documented and saved for analysis. The overall search yielded a total of thirty-nine articles.

Gathering information from studies. Step three ensured trustworthiness through: a) consistency in maintaining the specific criteria for inclusion and exclusion and b) procedures employed to address unbiased and reliable data collection takes place. To effectively synthesize the gathered data for a research synthesis, a categorization guide was created as was suggested by Cooper (2010) for syntheses with multiple articles. A spreadsheet was created with the following characteristics highlighted from each study and was used as the categorization guide for separating the articles into logical themes:

1) Author(s) and year
2) Research Purpose
3) Study Population
4) Population Size
5) Findings and Recommendations

The researcher conducted all searches and categorized the articles for the synthesis. Subsequently, the article information listed above was entered into the spreadsheet and saved for further analysis.

Once the initial literature search was complete and information entered into the spreadsheet, a review of each study was conducted. This review allowed the researcher to exclude any studies from this synthesis due to design or implementation defaults indicating that the study was not consistent with the parameters of the research synthesis. This was done in a consistent manner with all studies, as was outlined by Cooper (2010). Once identified, articles were read and analyzed using the operational definitions of the key terms. If the study was found to be outside the parameters of the research synthesis, it was excluded. For example, when searching the term "culture" often the search database would highlight any words containing culture, such as "agriculture." After primary analysis was complete, the result yielded a total of thirty-nine articles that met inclusion criteria.

Following primary analysis, the researcher used the spreadsheet to categorize the studies so that important distinctions could be made between them concerning research design, implementation, and other pertinent characteristics (Cooper, 2010). Each study was reanalyzed, to find common themes in their research criteria and topic. From the coding, the thirty-nine articles were grouped into one of the following five categories and showcase the differences and similarities between studies in the same category:

1) Historical and Research Review of Diversity in Agricultural Education
2) Preparing Agricultural Education for a Diverse Audience

3) Female and Minority Students Experiences and Perceptions of Agricultural Education
4) Inclusion and Engagement of Minority Students in Agricultural Education
5) Perceptions of Agricultural Education Professionals toward Diversity and Inclusion

Interpreting and presenting the results. In interpreting the evidence, generality and limitations of the synthesis findings were explored. Along with this, the extent of missing data was discussed, as was its effect on the research synthesis. The function of this step in the synthesis was to summarize the analyzed data in a cumulative fashion in consideration of its conclusiveness, generalizability, and limitations (Cooper, 2010). This final step in the research synthesis process outlined how to best represent the analyzed and interpreted data in a clear and complete manner. For the research synthesis, data was presented in tabular format, outlining and explaining categories and results of the research questions. Step five allowed the researcher to document clearly and completely the results of the synthesis, to identify important aspects of the study the reader will need to know, and to maintain consistency in research results (Cooper, 2010).

Validity and Reliability in a Research Synthesis

The search and inclusion criteria employed three critical approaches for addressing validity and reliability in research syntheses. These included search strategies, inclusion criteria, and categorization, each of which was described in previous sections. Specifically, three areas of validity were of concern to the researcher.

Cooper (2010) noted that during the literature search, studies found might be different in methods and results. This point was evaluated and was the reason for

conducting this study as a thematic synthesis where difference in methods and results do not affect synthesis results. Also during the literature review, bias could be realized during inclusion and exclusion of studies. The researcher referenced all inclusion and exclusion criteria during each study review and did not exclude or include due to the results of a study. Results were only reviewed to establish relevance to the purpose of the synthesis.

When analyzing studies, analysis could be conducted inconsistently or incorrectly thus leading to a misrepresentation of the studies in the synthesis (Cooper, 2010). With this being a thematic synthesis, when studies were reviewed a categories emerged, consistency was maintained on which category studies fell into. Some studies had characteristics of more than one category, however reasoning for the final category these fell into are given in the following chapter on an individual basis.

Lastly, the third point of validity, and perhaps the most salient, was in understanding the process for the synthesis. If omission of synthesis procedures occurs, evaluating conclusions, identifying plausible validity, and reproducing the study would be difficult (Cooper, 2010). This point of validity is addressed within this chapter when outlining the study methods. The methods outlined in this chapter were chosen as best methods for answering the research questions and in following the purpose of a thematic synthesis. Therefore, Cooper's (2010) seven step research synthesis process was modified to fit the needs of a thematic synthesis. The five steps previously outlined provided the framework for this study and were used systematically to ensure the validity and reliability of the results. The following chapter shows the results of implementing these methods.

CHAPTER IV: PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Results

In presenting the results, the study questions were utilized to guide this section and tables were used to present the findings. The research questions were as follows:

1) What studies have been done within the agricultural education field on the topic of culture?
2) What populations have been studied in the research on culture in agricultural education?
3) What was the purpose of the cultural studies done within agricultural education?
4) What findings and recommendations have been made from studies done within agricultural education on the topic of culture?

The research synthesis revealed a total of thirty-nine articles that fit within the considerations of the study. Utilizing the definition of culture developed through a literature review of mainstream education research, these articles have been synthesized and presented in tabular format. Each of the 39 articles was categorized into one of five groups and the tables are presented accordingly. These groups are as follow:

1) Historical and Research Reviews of Diversity in Agricultural Education
2) Preparing Agricultural Education for a Diverse Audience
3) Female and Minority Students Experiences and Perceptions of Agricultural Education
4) Inclusion and Engagement of Minority Students in Agricultural Education
5) Perceptions of Agricultural Education Professionals toward Diversity and Inclusion

Tables are presented within each of the five groups showing three areas analyzed for each article, thus effectively addressing each of the four research questions: research purpose, the study population and population size, and the study findings. Table 4.1 below outlines category one:

Table 4.1 - Historical and Research Reviews of Diversity in Agricultural Education

Author(s) (year)	*Research Purpose*	*Study Population/Size*	*Findings*
Croom & Alston (2009)	A historical study of African American problems with agricultural and industrial education	N/A N/A	Advances gained using the Hampton Model of Industrial Education could not be sustained for young African Americans with the pressures associated with race and ethnicity during the 20th century
Luft (1996)	Determine the degree to which pedagogy addressing cultural diversity were being carried out in high school agricultural education programs	High school agriculture teachers in Nevada during the '93-'94 school year. *N* = 21	Most students enrolled in FFA were white (>90%), and that the extent to which teachers addressed cultural diversity was limited and needed improvement

Table 4.1 includes two articles that were classified into the category of historical or research reviews on cultural diversity within agricultural education. While one of the articles (Croom & Alston, 2009) was strictly looking at historical data of cultural diversity in agricultural education, Luft (1996) was not. However, this category included this study because of the nature of what Luft was researching,in trying to determine the degree to which cultural diversity pedagogy was being used constitutes a historical view. Therefore, it was determined that Luft (1996) fit best in this category. Note also that the Luft (1996) article was the only study of the two utilizing a study population, that being 21 high school agriculture teachers in the state of Nevada.

The second emerging category of this research synthesis is shown below. This category, preparing agricultural education for a diverse audience, related to Luft's (1996) discussion on where the profession was at the time in regards to diversity within the classroom. However the articles within this category discussed preparation for diverse students.

Table 4.2 - Preparing Agricultural Education for a Diverse Audience

Author(s) (year)	*Research Purpose*	*Study Population/Size*	*Findings*
Andreasen, Seevers, Dormody, & VanLeeuwen (2007)	Describe the perceptions of secondary agricultural education teachers in New Mexico toward their level of competence on state special needs inclusion	Secondary agricultural education teachers. *N* = 69	Inclusion competencies and teaching skills most needed by New Mexico teachers were all related to understanding, dealing and working with special needs students
Bell (2000)	Evaluate the longitudinal effect of a planned in-school practicum experience addressing cultural diversity on the self-perception of student teachers regarding their interpersonal competency in such situations	Agricultural education and FCS student teachers *N* = 24	All students indicated a perceptual change of interpersonal competency on all measured subscale areas. Greatest area: teacher-student relationships. Least gain: cultural awareness
Bowen & Rumberger (2002)	Advancing agricultural education within the context of an increasingly diverse society	N/A N/A	AAAE Distinguished Lecture
Hains, Tubbs, & Vincent (2013)	Examine the approach one professor at a land grant institution took toward enhancing multicultural understanding through an immersion activity	Agricultural education, extension education and leadership education graduate students. *N*= 8	Participants indicated a deeper understanding of their chosen identity. Participants also expressed a need to adapt teaching practices to diverse audiences.
Haygood, Baker, Hogg, & Bullock (2004)	Outline the extent to which service learning can advance cultural competency in agricultural education	Public secondary agriculture science teachers in the US during the '97-'98 school year. *N* = 138	The study indicated that the combination of school and personal characteristics had a big influence on positive teacher behavior

Talbert & Edwin (2008)	Investigate how agricultural education programs prepared teacher education students to work with diverse populations	Agricultural education programs. *N* = 57	Students were involved with student teaching and early field experiences that exposed them to diverse situations. However coursework showed mixed results
Vincent, Killingsworth, & Torres (2012)	Summarize the concern levels of current pre-service teachers toward multicultural classroom teaching	Agriculture and other secondary pre-service teachers. *N*= 113	Variance in descriptive characteristics between AgEd pre-service teachers and all others included race (slightly), home residence, and estimated household income. Females were more concerned overall than males. Highest areas of concern included familial/group knowledge followed by strategies and techniques.
Vincent, Kirby, Deeds, & Faulkner (2014)	Determine a difference in multicultural teaching concern amongst pre-service teachers, located in the south, with and without a required course in multicultural education	Pre-service agricultural education teachers *N*= 438 Enrolled in universities *N*= 31	The majority of students were rural, white, and female. Concerns with highest mean score were cross-cultural competence followed by strategies and techniques.
Webster & Hoover (2006)	Report the results of a service learning activity used to bridge minority-based collegiate group with an adolescent leadership development class	Undergraduate and graduate level agriculture students. *N* = 53	The findings supported using service learning activities as a positive means to expose students to diversity
Woods (2004)	Outline the extent to which service learning can advance cultural competency in agricultural education	N/A N/A	Discussion article

Table 4.2 shows the articles included in the category of preparation of the agricultural education profession to work with diverse population. Of the ten studies in this category, six addressed utilizing some sort of planned experience to expose students to diversity and discussed the positive response these experiences had on student

perception to diversity (Bell 2000; Hains, Tubbs, & Vincent, 2013; Haygood, Baker, Hogg, & Bullock, 2004; Talbert & Edwin, 2008; Woods, 2004). Two of the other studies, Andreasen, Seevers, Dormody, & VanLeeuwen (2007) addressed New Mexico teachers' perceptions toward inclusion of special needs students and, in turn, what training they needed to improve, and Bowen & Rumberger (2002) discussed advancing the profession in the context of an increasingly diverse society. The final two studies both sought to identify or summarize the concerns pre-service teachers held toward multiculturalism in the classroom (Vincent, Killingsworth, & Torres, 2012; Vincent, Kirby, Deeds, & Faulkner, 2014). Note that of the ten studies in this category, five have been completed within the last ten years.

The following eleven studies in table 4.3 were categorized together for their thematic similarities dealing with female and minority students' experiences in agricultural education.

Table 4.3 – Female and Minority Students Experiences and Perceptions of Agricultural Education

Author(s) (year)	*Research Purpose*	*Study Population/Size*	*Findings*
Bell & Fritz (1992)	Determine factors to female enrollment in secondary agricultural education programs in Nebraska	High school agriculture teachers, counselors at schools with programs, collegiate female students who graduated from schools with programs but did not take them, and parents of current females enrolled in high school agriculture programs. *N* = 30	The study revealed that female students were deterred from enrolling in agricultural education courses due to: 1) lack of career information showing female career paths in agriculture, 2) counseling services did not provide information for career options, and 3) a lack of a support network for participation

Table 4.3 (cont.)			
Cano & Bankston (1992)	Explore factors associated with participation and non-participation of ethnic minority youth in a 4-H program	Ethnic minority youth and parents in ten selected counties. *N* = 103	Major factors cited by both parents and students for non-participation included lack of minority role models, lack of advertising, and access to rural areas for urban students. For participation both viewed the program as positive
Faulkner, Baggett, Bowen, & Bowen (2009)	Examine long-term influences to attitudes, educational, and career choices of FASI students from ’94-‘01	Former high school students. *N* = 154	Respondents had positive view of food and agriculture studies. However few had pursued a career in those areas. Family, parents, and personal factors were most commonly cited as biggest influences on career choice.
Foster & Seevers (2003)	Describe the unique challenges of women in regards to personal life and barriers in the profession	Females in AAAE listed as faculty in agricultural extension and education programs. *N* = 53	Three themes from the study: 1) women in the field who are encouraged and strongly committed, 2) mentoring and support networks are too few, and 3) barriers to women in the profession are real and need to be addressed
Kelsey (2006)	Discover what role a pre-service teacher preparation program played in contributing to the lack of females within the program	Pre-service agriculture education female students at a mid-west land grant institution from ‘99-’04. *N* = 33	While results indicated that equitable treatment was given by faculty and staff, female students experienced stereotyping and gender bias from male peers, male secondary ag teachers, and male school administrators
Marshall, Herring, & Briers (1992)	Examine relationships among agricultural science students, reasons for enrolling in the course, reasons for joining or not joining the FFA, and perceptions towards SAEP requirements	All secondary agricultural education students in the fall of ’89. *N* = 1697	Results indicated that overall students enrolled in courses and joined FFA because of what each had to offer and to enhance their identities.
Newsom-Stewart & Sutphin (1994)	Student opinions of agricultural education in relation to academic subjects, as well as gender and ethnicity divergence	Tenth grade students across twelve schools and technical centers. *N* = 925	Overall, all students had a positive view of agriculture and its importance. Divergence between genders and ethnicities emerged

			more prominently in environmental science questions than in agriculture science
Sutphin & Newsom-Stewart (1995)	Determine reasons for student enrollment in high school agricultural education courses	Tenth grade high school agriculture students. *N* = 925	Results showed that reasons for enrollment fell into five categories: 1) prep for job and higher ed., 2) developmental skills, 3) academic enhancement, 4) response to social pressure, and 5) participation in activity centered learning
Talbert & Larke (1995)	Identify attitudes and reasons for minority and non-minority enrollment in agriculture as well as perceived barriers	High school students. *N* = 1322	Findings included 1) majority of teachers and students were white males, 2) minority students, especially minority females, were very underrepresented, 3) minority students were mainly from non-farm, non-rural backgrounds, and 4) minority students had more negative perceptions
Thorp, Cummins, & Townsend (1998)	Evaluate the efficiency of leadership education methodologies for female students	Collegiate students enrolled in an academic leadership course during the fall of 96. *N* = 87	No relationship found between women's' previous leadership experience and their perceived leadership abilities. Women in all female groups had a stronger perception of their abilities than women in male-female groups
Wiley, Bowen, Bowen, & Heinsohn (1997)	Explore the attitude formation of minority students toward the Food and Agricultural Sciences through a one week workshop	Academically talented minority high school students. *N* = 28	Results showed that participants in the workshop left with more positive perceptions toward FAS and maintained them a year later

Table 4.3 outlines the articles addressing female and minority students' experiences with, and perceptions toward, agricultural education. Of the eleven studies in this category, four of them speak directly of female experiences and deterrents to enrollment in agriculture courses (Bell & Fritz, 1992; Foster & Seevers, 2003; Kelsey,

2006; Thorp, Cummins, & Townsend, 1998), and four of them describe the perceptions and enrollment factors of minority populations (two of which include females) (Cano & Bankston, 1992; Newsom-Stewart & Sutphin, 1994; Sutphin & Newsom-Stewart, 1995; Wiley, Bowen, Bowen, & Heinsohn, 1997). Of the remaining three, two of the studies looked at factors associated with enrollment in agriculture courses, yet then delineated the results using cultural tenets (i.e. gender, ethnicity) as demographic factors (Marshall, Herring, & Briers, 1992; Faulkner, Baggett, Bowen, & Bowen, 2009), and the remaining article viewed factors of both minority and non-minority for enrollment in agriculture (Talbert & Larke, 1995).

Note also that of these eleven studies, all used a study population, and they all consisted of at least 28 individuals, the highest having 1697 participants. However, it is also important to note that only two of the studies have been done in the last ten years, the most recent being in 2009 (Faulkner, Baggett, Bowen, & Bowen, 2009).

Related to the previous category of experience and perceptions of minorities and females in agricultural education, the following studies were categorized together for their commonality in researching inclusion and engagement of minority students. See table 4.4 below.

Table 4.4 – Inclusion and Engagement of Minority Students in Agricultural Education

Author(s) (year)	*Research Purpose*	*Study Population/Size*	*Findings*
Giffing, Warnick, Tarpley, & Williams (2010)	Determine attitudes and perceptions of willingness and ability to include students with special needs	Secondary agricultural education teachers. *N* = 93	Results indicated that while teachers held a positive attitude toward inclusion of special needs students, few held positive perceptions of having the skills to do so
Hoerst & Whittington	Describe the needs of secondary agriculture	Secondary agriculture	Results showed that teachers felt comfortable

(2009)	teachers in relation to learners with special needs	teachers. *N* = 184	teaching in an inclusion classroom. However teachers indicated a need to have more training on how an inclusion classroom should operate
Jones & Bowen (1998a)	Determine factors related to enrollment of African American students in secondary agricultural science programs related to agriculture teachers	Secondary agriculture science teachers. *N* = 11	Teachers relating well to all students, classrooms with technology and science-based curricula, and schools with an African American teacher all had higher enrollment of African American students
Jones & Bowen (1998b)	Determine factors related to enrollment of African American students in secondary agricultural science programs related to students and school	Secondary agriculture science students. *N* = 380	Students in agriculture had a more positive perception than those not. African Americans had a more negative perception regardless of being enrolled or not within an agriculture course
LaV ergne, Larke, Elbert, & Jones (2011)	Assess the perceptions of the benefits of diversity inclusion and perceptions of the barriers of diversity inclusion	Secondary agricultural education teachers. *N* = 232	Researchers found that respondents had a positive view of all the statements regarding the benefits of diversity inclusion
Pense, Calvin, Watson, & Wakefield (2012)	Identify the impact of the inclusion technique of learning objectives for students with learning disabilities within agricultural education classrooms	High school students in IL. 5 schools total *N*= 100	Study showed that curriculum can be effectively redesigned with learning objectives for students with learning disabilities. Further research needed to build upon these findings
Pense, Watson, & Wakefield (2010)	Identify the impact of the inclusion technique of learning objectives for students with learning disabilities within agricultural education classrooms	High school students in IL. 5 schools total *N*= 197	Study showed that curriculum can be effectively redesigned with learning objectives for students with learning disabilities. Further research needed to build upon these findings
Roberts, Hall, Briers, Gill, Shinn, Larke, & Jaure (2009)	Describe the outcomes of field-based efforts to increase diversity (specifically Hispanic students) in agricultural	High school agriculture programs including students, teachers, and	All schools participating increased their number of Hispanic students involved with agriculture education and FFA while also

	education programs and the FFA	parents. *N* = 3	increasing the number of FFA events the chapter participated in as a whole
Vincent, Henry, & Anderson II (2012)	Gain a deeper understanding or why students that identify as non-white decided to pursue a degree in AgEd	Agricultural Education pre-service teachers of color *N*= 10	Participants noted several facets of the AgEd profession as reasons for joining. Internal and external values motivated the selection. Familial, personal, and structural inducements could be possible barriers to selecting AgEd.
Warren & Alston (2007)	View the perceptions of secondary agriculture teachers regarding benefits and barriers to diversity inclusion	Secondary agricultural education teachers. *N* = 74	Study results showed respondents agreed that diversity inclusion benefits include development of leadership skills in minorities and women. Barriers to inclusion were prejudicial issues, guidance counselors, perception of agriculture, and stereotypes

Table 4.4 shows the ten studies that were categorized as pertaining to inclusion and engagement of minority students, including students with special needs, into agricultural education. All ten studies utilized study populations, the smallest being a population of three and the largest being a population of 380. Note that, of the studies included, six utilized secondary agriculture teachers as their study population. This signifies that these researchers consider high school agriculture teachers to be a valuable venue for gathering data on this topic. Special needs students were the specific focus of four of the studies. Also, it is important to note that eight of the ten studies in this category occurred in the last ten years.

Table 4.5 shows the last category established during analysis. This table shows the research within the *Journal of Agricultural Education* pertaining to the perceptions of agricultural education professionals toward diversity and inclusion.

Table 4.5 – Perceptions of Agricultural Education Professionals toward Diversity and Inclusion

Author(s) (year)	*Research Purpose*	*Study Population/Size*	*Findings*
Cano & Ludwig (1995)	Determine the knowledge of diversity and response towards diversity	Extension administrators at a land grant institution. *N* = 108	Respondents indicated agreement that diversity was an issue. Most critical issues with diversity included communication with diverse audiences, lack of understanding what a multicultural organization could achieve, and recruitment efforts for a diverse program
Dillingham, Ramirez, & Amsden (1993)	Determine whether gender affects secondary and post-secondary teacher and student participation in agricultural mechanics programs	Secondary agricultural education teachers. *N* = 134	Results indicated that gender equality had not been reached in agriculture mechanics
LaVergne, Jones, Larke, & Elbert (2012)	Examine effect of teacher demographics and personal characteristics on their perceptions of diversity inclusion benefits, perceived barriers to diversity inclusion, and proposed solutions to increasing inclusion in AgEd classrooms	Secondary agricultural education teachers. *N*= 232	Findings included race/ethnicity as a statistically significant variable for perceived barriers and solutions. Others included statistical significance based on location, suburban/urban, toward proposed solutions to increase diversity inclusion.
Pense (2009)	Identify and describe curricular needs of students with learning disabilities within agricultural education from the perspective of the agriculture teacher	Secondary agricultural education teachers. *N*= 143	Recommendations included: finding ways to increase and improve teaching to SLD students, identify avenues for additional funding of SLD students, and identify ways to modify curriculum for this population.
Vincent & Kirby (2015)	Inspect the dynamic of Culturally Responsive Pedagogy (CRP)among secondary Ag.Ed. teachers in thnically diverse schools.	Secondary agricultural education teachers. *N*= 9	A large difference in four of the six characteristics, medium difference in the other two, existed for CRP. Difference in magnitude codes between teachers with diverse enrollment and those without.
Zhai & Scheer	Measure the level of	Collegiate level	Results indicated that

(2004)	global perspective and attitude toward cultural diversity	agriculture students. *N* = 145	students tended to have a moderate global perspective and a positive cultural diversity attitude, females more so than males. Students with exposure to international people had a higher score on global perspective and diversity

Of these six articles, three were published within the last ten years; two of the other three are at least twenty years old. Each of the six studies included a study population, all but one were over 100 participants. Dillingham, Ramirez, & Amsden (1993) sought to determine whether or not gender affects high school and collegiate teacher and student participation in agriculture mechanics. The argument can be made that the article could have been included in the category of female and minority students' experiences and perceptions of agricultural education. However, after further analysis it was noted that the study consisted of understanding the perceptions of high school agriculture teachers regarding the influence of gender in agricultural mechanics. Therefore, it was decided that the study best fit in category five.

The purpose of this study was to identify and synthesize what research has been conducted within one venue of agricultural education research toward culture. Research was synthesized within the *Journal of Agricultural Education* from 1960-2015 regarding culture. The tables above outlined the studies included in this research synthesis in three specific areas; the purpose of the study, the study population and population size, and the findings; thus addressing the research synthesis questions:

1) What studies have been done within the agricultural education field on the topic of culture?

2) What populations have been studied in the research on culture in agricultural education?
3) What was the purpose of the cultural studies done within agricultural education?
4) What findings and recommendations have been made from studies done within agricultural education on the topic of culture?

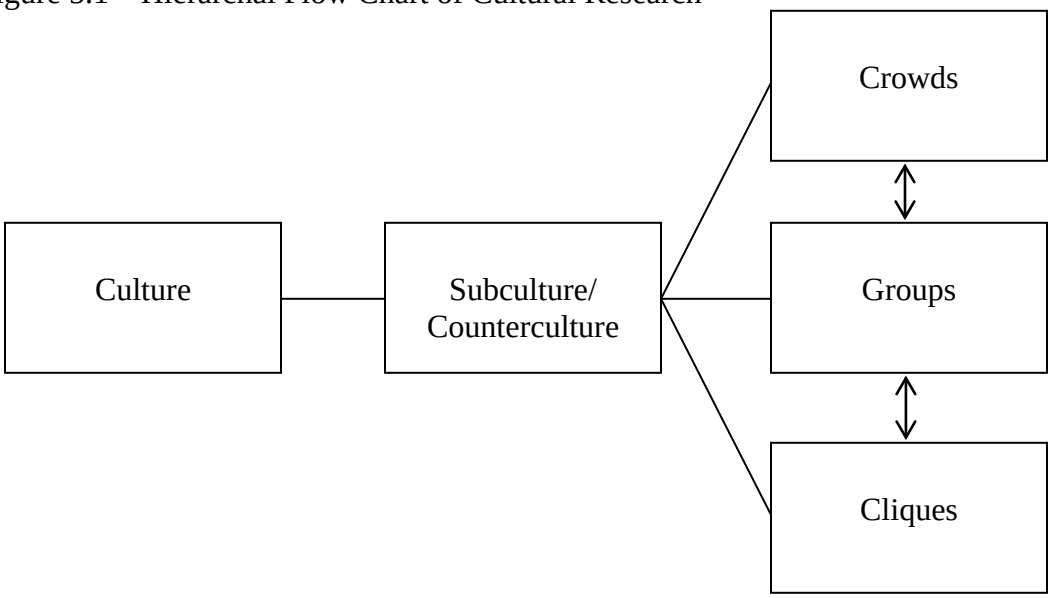
As the tables outline, studies ranged in purpose from presenting findings of research on diversity within agricultural education (Woods & Moore, 2003) to outlining methods of preparation for pre-service agriculture teachers (Talbert & Edwin, 2008). These studies also ranged in population size and type from 1322 high school students (Talbert & Larke, 1995) to an all-encompassing view of three agriculture education programs (Roberts, Hall, Briers, Gill, Shinn, Larke, & Jaure, 2009).

CHAPTER V: SUMMARY, IMPLICATIONS AND RECCOMENDATIONS

Summary

To outline areas of efficiency and deficiency in the studies used for this thematic synthesis, the literature review was used as a basis. The literature review of cultural research in mainstream education yielded results indicating that it followed a hierarchy of categories related to culture. Research showed that culture was considered to flow into multiple categories. Figure 5.1 outlines this hierarchal flow of cultural research within mainstream education.

Figure 5.1 – Hierarchal Flow Chart of Cultural Research

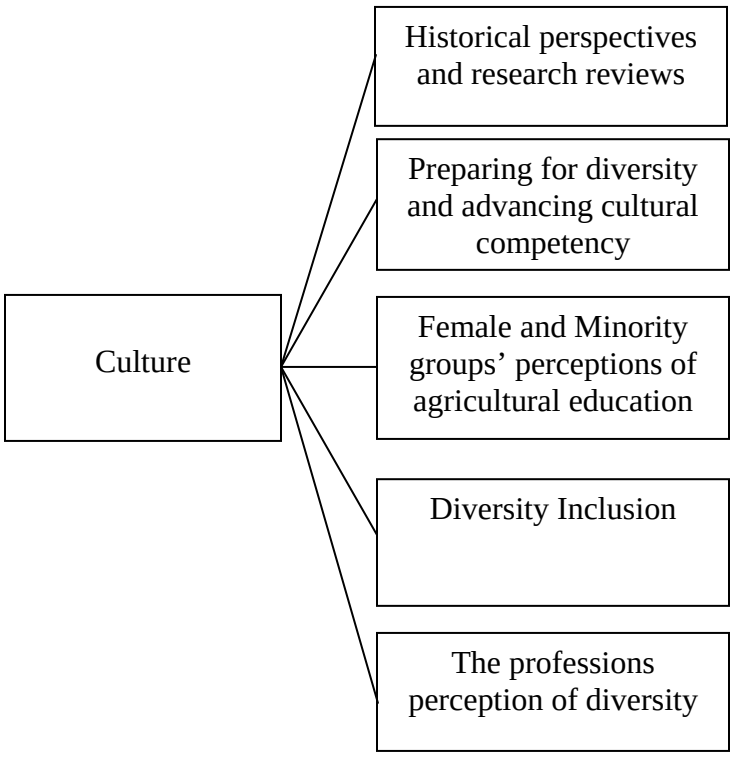


As figure 5.1 outlines, culture branches into subcultures and countercultures. Subculture is the diverse cultural patterns that emerge within the broader culture (Kottak & Kozaitis, 2003). Countercultures can be viewed as a type of subculture themselves (Dowd & Dowd, 2003), but the difference lies in the views of the counterculture. Countercultures aren't simply different from the dominant culture, but are adamantly and

deliberately against certain aspects of the dominant culture (Dowd & Dowd, 2003). From there, research indicated that cultural studies stem into crowds, groups, and cliques. Crowds, groups, and cliques all have unique and distinct features but are fluid in nature in that an individual can flow from one to another, depending upon the situation or perception of the viewer.

Likewise, agricultural education research in the area of cultural studies can be categorized into a flow chart of research topics. Figure 4.2 outlines these topics into categories identified through the categorization of studies identified for this research synthesis using.

Figure 5.2 – Agricultural Education Research toward Culture



In figure 5.2, it can be seen that focus of three of the five categories is diversity. The other two categories look at historical perspectives and research reviews relating to culture and minority groups perceptions of agricultural education and relate findings to diversity. Through these categories, efficiencies and deficiencies within agricultural education research in the *Journal of Agricultural Education* toward culture can be identified.

Efficiencies and Deficiencies of Ag. Ed. Research on Culture

Agricultural education research effectively researches diversity in the profession, as all five categories relate directly or indirectly to diversity. Nowhere in the synthesis of research in agricultural education could the term culture, in reference to the way used in this paper, be found. However, culture is addressed, albeit without identifying it, when researchers focus on diversity in agricultural education programs. An individual's perception (Frick et al., 1995; Frick, Birkenholz, & Machtmes, 1995; Wigenbach, Gartin, & Lawrence, 1999), in this case concerning agriculture, is a result of the culture from which they are a part of (Dowd & Dowd, 2003) and action upon these perceptions could result in the diversity the profession researches.

When considering the categories with the highest occurrence of studies, the three categories were, in order of most studies conducted: Female and Minority Students Experiences and Perceptions of Agricultural Education (11 or 39), Preparing Agricultural Education for a Diverse Audience (10 of 39), and Inclusion and Engagement of Minority Students in Agricultural Education (10 of 39). These three categories make up almost 80% of the studies identified in this synthesis. These are followed by the categories, Perceptions of Agricultural Education Professionals toward Diversity and Inclusion (6 of

39), and lastly Historical and Research Reviews of Diversity in Agricultural Education (2 of 39). Within each of these categories however it is also interesting to note duplicates in both research being published as more than one article and on the authors conducting the research and writing the articles. There are a total of 73 different authors within the 39 identified articles in this synthesis. 18 of the 73 were main or co-author of more than one of the articles, most notably Vincent, Bowen, Jones, and Larke. This is commendable that so many in the field of agricultural education have taken on research in this area, and even more commendable that several research and write about it continuously. Along with authors, however, two research studies were published twice each, which can skew the perception of the total number of studies conducted regarding facets of culture.

Facets of culture researched within agricultural education found in this synthesis included such topics as barriers to and perceptions of minority groups, including Hispanics, African Americans, and gender specific groups. However, when viewed utilizing the components of culture generated from mainstream education (see figure 4.1), deficiencies in research toward culture can be identified. The articles within this synthesis were limited in their view of culture. While it is evident and commendable that agricultural education researchers have spent ample time researching how to adequately prepare pre-service teachers for diverse classrooms, how culture is viewed can be a limitation to how well pre-service teachers can be prepared. Also limited in the research is an effective how-to on preparing pre-service teachers to understand the cultures of their students. The only study identified in this research was Hains, Tubbs, & Vincent (2013). In their study, the authors outline and describe a method for cultural immersion for pre-service and in-service teachers to both identify their own cultural biases and to immerse

themselves in a situation in order to build cultural awareness. Based on the amount of research indicating a need and belief in diversity inclusion, further research should be conducted on how to build the skills necessary in order to do so.

Study populations within the sample of articles were viewed in multiple studies according to sub-cultural categories. For example, Croom & Alston (2009) studied the historical issues of agricultural and industrial education for African Americans. Likewise Kelsey (2006) looked specifically at the experiences of women in a pre-service teacher program. These demographic factors limit the view of culture within the profession and don't look at subcultures and countercultures the way mainstream education does. Tharp (2010) describes as the simplest way of defining culture: it's the things we do, make, and think and is shared, learned, transmitted, symbolic, adaptive, and integrated. Nowhere in that definition is mentioned gender or skin color. The factor that is missing in cultural studies within the included articles is the social aspect of what makes up culture.

Limitations and Gaps of Cultural Studies within Agricultural Education

Agricultural education continues to struggle with inclusion and diversity issues in both secondary education and the profession (Bowen, 2001). Despite this, research specific to culture and diversity in agricultural education commonly focuses only on demographic conditions of culture such as gender and ethnicity (Bowen, 2002; Luft, 1996; Warren & Alston, 2007). Luft (1996) sought to identify the extent that cultural diversity was addressed in agricultural education. The research Luft (1996) conducted specifically focused on determining the number of ethnic minorities enrolled in agricultural education and how teaching styles were altered for them. Similarly, Warren and Alston (2007) sought to determine diversity inclusion in agricultural education and

barriers identified by agriculture teachers to diversity inclusion. In the findings, Warren and Alston (2007) noted stereotypes and perceptions of students as barriers; however, these findings were related back specifically to women and ethnic minorities. When speaking at the American Association of Agricultural Educators conference in 2001, Bowen (2001) reported recommendations to diversity inclusion at post-secondary institutions. In her recommendations, Bowen (2001) noted including recruitment of women and ethnic minorities into doctoral positions and faculty. Bowen (2001) also noted the need to "engage in sound, contemporary research that addresses complex gender and ethnicity questions" (p.10). However, Bowen (2001) acknowledged the multi-faceted dimensions of culture including social dynamics (Bowen, 2001). With these examples in mind, has agricultural education effectively researched culture? Even further, has agricultural education sought to understand the culture of the profession itself? Does the field examine itself and the cultural biases within the field?

There is a need for multicultural awareness in agricultural education in order to aid in learning for all students from various conditions, to develop students' behaviors and positions, and to prepare students for a society that is culturally pluralistic (Talbert & Edwin, 2008; Warren & Alston, 2007; Woods, 2004). However, the first steps are to understand what culture is, to understand what the profession's culture is, and to understand the cultural biases held within the profession. Research within this field is indicatory of embedded biases that exist within the agricultural education profession toward those individuals from other cultures (Whent, 1993).

Recommendations and Implications for Further Research

When utilizing the definition of culture found in mainstream education, agricultural education contains both efficiencies and deficiencies in its research. Culture, as noted earlier, is defined as a way of life that outlines how an individual acts, perceives, and believes. These are created through social interaction and heritage passed from one generation to the next. Within agricultural education, culture seems to be defined as the demographics, that is to say the surface characteristics of a population (race, gender, location), that make up the research population being studied. In simply focusing on the surface characteristics of sub-populations instead of viewing groups through the lens of culture, are we as a profession inadvertently perpetuating the gender and race issues and continuously marginalizing all that don't fall into those two realms? In analyzing this further, there is an evidently large gap in the research done by agricultural education in viewing culture as a social phenomenon as well. Darling-Hammond (1996) identified the type of education system that focused not on demographic factors of individuals, but on what can be accomplished when educators and institutions focus on learning and understanding culture more holistically. She noted that education should seek competency as well as community, and thus facilitate and environment encouraging of exploring how students want to contribute to one another and to the world. For agricultural education to accomplish this, the profession needs to identify an effective approach.

With recommendations in mind from the profession on the need for further research in diversity, the question must be raised "is agricultural education's current method for doing research on diversity the most effective approach?" It can be concluded

that with adolescence being a time for identity and social development, focusing on mutually exclusive demographics within this age group (gender, ethnicity, and race) is not the most effective manner in diversifying and including students from all groups into agriculture. Instead, it is recommended that future studies in agricultural education view and study youth cultures as a network of social categories that are both fluid and inclusive. From this, research can begin to understand what factors most influence student opinion and action in both high school and post-secondary institutions and apply these findings to enrollment, retention, and recruitment into programs.

Based on the proposed models of current research conducted both within and external to agricultural education, I conclude here that this profession has created a limited vision for what diversity is and how to go about researching culture in agricultural education. The agricultural education profession must take a step back and view this in a broader and more encompassing manner in order to ascertain methods which are applicable to secondary and post-secondary programs. By only focusing on demographic factors of the youth in agricultural programs, mutually exclusive findings and recommendations cannot be reached. If agricultural education cannot look at diversity and culture through the lens of social aspects as well as demographic factors such as racial and gender roles, research implications will be limited to that of the population being studied and cannot be replicated to a broader audience, even within agricultural education. It is recommended that agricultural education adopt the view of cultural studies used in mainstream education, flowing from culture to subcultures and countercultures, and from there to crowds, groups, and cliques. It is therefore further

recommended that research within agricultural education encompass social dynamics, not simply social issues (race/gender) in culture and diversity studies.

Closing Remarks

The purpose of this research synthesis was to view the state of research within agricultural education within one national venue, the *Journal of Agricultural Education*, toward culture. Secondary to this was to analyze the research that has been conducted, thus providing insight into the current state of research on this topic. Further, it was the purpose of this piece to provide both an initial investigation and a venue for discussion on the path that agricultural education research should take in regards to the topic of culture. Utilizing mainstream education research as the facilitator in outlining the definition of culture, this research synthesis found thirty-nine studies fitting within the parameters of the synthesis. Within these, five categorical areas were coded and outlined the efficiencies and deficiencies in agricultural education research toward culture. With these in mind, the profession can begin to move forward toward embracing individual culture through understanding all that the term culture encompasses.

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VITA

JONATHAN ALEXANDER TUBBS

ACADEMIC RECORD

Masters of Science, Expected 2015
University of Kentucky College of Agriculture – Lexington, KY
Community and Leadership Development – Career and Technical Education
Thesis: The Role of Culture in Agricultural Education: A Synthesis of Research

Bachelors of Science, 2009
Western Kentucky University – Bowling Green, KY
Agricultural Education

RESEARCH INTERESTS

- Cultural and social development in youth and the effect of each on learning and teaching in career and technical education.
- How agricultural education can attain a broader perspective on cultural implications, socially and demographically, for recruitment and retention.
- Immersion in and emotional response toward culturally diverse situations.
- Integration and adaptation of urban agriculture and green technologies into high school agriculture programs.

PUBLICATIONS

Hains, B. J., **Tubbs, J. A.**, & Vincent, S. K. (2013). Embracing alter-identities: Socio-cultural development for graduate education. *Journal of Agricultural Education,* 54(3), 209-223

PRESENTATIONS

International

Hustedde, R., Gruidl, J., & **Tubbs, J. A**. (2011). "The language of poetry in community development." Community Development Society International Conference (workshop presentation). Boise, ID. (July)

National

Hains, B.H., Ricketts, C., **Tubbs, J.A.**, Robin, S.F. (2012). "Cultural immersion: The development of formal and non-formal leaders in agricultural education." Association for Leadership Educators (paper presentation). Key West, FL. (July)

Tubbs, J. A., Hains, B. J., & Vincent, S. K. (2012). "Teacher preparation for the culturally different: The next chapter." American Association of Agricultural

Educators National Research Conference (paper presentation). Asheville, NC. (May)

Tubbs, J. A., Hains, B. J., & Vincent, S. K. (2011). "A qualitative approach to social understanding in agricultural education" American Association of Agricultural Educators National Research Conference (poster presentation). Cooeur d'Alene, ID. (May)

Regional

Tubbs, J.A., Robin, S. F., & Hains, B. J. (2012). "Rural education: Acclimating pre-service agriculture teachers to diverse student populations." Southern Rural Sociological Association (poster presentation). Birmingham, AL. (February)

Tubbs, J.A., & Hains, B. J. (2012). "Cultural immersion: Classroom and field application for agricultural professionals." Southern Rural Sociological Association (poster presentation). Birmingham, AL. (February)

Tubbs, J. A., Robin, S. F., & Hains, B. J. (2012). "International acculturation: The good, the bad, and the ugly." Southern Association of Agricultural Scientists (poster presentation). Birmingham, AL. (February)

Robin, S. F., **Tubbs, J. A**., & Hains, B. J. (2012). "Influencing agricultural and educational policies in both rural and urban communities through agricultural education." Southern Rural Sociological Association (poster presentation). Birmingham, AL. (February)

Tubbs, J. A., Hains, B. J., & Vincent, S. K. (2011). "Simulation: Innovations toward bridging social culture in agricultural education." Southern Association of Agricultural Scientists (poster presentation). Corpus Christi, TX. (February)

Tubbs, J. A., Hains, B. J., & Vincent, S. K. (2011). "A qualitative approach to multicultural intelligences in agricultural education." Southern Association of Agricultural Scientists (poster presentation). Corpus Christi, TX. (February)

INSTRUCTION

UNIVERSITY OF KENTUCKY

Undergraduate Courses

Methods of Teaching Career and Technical Education – AED/FCS 586
Fall, 2010/2011

Advising a Career and Tech. Ed. Student Organization - AED/FCS 371
Spring, 2011/2012