

A CASE STUDY OF WOMEN'S EXPERIENCES IN A PRESERVICE TEACHER PREPARATION PROGRAM

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Abstract

Because women are underrepresented in all domains of the agricultural education profession, this case study sought to explore women's experiences in a preservice teacher preparation program at Oklahoma State University. The study sought to discover what role, if any, the program played in contributing to the lack of women in the profession. Results indicated that women were treated equitably by teacher education faculty and staff. However, they experienced sex stereotyping and gender bias from male student peers, male secondary agricultural education teachers, and male school administrators. Teacher education faculty were reported to be sanguine in their approach to dealing with female under representation in the profession, at times suggesting that being female was an advantage in regard to securing employment as a secondary agricultural education teacher in a state where 97% of the secondary agricultural education teachers are male. Teacher education faculty should engage their students in diversity education. They should also inform female students about gender bias and work to equip them with requisite coping skills. A theory is needed to explain the role of gender and ethnicity in career entry and development in secondary agriculture education.

Introduction

Women are underrepresented in all domains of the agricultural education experience, especially in Oklahoma where female secondary agricultural education teachers represent 3% of the population. A case study was undertaken to examine this phenomenon. One component of the study included exploring women's experiences while they were students in a preservice teacher preparation program to identify possible barriers for entry into the secondary agricultural education profession.

Gender bias against women has been documented in the agricultural education literature for nearly 40 years. Rudd (1967) found that the majority of male secondary agricultural education teachers were not supportive of girls joining the Future Farmers of America and reported that there was "no need for women agricultural instructors" (p. 136). Bradley (1971) reported that if women were to teach secondary agricultural education they should only teach in multi-teacher departments with

a male partner and they should teach horticulture (a typical sex stereotyped role for women in agricultural education). Thompson (1986) found that women had more difficulty gaining employment as secondary agricultural education teachers than men. Knight (1987), Cano (1990), Foster, Pikkert, and Husmann (1991), and Foster (2001a; 2001b) have all documented gender bias in secondary agricultural education, from women's inability to obtain employment as secondary agricultural education teachers to peer rejection and isolation while working in the field. At the turn of the 21st century, women constituted 22% of the secondary agricultural education teaching force nation-wide (Camp, Broyles, & Skelton, 2002).

The causal elements for gender and ethnic bias in secondary and tertiary agricultural education profession have not been reported in the literature (Myers & Dyer, 2004). In response to Myers and Dyer's call for investigating "why females and ethnic minorities are not choosing to enter the professorate" (p. 49) the

author/researcher postulated an embryonic theory that may partially explain the lack of diversity in the profession. Most that enter secondary agricultural education do so as high school freshmen (age 13) by participating in the National FFA Organization where they engage in leadership opportunities and a Supervised Agricultural Experience (SAE). As a result of these positive experiences, reinforced by valued others such as teachers and parents, a few youth commit to becoming secondary agricultural education teachers and major in agriculture education or an agriculturally-related subject in college (Lent, Brown, & Hackett, 2002). In 87% of the preservice programs nationally, students begin taking courses in teacher education during the third and fourth years of their baccalaureate degrees (Myers & Dyer). As women in non-traditional careers experience discrimination at career entry (Fitzgerald & Betz, 1983), there are few women in the pipeline to become teacher educators. Also, the points of entry into the profession are few as the prerequisites to becoming a secondary agricultural education teacher and subsequently, a teacher educator require specific experiences typically acquired in youth. Thus, the indoctrination process to become a secondary agricultural education teacher or teacher educator spans one's adolescence and early adulthood, when social constructions of gender stereotypes are solidified (Kite, 2001). Given few points of entry into secondary agricultural education and the fact that agriculture teacher educators tend to be "quite homogenous" consisting of middle-aged white males who grew up in traditional families (Myers & Dyer, p. 45), students have little exposure to diversity that might shape their ideas regarding the secondary agricultural education teacher archetype, including women and ethnic minority role models who serve to reinforce career choice (Lent et al., 2002). Gender stereotypes are predictive of occupation. As girls and young women socially construct their career path, agricultural education is not seen as an option as children who violate gender roles are punished by their peers and adults for nonconformity (Kite).

Within the agricultural education context, some women assume gender-stereotype roles, most noticeably as horticultural, agricultural communications, and leadership teachers as creating beauty and language arts are viewed as feminine, whereas, handling livestock and welding are perceived as masculine. Women also construct themselves as co-teachers, or helpers, to men in multi-teacher departments (Bradley, 1971). These forms of *subtle sexism*, beliefs about women and men that are harmful but are internalized and considered normal or natural (Kite, 2001), hinder women's participation in secondary agricultural education. Women have not been legitimized as decision makers and full partners in secondary agricultural education evidenced by the absence of women in leadership positions at all levels. The social hierarchies of male-dominated careers favor male participation by creating sex-segregated work and by giving women token status (Fox, 2001; Gutek, 2001).

Because of women's persistent marginalized role in agriculture education, this case study was framed by a feminist epistemology. Feminists are concerned with the ways that gender influences learning and applying knowledge, termed *situated knowing*, and how the feminine perspective informs truth seeking. Masculine epistemologies serve to marginalize women through exclusion, denial of authority, devaluing female ways of knowing, representing women as inferior and deviant, and creating social constructions of women as subordinate to reinforce male dominance (Anderson, 2004).

The purpose of the case study was to explore the experiences of women who participated in the preservice teacher preparation program at Oklahoma State University to discover what role, if any, the program played in contributing to the lack of women in the secondary agricultural education profession.

Methodology

The study adopted a qualitative case study approach (Merriam, 1998). Case study allows the researcher to capture the nuances and particularities of phenomena while

giving the study flexibility to probe emerging themes. Case studies are particularly appropriate for exploratory research and lend themselves well to feminist epistemology as they embody reflexivity and subjectivity in the research process. Feminist case studies are dedicated to giving back to participants by giving voice to the voiceless in the hope for social change by raising consciousness and informing policy and practice (Reinharz, 1992).

The population included all female students who took at least one preservice teacher preparation course at Oklahoma State University from 1999 to 2004 ($n = 64$). All female secondary agricultural education teachers were also included in the study as the majority had graduated from Oklahoma State University within the time frame identified for the study ($n = 11$). Students' whose grade-point average was less than 2.5 were excluded because they were not qualified to enter the professional program. To protect the identity of the subjects, the women are identified by number in the text. The teacher educators are not differentiated and are referred to as Mr. Jones in text to protect their identity. Direct quotes are referenced by numbers in parentheses indicating location in the original transcript.

The participants were solicited by letter and telephone, and asked to participate in a long interview that was audio-taped, transcribed, and mailed back to them for verification. All interviews adhered to a semi-structured interview protocol. Participants were also engaged in probing questions that evolved during the interview process to explore emerging themes. The interview transcripts were cleaned and loaded into a qualitative data analysis software program (ATLIS/ti). The program allowed the researcher to organize and

categorize the data, known as coding and memoing. The codes were then grouped together, distilled, and analyzed for patterns and themes. An overall portrait of participants' responses was constructed and used to draw conclusions and recommendations (Creswell, 1998).

Merriam (1998) recommended six strategies for enhancing validity in case study research. Participants' claims were *triangulated* with teacher educator's understanding of certain facts about the program. *Member checks* were accomplished by mailing participants a copy of their interview transcripts for verification. Draft copies of the report were shared with members of the agricultural education community, including study participants, for *peer examination* and feedback. The study was conceptualized with teacher educators, adding an element of *collaborative research*. *Researcher's bias* can never fully be removed. The researcher admits to a feminist social constructionist epistemology. An awareness of personal bias was acknowledged through reflective practice. There was no attempt to generalize the results of the case study to this or other populations as qualitative research attempts to seek meaning and understanding, not broad causal statements; however, some analytical generalizations can be drawn if other situations are similar to this one.

Findings and Conclusions

Thirty-three of the 75 women chose to participate in the study (44% response rate) by responding to the invitation letter. The findings are gleaned primarily from the women who were current students or recently graduated. The women's identification numbers and career status are detailed in Table 1.

Table 1
Career Status of Study Participants

<i>Status</i>	<i>f</i>	<i>%</i>
Current Students (B.S. and Masters' students)		
Had not completed student teaching experience (1, 6, 11, 14, 19, 31, 36, 37, 49, 52, 63, 67)	12	36%
Had completed student teaching experience (9, 54, 66)	3	9%
<i>Subtotal of Participants Enrolled in University</i>	15	45%
Graduated		
Not teaching (8, 23, 28, 57, 60)	5	15%
Teaching but not secondary agricultural education (2, 15)	2	6%
Teaching secondary agricultural education (3, 13, 26, 43, 56, 71, 77, 78)	8	25%
Teaching college agriculture (17, 20, 59)	3	9%
<i>Subtotal of Participants Graduated from University</i>	18	55%
Total	33	100%

Early Field Experience

Forty-five hours of early field experience are required of students prior to student teaching. The experience includes a variety of activities such as classroom observation, classroom teaching, laboratory teaching, SAE observation, planning and evaluation, National FFA Organization competitive and noncompetitive experiences, and attending professional meetings. Students complete these experiences in their junior year or the first semester of their senior year if they transfer from a community college. If students begin at the land-grant university as freshmen, they may begin these experiences earlier. Students also obtain field experience through a special education course.

Eleven women who were currently enrolled in the university reported they had recently completed their early field experience. Eight women (9, 11, 14, 19, 31, 49, 63, 66) reported having had a positive early field experience, two women (14, 36) reported a positive early field experience but

encountered discriminatory attitudes, and two women (1, 52) reported having had a negative early field experience.

Number 11 (2:21) said her cooperating teacher was "very respectful and willing to help you improve your teaching." Number 19 (407:415) reported that she "was more excited about teaching than ever... I just had an awesome experience." Number 49 (184:194) had a positive experience but desired more "logistical" support from faculty. Number 66 (157:171) said that "it was helpful" but wished she had more time in the field as a freshman and sophomore. Number 31 (243:258) reported that her experience "went really well, had a good cooperating teacher, and good students."

Number 36 (9:33) reported that spending three days in the field motivated her and was a positive experience as she confirmed that she "really did enjoy being in the classroom." However,

the battle (for women to teach agriculture) is just a little bit too tough to

fight. I have been told 'you are a girl and you can't teach agricultural education.' In fact one of the secondary agricultural education instructors that I taught for (during my early field experience) sat me down and said 'you're a Yankee and you're a girl and if you expect to make it in this state you are crazy.'

Number 36 intended to relocate out of state due to the provincial attitudes she experienced during her early field experience.

Number 14 (206:215) had a positive early field experience because her cooperating teacher "was real supportive." "He told me to stick it out" because she was considering changing her major. Number 14 did change her major because "when you look at the figures and look at the numbers (of female secondary agricultural education teachers) it is real discouraging." She was not confident that she could obtain employment as a secondary agricultural education teacher in the state.

Number 1 (176:200) reported that she had an unsatisfactory experience with her cooperating teacher because he did not give her good feedback and she did not understand why she was graded poorly. Number 52 (25:29) reported that her experience "wasn't so good" because the teacher talked to the students during her lesson. She felt that the teacher "put no importance on me at all, he was talking to kids while I was trying to teach." She felt that the teacher was most interested in livestock and that if a student teacher did not stress livestock they would not succeed as a secondary agricultural education teacher.

Student Teaching Experience

Ten women discussed their student teaching experience through the land-grant university. Seven women reported having a positive experience (2, 8, 9, 13, 20, 28, 66). In contrast, three women reported less than satisfying experiences in the field (15, 17, 57).

Number 8 reported that being female was an advantage during student teaching because she could serve as a chaperone during field trips. Number 13 (100:110) reported that her cooperating teacher was

"great with student teachers. I was his second female student teacher and he turned things over to me and let me have control, even the shop class." Number 20 (390:390) reported having a "wonderful relationship with the students." Number 66 said when she came to town her cooperating teacher introduced her to the community, was supportive, and helpful through out her experience.

Number 9 (154:162) reported that placement of female student teachers was problematic because "there were certain secondary agricultural education programs that straight up told Mr. Jones that they did not want a female." However, she was successfully placed and had a good experience. Number 28 had a positive experience in her student teaching environment, but reported that the superintendent asked her gender-biased questions during a mock interview.

Number 15 was placed with a male secondary agricultural education teacher. He initially marginalized her by not allowing her to make home visits or to assist with SAE projects. During the state fair, he advised number 15 to "go home, have a free weekend." She told her cooperating teacher she wasn't going anywhere and stayed on at the fair and helped the high school students with their projects. She said "he really did not know what to do with me at first. Then it was like after the first month (after the state fair) it was okay and I started doing more" (240:258).

Number 17 (166:217) described her student teaching experience as trying. She submitted her paperwork early but the first school rejected her because, in her opinion, she was female. Her second option was to be placed under a female secondary agricultural education teacher who already had a student teacher assigned to her. Her third attempt was with a male secondary agricultural education teacher who told her he had "big reservations about getting a girl because he had seen several girls previously that didn't dress very appropriately, they wore really tight clothes and lots of make-up and he said he did not want that." Mr. Jones assured the cooperating teacher that number 17 would follow expected behavior and attire. Part of the teacher's reservations centered on the

fact that his high school students might make sexual advances at a female student teacher. After gaining her cooperating teacher's trust, number 17 said he introduced her to other secondary agricultural education teachers and praised her work.

Participant's Overall Experience while enrolled at the Land-Grant University

Thirty women said they were treated equitably and fairly by the preservice teacher preparation program faculty and staff (1, 2, 3, 6, 8, 9, 11, 13, 14, 15, 17, 19, 20, 23, 26, 28, 36, 37, 43, 49, 52, 54, 56, 57, 59, 60, 62, 63, 66, 67). Many of the women were encouraged by the faculty to become secondary agricultural education teachers (1, 14, 17, 20, 59). Number 17 (161:167) reported that faculty said "you have an advantage because you are going into a field that is all male, you have so much to give that (your gender) is not really going to be a factor." Number 59 (62:67) said the faculty encouraged her to stay and complete her degree. Numbers 17, 26, 43, 56, and 60 all reported that they received excellent placement assistance from the faculty as they began their job search.

Numbers 3, 8, 14, 19, 23, 26, and 37 reported that their male student-peers were extremely supportive of them. In contrast number 60 (175:179) reported that male students "give you a hard time" about being a female in secondary agricultural education. Number 52 (104:114) reported that her male peers were not "mean or derogatory" to her, but there was an underlying belief among the male agricultural education students that women don't drive trucks, haul trailers, or weld. "I think that the faculty and students accept that girls do this (agricultural education) as far as leadership roles. There are more female students in the leadership of FFA than there are males." But they don't accept women as animal science or agricultural mechanics teachers.

Number 6, an out-of-state student, reported that other students, specifically men from this state, did not accept her into their student work groups. They excluded her from class activities and did not interact with her. Likewise, number 36 (90:114), an

out-of-state student, reported that when she shared her career goals with peers in the agricultural education department, the male students told her "there is no way you know what you are talking about" in regard to her agricultural content knowledge.

Numbers 9, 17, and 28 reported that their student teaching experience was where they first encountered discriminatory attitudes toward women in secondary agricultural education. Number 17 (226:280), another out-of-state student, reported that male peers made comments to her like "you are not going to get a good job" in this state. Over time, a group of five male agricultural education students regularly teased number 17 about their advantage in the job market because they were men from this state and she was a woman from another state. Number 17 also noted that after the cohort went out to student teach and came back to campus, the male students were more confirmed in their beliefs and subsequent harassment of number 17 and her female classmate that they would not get secondary agricultural education teaching jobs in this state.

Overall, the women were very satisfied with their university experiences. They found the teacher preparation program to be rigorous and enjoyable. They found the faculty to be supportive and encouraging of their career choice. They believed that the preservice program was a superior experience to alternative programs in other states and most felt proud of their degrees. Even women who did not secure employment as secondary agricultural education teachers were positive about their university experience and were glad they majored in agricultural education.

Fourteen women were very satisfied with their experience and rated the program as *excellent* (1, 3, 8, 9, 11, 17, 20, 23, 28, 37, 43, 54, 59, 67). Ten women rated the program as *good* (13, 15, 26, 31, 36, 49, 52, 56, 57, 66). Three women rated the program as *average* (6, 19, 63). Number 6 said "I was not challenged." One woman was *dissatisfied*. She said "It is not a well rounded program. I was not fully prepared for the entire role of a secondary agricultural education teacher" (60-192:198).

Should Teacher Educators Discuss Gender Bias with Women in Secondary Agricultural Education?

Because the preservice program faculty were sanguine with the women about their career prospects, several women were unaware of the barriers women faced in obtaining employment as a secondary agricultural education teacher in the state (8, 23, 67). The researcher asked several women if the faculty should counsel them about possible gender bias they may encounter when applying and interviewing for jobs. Their reactions were mixed. Some women knew through informal communication channels they would have a difficult time securing employment while others were ignorant until they were asked gender-biased questions by a principal or superintendent in an interview situation, leaving them unprepared to respond in such a manner that would enhance their chances of getting hired.

Number 15 (505:315) wished she had been made aware of the gender-related barriers to entry in secondary agricultural education. Number 9 (508:515) said "it's a slam in your face that you are here and you really feel like that if you are going to stay (in the state) you are not going to get a quality (agricultural education teaching) job" because the more desirable positions are given to men. On the other hand, number 23 (203:215) said that although she was not made aware of the barriers to entry by faculty, she "fully understood and wanted to be there" (in the agricultural education major). Although she is not currently teaching she enjoyed her major and has no regrets.

The informal information channels communicate to students the difficulty women have in securing employment. Number 28 (162:169) said

most people are aware of how it is, students talk about when you go out there to try and get a job it is hard to even get an interview. You hear that as a woman you will have a better chance of getting hired if you are married (to a

secondary agricultural education teacher) and if you try for a two-teacher program where the co-teacher is male.

Number 8 (168:180) recommended that the faculty be

straight forward with them. The message to send is there is a problem but the more professional you are, the more of you that go out there, it will break stereotypes. So you give them the bad news but then you say this is what you can do. We need really strong females out there that can prove that they can do this.

Placement of Student Teachers

Several women reported that faculty were particularly careful about placing female student teachers and recommend that they student teach under female secondary agricultural education teachers. The faculty have not placed men student teachers with women secondary agricultural education teachers who run single-teacher departments.

Number 8 (149:166) said

I think that our professors were all looking out for us. Mr. Jones was really good about being careful about where I was placed and I am sure (he was equally careful) with all the girls. He said there are certain places I will not send you to, I think they were a little protective of us.

However, faculty never said directly to number 8 that her chances of getting a job in the state were poor.

Number 17 (175:178) said

Mr. Jones gave me a few options about where I could go and it was between a male or female teacher. He thought I should go with the female teacher because I would benefit more from being under a female teacher.

Number 43 (458:471) was grateful for her placement as a student teacher with a female secondary agricultural education teacher. She said the

mentoring opportunity with another female made a huge difference and maybe that is another reason that I didn't have as many problems in the state, or didn't perceive myself as having gender related issues because I think I had learned from her.

Number 77 (854:873), a graduate of the program and a cooperating female secondary agricultural education teacher, has received only female student teachers and believes this practice encourages sexism within the secondary agricultural education profession.

How come I have had student teachers for the last three years and I've had three females? My high school students say how come we get a female all the time? I don't think you coddle them (female secondary agricultural education student teachers). They need to have a clear understanding of what is going to be expected or how challenging and difficult it is and what they really need to know if they are going to do this and want to follow through with that commitment. I don't coddle them when they are here. I may be just as hard or harder on them in some ways because I think the profession is going to be that way. So I am not helping them by not giving them a true picture of what is really going on because there are only 13 women teaching secondary agricultural education out there.

Students' Recommendations to Improve the Preservice Program

Women who had completed the preservice program offered suggestions to strengthen the program. The women believed they fully mastered lesson planning. However, they lacked many of the non-classroom skills required to manage a secondary agricultural education program. Their suggestions focused on teaching students more about the life of a secondary agricultural education teacher outside the classroom and specific curriculum adjustments that would enhance the program for future students. The women also desired

more information regarding the unique challenges women face in a male-dominated profession.

For example, the teacher educators should: a) spend more time discussing secondary agricultural education teacher expectations and responsibilities outside the school setting such as the teachers' role in the community, how to organize and manage an advisory council, working with parents, feed stores, and visiting stakeholders (13, 17, 60); b) discuss social services as many children need them (66); c) incorporate more informal time between faculty and students to discuss situations that may arise, for example the death of a high school student (17); d) spend more time teaching students how to manage the required paper work for field trips, activity account money, purchase orders, SAE, and the National FFA Organization (3, 9, 17, 23, 57); e) emphasize the objectives required by the No Child Left Behind act (66); f) provide more information on conducting home visits (54); and g) provide more information regarding gender-related issues and the unique challenges women face in secondary agricultural education including providing more support and networking opportunities for female students to develop relationships with female secondary agricultural education teachers (i.e., a club, a listserve, a newsletter) (54).

A cooperating teacher (77) recommended that faculty: a) place male student teachers with female secondary agricultural education teachers; b) hold a placement party where student teachers can meet potential supervising teachers; and c) conduct exit interviews with the cooperating teachers at the end of the student teaching experience.

The women recommend a variety of specific program modifications including: a) expanding students' time in the field throughout the curriculum, freshmen to senior years (8, 15, 19, 26, 28, 57, 59); b) eliminating the 4-week block and substitute with more field experiences (17); c) focusing more on teaching methods, less history and philosophy of agricultural education (17); d) having a complete methods class rather than just in the four-week block (9); e) sequencing teaching

methods just before the student teaching experience (17); f) spending less time developing original lesson plans and more time learning what curriculum is already available from state sources (26); g) focusing more on content that is required of secondary agricultural education teachers in the state, for example horticulture and welding (13, 20, 43, 60); h) hiring a woman faculty member to teach in the preservice program and increasing the diversity of faculty expertise within the program (54); and i) setting up a listserv or other means of communication between majors and faculty as information channels were inadequate (63).

Discussion and Directions for Future Research

This case study explored women's experiences in a preservice secondary agricultural program to discover if barriers to career entry existed. Findings indicated that women were supported and encouraged by faculty and staff to succeed in the secondary agricultural education preservice program. However, the participants did not report being given any preparation for coping with gender bias after they left the safe haven of the university.

Preservice faculty must address the uncomfortable and complex issue of sexism with students. Women need to know about, and understand, what obstacles they will encounter as they navigate their path in a male-dominated profession. As Bowen (2002, p. 1) so aptly reminded teacher educators,

we have extreme difficulty discussing this topic (ethnic and gender diversity) with meaningful dialogue...most of us are ill-equipped and uncomfortable dealing with this topic that evokes considerable emotion while testing the soul and depth of our value systems.

Remaining sanguine about women's prospects of securing employment reinforces the hegemony of oppression they are already victims of by not empowering them with the necessary skills to negotiate gender-biased situations at career entry (Freire, 1970). A woman must learn (via coaching, practice,

and role modeling) to effectively defend her personhood when her cooperating teacher says "you're a Yankee and you're a girl and if you expect to make it in this state you are crazy" (36) or when a superintendent asks "how will you handle those boys in the agricultural mechanics shop?" (43). Lent et al. (2002) suggest faculty should counsel women to: 1) consider potential barriers to entry; 2) analyze the likelihood of encountering these barriers; and 3) help women prepare strategies to manage barriers and cultivate social support systems.

The practice of placing student teachers should be examined more carefully. A preference for placing female student teachers with female cooperating teachers continues horizontal sex segregation (Gutek, 2001). Not placing male student teachers with female cooperating teachers in single-department programs is also practicing sex-segregation and sends a message that female-led programs are not of equal status as male-led programs. Male student teachers should be placed with female cooperating teachers to increase tolerance in the profession. As number 77 (980:999) noted, "How do you change their perception if all you do is send girls to the girl teachers?" Diversity training is called for to increase acceptance among male students (future secondary agricultural education teachers) of female and minority co-workers (Bowen, 2002).

The women in this study felt unprepared to manage the extra-curricular requirements of the job. Consistent with Myers, Dyer, and Washburn's (2005) findings that beginning teachers had difficulty in the logistical aspects of teaching secondary agricultural education such as organizing alumni chapters, advisory committees, and National FFA Organization chapter events, this study found that students wanted more coaching on the non-classroom aspects of the secondary agricultural education teacher role. The women were satisfied with the technical content presented in the preservice curriculum, but desired more soft skills in how to establish support mechanisms for building a successful program. To meet this need, the preservice program faculty should consider instituting a one-credit hour

seminar that includes extra-curricular activities in addition to addressing women's issues in nontraditional occupations.

The absence of women and minorities in all levels of agricultural education has been reported descriptively, but is poorly understood theoretically. A theory that explains the role of gender and ethnicity in gaining career entry in agricultural education needs to be developed, tested, and refined so that practices that contribute to gender and ethnic bias can be uprooted and discarded, as well as, implementing practices that reduce the gender and race gap in agricultural education.

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