

# Multicultural Competence: A Case Study of Teachers and their Student Perceptions

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## Abstract

*The purpose of this study is to describe the level of multicultural competence among secondary agriculture teachers in schools with a minimum of 30% ethnic minority student enrollment. Using the Multicultural Skills Awareness and Skill Survey – Teacher Form, teachers assessed their multicultural competence as did their students assess the teacher’s multicultural competence. For comparison purposes, teachers were grouped by the ethnic diversity of their FFA chapter membership: diverse and non-diverse FFA membership. From the findings, teachers within a diverse FFA membership had a higher multicultural competence level (by the teacher and the students) than did teachers within a non-diverse FFA membership. When combining both teacher groups together, the results suggest that students perceive their teachers to be more multicultural competent than the teachers perceive themselves. The results and recommendations are provided as to the development of teachers that are multicultural competent.*

*Keywords:* Multicultural Competence, Diverse, Non-Diverse, membership, secondary

The United States is growing and transitioning into a more pluralistic country (Villegas & Clewell, 1998; Woods, 2004; Census, 2008). In 2008, the United States Census Bureau (USCB) issued a report detailing population predictions by ethnicity from 2010 to 2050. The USCB predict that the White population will have the lowest increase in population (1.2%; 2.48 million) over the 40-year time-period as compared to other ethnic groups. By contrast, the Hispanic population is anticipated to have the largest increase (167.1%; 83 million) followed by Asians (137.3%; 20 million) and African Americans (36.7%; 14 million).

This dramatic change in ethnic composition is expected in public school classrooms across the United States as well (Diller & Moule, 2005; Luft, 1996; Milner, Flowers, Moore, Moore, & Flowers, 2003). Minority students are projected to comprise approximately 48% of the nation’s school age children by 2020 (Pallas, Natriello, & McDill, 1989). Projections suggest, however, that teacher populations will not reflect a similar demographic change.

The lack of minority teacher representation exists in agricultural education as well. In a study of the 2005 preservice agriculture teacher population, 93.4% of the respondents reported to be White, followed by 2.4% Hispanic, 1.4% African American and 0.9% Asian (Rocca & Washburn, 2008). This trend is expected to continue as 95% of all teacher education students hail from rural and suburban areas, which subsequently represent a majority of White non-Hispanic populations (Dilworth, 1989). Although the Dilworth report is dated and includes all disciplines, membership data within the agricultural education discipline itself mirror the Dilworth publication (Kantrovich, 2007; Rocca & Washburn, 2008).

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As the United States continues to become more diverse, educators will be called on to teach more students from diverse cultures (Diller & Moule, 2005). It is not sufficient to merely expect students to accept the same antiquated models of agricultural education programs or for schools to be able to hire a few ethnically diverse teachers to meet the need (2005). Instead, a change in cultural sensitivity is needed in order to effectively teach ethnically and culturally different students (Banks, 1993). Adoption of the concept of multicultural competence is necessary in order to accomplish the vision of Banks' (1993) and Diller and Moule (2005). Are agriculture teachers in secondary schools culturally sensitive to the needs of their students? Does cultural sensitivity affect the ethnic enrolment in an agriculture program, which inadvertently affects the membership in the local FFA chapter?

### **Theoretical Framework**

To understand a teacher's level of multicultural competence, this study utilized a theory from counseling psychologists called Multicultural Competence. Multicultural Competence is the ability to engage in actions or create conditions that maximize the optimal development of individuals or individual systems (Sue & Sue, 2008). This is developed through an individual's acquisition of awareness, knowledge, and skills needed to function effectively in a pluralistic society; and on an organizational/societal level, advocating effectively developing new theories, practices, policies, and organizational structures that are more responsive to all groups (Sue, 2001).

Banks (1995) explains the importance of education, in the form of the three constructs of multicultural competence. The first construct, awareness, describes ethnic pluralism as a growing societal reality that influences the lives of young people, while the second construct, knowledge, states that in one way or another, individuals receive knowledge or beliefs, sometimes invalid, about ethnic and cultural groups. The final construct, skills, says that beliefs and knowledge about ethnic and cultural groups limit the perspectives of many and make a difference, often a negative one, in the opportunities available to individuals representing different ethnic groups (Banks, 1995).

In order to visually explain the theory of multicultural competence and its effects on an individual/society, Sue, Arrendondo, and McDavis (2002) developed a Tripartite Model of Multicultural Counseling Competencies; but following several issues concerning the incorporation of psychology, Sue (2001) developed the multidimensional Model for Developing Cultural Competence (MDCC). The MDCC consists of three primary dimensions of multicultural competence: specific racial/cultural group perspectives, components of cultural competence, and foci of cultural competence (Figure 1). Each cell in the model represents a combination of the three major dimensions. Dimension one pertains to acknowledgement of race or culture while dimension two is composed of the constructs from the multicultural counseling competencies: knowledge, beliefs, and skills (Sue et al., 1998). The foci of dimension three examine the person versus the organizational systems of analysis. The work on multicultural competence begins, and typically focuses, on the individual level (Sue et al., 1998).

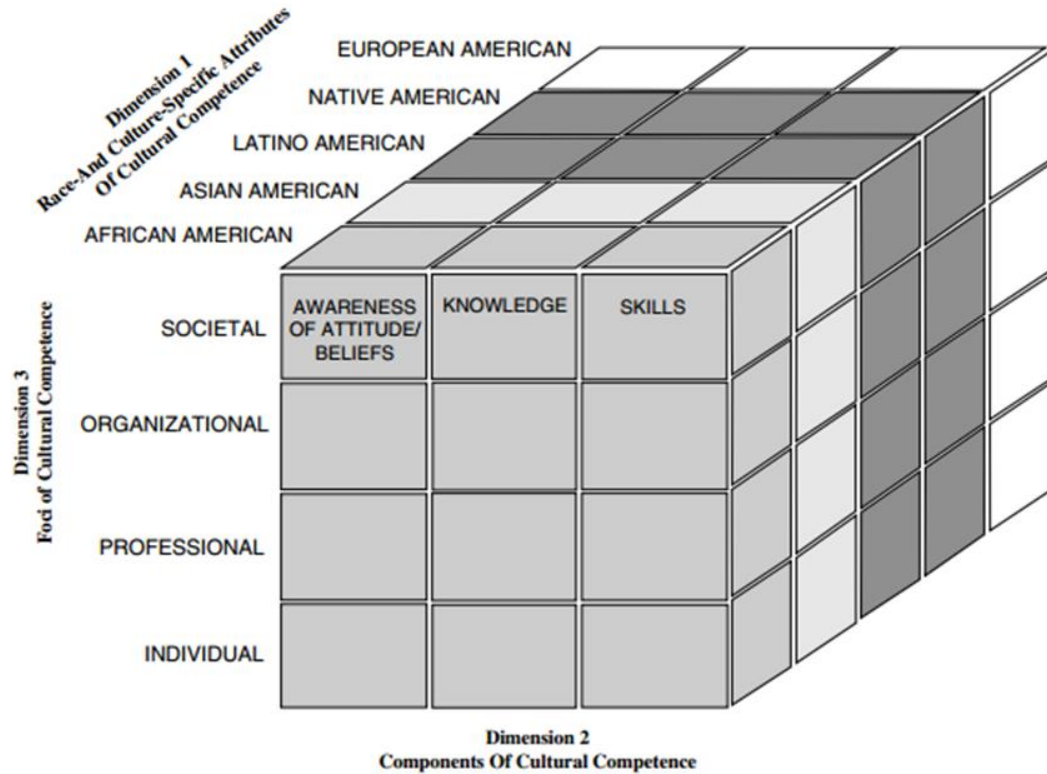


Figure 1 Multidimensional Model for Developing Cultural Competence (Sue & Sue, 2008)

The work on multicultural competence begins and, typically, focuses on the individual level (Sue et al., 1998). Development of multicultural competence along dimension 3 proceeds in a concerted, hierarchical fashion along four main foci: individual, professional, organizational, and societal levels (Sue, 2001). This study examines the individual and professional foci of dimension 3.

**Purpose and Research Objectives**

The purpose of this study was two-fold. First, this study sought to describe the constructs of multicultural competence in school-based agriculture teachers and their relationship to the ethnic diversity of local FFA membership in selected high schools. Additionally, this study examined the constructs of multicultural competence in school-based agriculture teachers, as perceived by their students, in relationship to the ethnic diversity of local FFA membership in selected high schools. The following research objectives guided this study.

1. Compare the level of multicultural competence held by school-based agriculture teachers by the ethnic diversity of the local FFA membership.
2. Compare the level of multicultural competence held by school-based agriculture teachers, as perceived by their students, by the ethnic diversity of the local FFA membership.
3. Compare the level of multicultural competence held by school-based agriculture teachers with students' perception of their agriculture teacher.

**Methods and Procedures**

The study utilized descriptive, correlational research methods. Descriptive, correlational research is a type of research that consists of “a set of concepts and methods used in organizing, summarizing, tabulating, depicting, and describing collections of data” (Shavelson, 1996, p. 8).

The sample used in this study was school-based agriculture teachers in ethnically diverse schools and students enrolled in the teachers’ programs during the 2009 – 2010 academic year. The demographic characteristics of the teachers were White males with at least four years of teaching experience in the selected rural school. The students had each completed a minimum three years under the tutelage of the teacher and were members of the local FFA chapter. The rural schools that each teacher was selected from, as defined by Elder (1992), contained a 30% minimum ethnic minority enrollment (in this case, African American). In order to have a critical mass to create an environment that supports multicultural competence, 30% of the population must be a specific minority (Abreu, Chung, & Atkinson, 2000). By selecting schools with a 30% ethnic minority enrollment, each agriculture program had the potential to have a critical mass representation within their agriculture program and FFA membership. This cannot be assumed among agriculture programs in schools with less than 30% ethnic minority enrollment.

Public school districts along the Mississippi Delta served as the frame for this study ( $N = 3,681$ ). The National FFA Organization, the National Center for Educational Statistics, and the Council of Chief State and School Officers assisted in narrowing the frame. Only ten schools ( $n = 10$ ) were purposefully selected to comprise the sample due to criteria determined earlier: the cost of traveling to each school for data collection and the lack of representation of diverse ethnic FFA chapter memberships in the selected states. Once schools were selected, ethnicities in the FFA membership were identified. Half of the teachers and their students were labeled diverse as defined by having a minimum of 30% ethnic diverse membership in FFA and the remaining half of teachers and their students were identified as non-diverse, defined as having less than 30% ethnic diverse membership in FFA. The student demographics represented high school junior and senior students who were completing or had completed three years of agricultural education. The ethnic compositions of the student sample were Black and White.

The Multicultural Awareness-Knowledge-Skills Survey: Teacher Form (MAKSS-T) was developed by D’Andrea, Daniels, and Noonan (1994). The MAKSS-T is a derivative of the Multicultural Awareness-Knowledge-Skills Survey: Counselor Edition (MAKSS-CE) which was designed to evaluate counseling psychologists’ effectiveness to counsel patients who were culturally different than themselves (1991). The MAKSS-T is designed to assess the multicultural competence level of teachers who were or would be teaching in a classroom composed of different ethnicities (D’Andrea et al. 2003). The MAKSS-T composed of 37 statements and assesses the three constructs of multicultural competence: awareness, knowledge, and skills. When summated, the three constructs provide a score of an individual’s overall level of multicultural competence. The teacher questionnaire asked the teacher to rate their competence level among various statements while the student questionnaire asked the students to rate their teacher’s competence level among various statements. Each teacher and student rated the competence score to the various statements on a 4-point Likert scale ranging from “No Competence” to “Excellent Competence”.

A panel of experts ( $n = 8$ ) consisted of university faculty members representing agricultural education departments and education colleges from four different universities. The committee reviewed the MAKSS-T for face and content validity. A pilot study of the questionnaires was conducted with secondary agriculture teachers ( $n = 32$ ) and students ( $n = 21$ ) in public school districts in the state of Kentucky. Teachers and students were selected based upon their similarity to the study sample. However, the teachers and students did not reside at a school above a 30% critical mass in ethnic enrollment. Cronbach’s Alpha was utilized to describe the reliability of the questionnaire for the teacher version and the student perception version. Results of the Cronbach’s Alpha provide the overall teacher version of the MAKSS-T as .89 and

the overall student perception version as .88 (Table 1). The overall score and each construct of the teacher and student questionnaire was considered acceptable (Nunnally, 1978).

Table 1

*Cronbach's Alpha Reliability Estimates of the Teacher and Student Questionnaire*

Questionnaire Section	Teacher Version (n = 27)	Student Version (n = 21)
Constructs		
Awareness	.81	.91
Knowledge	.92	.96
Skill	.85	.72
Overall	.89	.88

The teachers and students were assessed near the beginning of the calendar year, prior to state accountability testing windows and organized activities related to the student's active youth organization. Data were collected using a simple distribution of the instrument to each teacher and their students of three and four years.

Following the collection period, data were coded and entered into SPSS. Descriptive statistics of central tendency and variability were calculated to summarize the data. For each group comparison, effect size was calculated using Cohen's (1988) *d* and magnitude interpreted by Thalheimer and Cook (2002) as: negligible ( $d < .15$ ), small ( $d < .40$ ), medium ( $d < .75$ ), large ( $d < 1.10$ ), very large ( $d < 1.45$ ), and huge ( $d > 1.45$ ).

### Results

Research objective 1 sought to compare teachers' multicultural competence by ethnic diversity of the local FFA membership. To compare constructs of multicultural competence (awareness, knowledge, skill, and overall), means and standard deviations were provided. Negligible, medium, and large effect sizes were found in the group comparisons.

The results of Table 2 display teachers' multicultural competence by ethnic diversity of the local FFA membership. In each construct of multicultural competence, teachers in a diverse FFA chapter reported a higher mean score. Within each multicultural competence constructs, only the skill construct ( $d = 0.81$ ) and the overall multicultural competence ( $d = 0.75$ ) displayed a large effect size. The remaining two constructs (awareness and knowledge) presented a medium ( $d = 0.73$ ) and negligible ( $d = 0.14$ ) effect size (Table 2).

Table 2

*Teachers' Multicultural Competence by Ethnic Diversity of the Local FFA Membership*

Construct <sup>a</sup>	Diverse (n = 5)		Non-Diverse (n = 5)		Cohen's <i>d</i>
	Mean	SD	Mean	SD	
Awareness	3.13	0.93	3.04	0.44	0.14 <sup>b</sup>
Knowledge	3.32	0.36	3.04	0.49	0.73 <sup>c</sup>
Skill	3.06	0.28	2.79	0.45	0.81 <sup>d</sup>
Overall	3.18	0.22	2.95	0.43	0.75 <sup>d</sup>

<sup>a</sup>Scale based on: 1 = None; 2 = Limited; 3 = Good; 4 = Excellent; Thalheimer & Cook's (2002) descriptors for describing Cohen's *d*: <sup>b</sup> = negligible; <sup>c</sup> = medium; <sup>d</sup> = large;

Objective 2 sought to compare the teachers' multicultural competence, as perceived by their students, by the ethnic diversity of the local FFA membership. To compare the constructs of multicultural competence (awareness, knowledge, skill, and overall), means and standard deviations were provided. Small and medium effect sizes were found in the group comparisons.

The results of research objective 2 are displayed in Table 3. Students within diverse FFA chapters perceived their teacher to have a higher level of multicultural competence than students in non-diverse FFA chapters perceived their teacher. When comparing the teacher groups, awareness ( $d = 0.51$ ) displayed a medium effect size. Students' perception of their teacher's Knowledge ( $d = 0.20$ ), Skill ( $d = 0.26$ ), and overall multicultural competence ( $d = 0.37$ ) displayed a small effect size.

Table 3

*Students' Perception of Teacher's Multicultural Competence by Ethnic Diversity of the Local FFA Membership*

Construct <sup>a</sup>	Diverse ( $n = 81$ )		Non-Diverse ( $n = 55$ )		Cohen's $d$
	Mean	SD	Mean	SD	
Awareness	3.17	0.49	2.90	0.59	0.51 <sup>c</sup>
Knowledge	3.31	0.70	3.20	0.45	0.20 <sup>b</sup>
Skill	3.25	0.60	3.08	0.74	0.26 <sup>b</sup>
Overall	3.25	0.52	3.06	0.52	0.37 <sup>b</sup>

<sup>a</sup>Scale based on: 1 = None; 2 = Limited; 3 = Good; 4 = Excellent; Thalheimer & Cook's (2002) descriptors for describing relative size of Cohen's  $d$ : <sup>b</sup> = small; <sup>c</sup> = medium;

Research objective 3 compares agriculture teacher groups and the students' perception by multicultural competence (awareness, knowledge, skill, and overall). To compare the constructs of multicultural competence (awareness, knowledge, skill, and overall) means and standard deviations were provided. Negligible, small, and medium effect sizes were found (Table 4).

A medium effect size ( $d = 0.41$ ) was exhibited between the teachers' and the students' perceived teacher's skill exhibited (see Table 4). A small effect size was observed in the overall multicultural competence rating ( $d = 0.22$ ). Both, knowledge ( $d = 0.13$ ) and awareness ( $d = 0.06$ ) constructs displayed a negligible effect size.

Table 4

*Comparison of Teacher Multicultural Competence and Students' Perceived Rating*

Construct <sup>a</sup>	Teacher ( $n = 10$ )		Student ( $n = 136$ )		Cohen's $d$
	Mean	SD	Mean	SD	
Awareness	3.09	0.31	3.06	0.55	0.06 <sup>b</sup>
Knowledge	3.19	0.44	3.27	0.61	0.13 <sup>b</sup>
Skill	2.92	0.38	3.18	0.66	0.41 <sup>d</sup>
Overall	3.06	0.12	3.17	0.53	0.22 <sup>c</sup>

<sup>a</sup>Scale based on: 1 = None; 2 = Limited; 3 = Good; 4 = Excellent; Thalheimer & Cook's (2002) descriptors for describing relative size of Cohen's  $d$ : <sup>b</sup> = negligible; <sup>c</sup> = small; <sup>d</sup> = medium

### **Conclusions, Implications and Recommendations**

Due to the nature and complexity of this study, the findings, conclusions, and recommendations are limited among schools and secondary agriculture programs of similar demographics: rural schools, with a minimum 30% African American enrollment, that contain a White male secondary agriculture teacher (Duncan, 2008). From the findings, it is concluded that agriculture teachers within a diverse FFA chapter membership setting expressed a greater sense of multicultural competence than did their counterparts. This finding supports Milner et al. (2000) who found characteristics of multicultural competence existing among teachers who surround themselves with culturally different students. In this study, each teacher taught at an ethnically diverse high school. However, ethnically diverse students are enrolled in diverse FFA chapters. Therefore, it can be implied that teachers in diverse FFA chapters are more aware, knowledgeable, and have more skill with relating to students of different cultures. It is recommended that agriculture teacher educators prepare students to become multicultural competent. This does not occur in the presence of a single course in multicultural education (Ford, 1992). Rather, agriculture teacher educators must incorporate multicultural practices throughout undergraduate and graduate courses. Multicultural practices could include, but are not limited to, exploration of beliefs and biases toward groups who are culturally different from the student, journaling, creative projects, philosophical statements, immersion activities, and student interviews.

Additionally, it is concluded that agriculture teachers within diverse FFA chapters have a higher multicultural knowledge score than teachers in non-diverse FFA chapters. According to Milner et al. (2000), teachers with increased knowledge extend themselves beyond the realm of classroom instruction. Therefore, it is implied that teachers in a diverse FFA chapter extend beyond the classroom and into extracurricular school and community events that represent diverse ethnic cultures. Further research is recommended to differentiate the school and community involvement of teachers in diverse and non-diverse FFA chapters.

Another recommendation is that agriculture teachers strive to recruit students that mirror the ethnic cultures represented in the community and school. The recruitment of students from diverse ethnic cultures can be obtained through engagement in community activities such as churches, festivities, and events that involve the cultures of the school. Furthermore, teachers must seek after and meet with students that are culturally different from themselves. The interaction must provide students with assurance of positive experiences and minimize negative perceptions.

Teachers within diverse FFA chapters had a higher skill rating than teachers within non-diverse FFA chapters. In other words, the conclusion suggests that when confronted with classroom issues among students who are culturally different than themselves, teachers in diverse FFA chapters have more confidence. This conclusion is consistent with D'Andrea et al. (2003). In their study, D'Andrea et al. found that teachers with a higher skill in multicultural competence were better able to relate to and manage students of cultures different from the teacher. It is implied that teachers within diverse FFA chapters can relate with and manage ethnically diverse classrooms better than teachers within non-diverse FFA chapters. D'Andrea et al. (1991) suggest that increased multicultural competence comes with practice. Therefore, it is recommended that agriculture teacher educators provide preservice teachers with immersion exercises and clinical hours in ethnically diverse classrooms. Agriculture teacher educators should educate and find approaches that raise secondary agriculture teachers' multicultural competence. Collaboration is recommended between agriculture teacher educators and faculty in the field of multicultural education to restructure undergraduate courses to include lessons and assignments that further develop multicultural competence in students. In addition, it is recommended that these

collaborations extend into research that describe, explain, and predict effective multicultural competent strategies in school-based agricultural education.

Based upon the demographics of each selected school, the primary ethnic minority examined in this study was African American. However, the multidimensional model for Developing Cultural Competence (MDCC) entails ethnicities besides African American. Therefore, assessment of multicultural competence toward students of all races and cultures is necessary. Other races modeled in the MDCC include Latino American, Asian American, Native American, and European American students.

Multicultural competence does not end with ethnicity. Sue's (2001) model is a reflection of race or culture and a secondary school is a complex assortment of cultures and cultural bias (Bennett, 2001; Crawley & Ritsema 2006; and Kinney 1999). It is recommended that future research examine other student populations that may not feel welcome within the doors of agriculture classrooms (Eckert, 1989; Kinney, 1993; Wilkins, 2008). The need to explore stereotypes beyond ethnicity, for instance social identity (Perry, 2002) is crucial in the development of a multicultural agricultural education classroom.

The findings from the students' perception suggest that students can identify a teacher who is and is not multicultural competent. This conclusion supports findings from Constantine (2002) regarding clients' perceptions of their counselors. In Constantine's study, clients were able to identify counselors who were multicultural competent. Perhaps students identify multicultural competence through interactions with other teachers in the school and by observing differences between teachers who are and are not multicultural competent. It could be that multicultural competent teachers exhibit knowledge, awareness, and skill in their classroom instruction, resulting in an inviting classroom environment for all students. Therefore, it is recommended that teacher organizations, such as National Education Association, Association for Career and Technical Education, and National Association of Agricultural Educators, inquire about students' perceived strategies used by teachers deemed multicultural competent. Furthermore, these organizations are encouraged to provide opportunities for students to recognize teachers for their ability to teach students who are culturally different than themselves. Additionally the National FFA Organization should reinstate the H. O. Sargent award to students and teachers who exhibit multicultural competence.

Students perceive their teacher's multicultural competence from observations in the classroom. This is a reflection of the teacher as a professional. Because Dimension 3 of the MDCC (Sue, 2001) is hierarchical, it can be concluded that a multicultural competent professional is also a multicultural competent individual (Sue, 1998). Thus, concluding that students in diverse FFA chapters perceive their teacher to be a multicultural competent individual and professional.

African American students represented the largest ethnic minority sample in this study. According to Brooks (2006), cultural differences exhibited by African Americans occur every day during cultural practices, family activities, community events, and religious ceremonies. Based upon the findings, it is concluded that African American students identified multicultural competence in the teachers in diverse FFA chapters. It is posited that these teachers are immersing themselves in activities similar to the Brooks' (2006) study, resulting in an ethnically diverse classroom and FFA chapter. As a result of the implication, recommendations are provided for immersing teachers into cultures different from their norm. Teachers should be expected to obtain a set number of after school hours in student activities beyond their discipline area and serve on organizations and attend community events that encompass student ethnicities different from themselves in order to assist in developing global mindsets in the young adults. In addition, research should examine activities that teachers in diverse FFA chapters immerse themselves in that would deem them multicultural competent.

Based upon the findings in research objective 3, it is concluded that for multicultural awareness and knowledge the teachers' rating reflects the students' perception of their teacher.

This implies that selected agriculture teachers' awareness and knowledge in multicultural competence is showcased during their interaction with students. Teachers should strive to increase their students' perception of their multicultural competence. Suggestions for improving a school-based agriculture teachers' awareness and knowledge are to learn as much as possible about the cultural backgrounds of each student through student interviews and SAE visits and pronounce student names correctly and understand the interpretive meaning of name. In order to enhance a student's self-image and motivation, it is imperative that teachers encourage cultural pride and identity. In addition, the teacher should work closely with school counselors to better understand their students' backgrounds and learning capabilities. Altogether these assist in developing the teachers' multicultural awareness and knowledge.

Another conclusion from the findings is that students perceive their teachers' multicultural competence to be higher than the teachers self-rating. It is posited that the teachers have established a developed trust and respect from their completer/concentrator students, resulting in a higher student perception than teacher rating. It is recommended that secondary agriculture teachers utilize the students' higher perception for recruiting ethnically diverse students, developing a pluralistic FFA chapter, and ending racial prejudices that may exist.

Additional research is needed to determine if a significant difference exists among students and teachers in diverse and non-diverse FFA chapters. Inferential statistics could not be used because the sample size of teachers ( $n = 10$ ) and students ( $n = 135$ ) were small and not proportional. Furthermore, additional research investigating agriculture teachers multicultural competence as perceived by students not enrolled in secondary agricultural education is recommended. The study recommended provides an understanding of ethnic minority students' perception of the agriculture teacher.

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