

EXTENT TO WHICH CULTURAL DIVERSITY IS ADDRESSED IN SECONDARY AGRICULTURAL EDUCATION

Vernon D. Luft, Professor
University of Nevada

Abstract

The purpose of this study was to determine the extent to which teaching practices addressing cultural diversity were being carried out in secondary agricultural education programs. The population of the study included all secondary agricultural education teachers in Nevada during the 1993-94 school year. Through the use of a mail survey instrument developed by the researcher, teachers were asked to report information about program and minority enrollments, the extent to which they carried out teaching practices related to cultural diversity, and the means by which they gained expertise in multicultural education. The results indicated that most students enrolled in secondary programs and FFA were white, and that the extent to which secondary agriculture teachers carried out cultural diversity practices was often limited and improvement is needed. Teaching practices most frequently carried out were those common to most classrooms regardless of cultural diversity, while those least frequently carried out were practices addressing cultural diversity more specifically. Teachers gained their expertise in multicultural education from a variety of sources.

The demographics of our school age population is changing in the United States. The enrollment of minority students in public elementary and secondary schools in the United States increased from 24.0 percent in 1976 to 32.1 percent in 1990 (National Center for Educational Statistics, 1993).

During the 1991-92 school year, 211,810 students were enrolled in grades K-12 in Nevada's public schools which included 73.18% white, 1.95% American Indian or Alaskan Native, 3.71% Asian or Pacific Islander, 12.16% Hispanic, and 9.00% Black (Nevada Department of Education, 1992). Distribution of ethnic minorities in occupational education programs was similar with 21,041 students enrolled -- 73.9% were white, 2.1% American Indian or Alaskan Native, 4.1% Asian or Pacific Islander, 10.9% Hispanic, and 9.0% Black.

National FFA membership in 1992-93 consisted of 88.15% white or European American, .99% Native American, .46% Asian American,

5.34% Hispanic American, and 4.52% African American (The National FFA Foundation, 1993).

The increase in the number of minority students creates a need for agricultural education teachers to be more diverse in their role as teachers and advisors. Moore (1994) indicted that supporting diversity in agricultural education should be a high priority. Bowen (1994) stated that "...gender and ethnic diversity must be pursued more aggressively if agricultural educators wish to be major players in America's educational enterprise during the next decade." (p.8). Whent (1994) stated, "Agricultural educators need to make greater strides toward acknowledging their unconscious biases toward people of diverse populations and move forward to accept the changes and challenges of the future." (p.11).

Sheppard (1983) noted that vocational teachers need training in multicultural education because America is a culturally pluralistic society, and cultural and ethnic diversity in the United States is a fact of life. The presence of diversity in

America should be recognized as a strength, not a weakness, as various ethnic and cultural groups contribute to the national culture while maintaining their distinct identity. Teachers also need training in multicultural education because it is very likely they will practice their professional skills in classrooms populated by students from a wide range of ethnic and cultural backgrounds.

Banks (1994) cited four principles of ethnic and cultural diversity: (1) ethnic and cultural diversity should be recognized and respected at the individual, group, and societal levels; (2) diversity provides a basis for societal enrichment, cohesiveness, and survival; (3) equality of opportunity must be afforded to all members of ethnic and cultural groups; and (4) identification for individuals should be optional in a democracy.

Efforts have been made to provide guidelines or evaluative checklists to guide educators in multicultural education. Banks (1994) described twenty three curriculum guidelines for multicultural education. From the guidelines he developed a "Multicultural Education Program Evaluation Checklist" (pp. 314-320) containing several evaluative criteria within each curricular guideline. In responding to a state mandate, a document was developed in Iowa (Anderson & Barta, 1984) to aid local agricultural education instructors in implementing the agricultural components of their school district's multicultural, nonsexist education plans. The document contained a self-evaluation checklist with sections pertaining to curriculum structure, curriculum content, instructional materials, and teaching strategies for use as a general guide in reviewing a program to determine how consistent it is with the basic concepts of multicultural, nonsexist education.

Addressing the needs of culturally diverse students should be a concern of agricultural educators. This study was conducted to determine what was being done in secondary agricultural

education programs to address the needs of culturally diverse students.

Purpose and Objectives

The purpose of this study was to determine the extent to which teaching practices addressing cultural diversity were being carried out in secondary agricultural education programs. Objectives specific to the study were to: 1) determine the number of ethnic minority students enrolled in secondary agricultural education programs including the number which are limited or non-English speaking and the number which are members of the FFA; 2) determine the extent to which various teaching strategies and practices were self-reported to have been carried out to serve culturally diverse students; and 3) determine the means by which agricultural education teachers gained preparation to serve culturally diverse students in their classrooms.

Methodology

Population

The target population for this study was secondary agricultural education teachers in Nevada during the 1993-94 school year. The Nevada Vocational Agriculture Instructors 1993-94 Directory (Nevada Department of Education, 1994) was used to determine that there were 21 teachers teaching secondary agriculture classes. Since the total number was small, the entire available population was surveyed.

Instrumentation

Data for this study were collected with a mail survey instrument. The instrument was developed by the researcher using Banks' (1994) work and the Iowa "Multicultural Education Program Evaluation Checklist" (Anderson & Barta, 1984) as models. The first part of the questionnaire asked respondents to supply information about

program enrollments, including minority student enrollments in their secondary agricultural education programs. The second part consisted of 27 questions relating to cultural diversity teaching practices, and asked teachers to indicate the frequency with which they carried out each of the practices using the following scale: 4 = always, 3 = most of the time, 2 = sometimes, 1 = almost never, 0 = never. Part III of the instrument asked the respondents to indicate the means by which they gained expertise in multicultural education.

The instrument was validated by a panel of experts consisting of university English as a Second Language and multicultural education faculty. The instrument was pilot tested by sending it to seven secondary agriculture teachers in Montana and six in Idaho. Revisions were made to the instrument based on feedback from the pilot tests and reviews.

Data Collection

The questionnaire, a cover letter, and a return envelope were sent in February, 1994 to each of the 21 agriculture teachers in the state. After three mailings, telephone contacts, and personal contacts during conferences and workshops, all questionnaires were returned, resulting in a 100 percent response rate. Completeness of responses

was obtained with telephone calls and personal contacts.

Data Analysis

All data were analyzed using the Statistical Package for the Social Sciences, Personal Computer Version. Frequencies, percentages, mean scores, and standard deviations were determined in the data analysis. The reliability of the instrument (items in Part II) using Cronbach's Alpha ranged from .885 to .902.

Results

The first objective sought to determine the number of ethnic minority students enrolled in secondary agricultural education programs including the number which are non-English speaking and the number which are members of the FFA. Table 1 indicates that out of 1,388 secondary agricultural education students enrolled during the 1993-94 school year, 1,130 or 81.41 percent were white. A total of 112 (8.07%) were American Indians, 108 (7.78%) were Hispanics, 27 (1.94%) were Blacks, and 11 (.79%) Asian/Pacific Islanders. FFA membership consisted of 701 students, of which 632 or 90.15 percent were white. There were 43 (6.13%) Hispanics, 17 (2.43%) American Indians, seven (1.00%) Asian/Pacific Islanders, and two (.29%) Blacks who were FFA members.

Table 1. Enrollments in Secondary Agricultural Education and FFA Categorized by Ethnicity

Race	<u>Agricultural Enrollment</u>		<u>FFA Membership</u>	
	n	%	n	%
American Indian	112	8.07	17	2.43
Asian/Pacific Islander	11	.79	7	1.00
Black	27	1.94	2	.29
Hispanic	108	7.78	43	6.13
White	1130	81.41	632	90.15
Total	1388	99.99*	701	100.00

*Total does not equal 100 due to rounding procedure.

Table 2 indicates that of the 108 Hispanic students who were enrolled in secondary agriculture, four or 3.7 percent are non-English speaking. A total of 37 Hispanics were reported to speak English, but not as their native language. Two American Indian students also spoke English, but not as their native language.

The second objective was to determine the extent to which various teaching strategies and practices were carried out to serve culturally diverse students. Respondents were asked to indicate the frequency (4= always, 3= most of the time, 2= sometimes, 1= almost never, and 0= never) to which they carried out the practices. Responses were converted to numerical scores so means could be calculated. Table 3 reports how agriculture teachers responded to each item. Percentages, mean scores, and standard deviations are reported.

The six practices which agriculture education teachers carried out most frequently, with a mean between three and four, were: use a balance between large group, small group, and individual activities so that all students regardless of sex, race, and disability are encouraged to become involved (X=3.62); avoid using language that may be sexist or racist (X=3.48); create a classroom atmosphere reflecting an acceptance of and respect for ethnic and cultural differences (X=3.33); use instructional materials that are unbiased on the basis of race, sex,

and disability (X=3.33); promote men and women as having the same potential responsibilities and capabilities in agricultural matters (X=3.29); and use classroom management strategies and role assignments that reinforce multicultural and nonsexist behavior (X=3.19). These practices tend to be common in most classrooms whether or not there is cultural diversity .

Thirteen practices were rated with a mean score between one and two, or being carried out "almost never" to "sometimes". Those practices which were rated lowest among this group included: promote festivities and celebrations relating to the minority cultures of the students enrolled in agriculture (X=1.52); conduct on-going evaluations of the teaching strategies and instructional materials used to teach about ethnicity and culture (X=1.52); use persons from diverse cultural/racial groups and disabled persons as resources in the classroom (X=1.57); provide curricular activities that promote the cultures of the ethnic minority students in your program (X=1.62); recruit ethnic minorities to enroll in agriculture classes (X=1.67); and use instructional materials that represent disabled persons (X=1.67). The practices which specifically address cultural diversity were those least often carried out.

Table 2. English Speaking Characteristics of Minority Students Enrolled in Secondary Agricultural Education Programs

Ethnicity	Non English Speaking		Speak English, Not as Native Language	
	n	%	n	%
American Indian	0	-	2	1.79
Asian/Pacific Islander	0	-	0	-
Black	0	-	0	-
Hispanic	4	3.70	37	
	34.26			

Table 3. Extent To Which Agricultural Education Teachers Carried Out Cultural Diversity Practices

Practices	Percent Responding					Mean	S.D.
	0*	1*	2*	3*	4*		
Use a balance between large group, small group, and individual activities so that all students regardless of sex, race, and disability are encouraged to become involved	0.0	0.0	4.8	28.6	66.7	3.62	.59
Avoid using language that may be sexist or racist	4.8	0.0	4.8	23.8	66.7	3.48	.98
Create a classroom atmosphere reflecting an acceptance of and respect for ethnic and cultural differences	4.8	4.8	0.0	33.3	57.1	33.30	1.06
Use instructional materials that are unbiased on the basis of race, sex, and disability	4.8	0.0	0.0	47.6	47.6	3.33	.91
Promote men and women as having the same potential responsibilities and capabilities in agricultural matters	0.0	4.8	9.5	38.1	47.6	3.29	.84
Use classroom management strategies and role assignments that reinforce multicultural and nonsexist behavior	0.0	0.0	19.0	42.9	38.1	3.19	.75
Provide opportunities for students to view women and men, minority and majority persons, and disabled and able-bodied persons in a variety of agricultural roles	0.0	4.8	42.9	28.6	23.8	2.71	.90
Alert students to stereotyping when it occurs in instructional materials	9.5	4.8	19.0	42.9	23.8	2.67	1.19
Ensure that students placed in cooperative placement programs are done so based on a career objective and not stereotypical roles	19.0	0.0	9.5	38.1	33.3	2.67	1.46
Ensure that students may comfortably surpass stereotypes when making agriculture project choices	14.3	4.8	19.0	28.6	33.3	2.62	1.39
Expose agricultural education students to diverse role models in various agricultural occupations	4.8	14.3	28.6	23.8	28.6	2.57	1.20

Table 3 continues.

Table 3. Continued

Practices	Percent Responding					Mean	S.D.
	0*	1*	2*	3*	4*		
Work with the counseling staff to ensure that students do not make classroom decisions about enrollment in agriculture classes based on misleading stereotypes	19.0	4.8	19.0	23.8	33.3	2.48	1.50
Actively recruit ethnic minorities to participate in the FFA chapter	9.5	9.5	28.6	23.8	23.8	2.45	1.27
Use instructional materials representative of the culture/racial diversity in the U.S.	4.8	14.3	33.3	38.1	9.5	2.33	1.01
Develop special support strategies for nontraditional students	19.0	14.3	33.3	23.8	9.5	1.91	1.26
Use a variety of assessment procedures that reflect the ethnic and cultural diversity of the students in the program	14.3	23.8	23.8	38.1	0.0	1.86	1.10
Encourage students to inquire into the historic involvement or exclusion of minority groups and women in agricultural occupations	14.3	28.6	23.8	28.6	4.8	1.81	1.16
Discuss the role ethnic minorities have played in the history of agriculture	14.3	28.6	28.6	23.8	4.8	1.76	1.13
Discuss how agricultural practices relate to the various cultures of students in your agriculture classes	19.0	19.0	38.1	14.3	9.5	1.76	1.22
Make bulletin boards and displays for the classroom that are representative of the cultural/racial diversity in the U.S. and and roles open to both men and women	23.8	9.5	38.1	23.8	4.8	1.76	1.22
Discuss ethnic and cultural diversity and public policies related to agriculture	14.3	23.8	38.1	23.8	0.0	1.71	1.00
Recruit ethnic minorities to enroll in agriculture classes	23.8	9.5	47.6	14.3	4.8	1.67	1.15

Table 3 continues.

Table 3. Continued

Practices	Percent Responding					Mean	S.D.
	0*	1*	2*	3*	4*		
Use instructional materials that represent disabled persons	9.5	23.8	57.1	9.5	0.0	1.67	.79
Provide curricular activities that promote the cultures of the ethnic minority students in your program	14.3	33.3	33.3	14.3	4.8	1.62	1.07
Use persons from diverse cultural/racial groups and disabled persons as resources in the classroom	14.3	33.3	33.3	19.0	0.0	1.57	.97
Promote festivities and celebrations relating to the minority cultures of the students enrolled in agriculture	28.6	23.8	19.0	23.8	4.8	1.52	1.28
Conduct on-going evaluations of the teaching strategies and instructional materials used to teach about ethnicity and culture	19.0	33.3	23.8	23.8	0.0	1.52	1.07

*4=Always, 3=Most of the time, 2=Sometimes, 1=Almost never, 0=Never

The third objective of this study sought to determine the means by which agricultural education teachers acquired their preparation to serve culturally diverse students. Twelve of the 21 teachers (57.1%) took a university class in multicultural education, 10 (47.6%) took an inservice workshop in multicultural education, and seven (33.3%) reported that multicultural education was integrated into several classes taken. Three or 14.3 percent of the teachers indicated having no formal preparation in multicultural education.

Conclusions

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

1. A large majority of students enrolled in secondary agricultural education programs in Nevada and members of the FFA were white. The percentage of minority students

enrolled in agricultural education was somewhat lower than that of the school age population and those enrolled in occupational education programs in general.

2. Very few minority students were non-English speaking, although about one-third spoke English but not as their native language.
3. Agricultural education teachers were not making a strong effort to recruit minority students into their programs.
4. The extent to which secondary agriculture teachers carry out cultural diversity practices was often limited since teaching practices rated highest were those often carried out in classroom regardless of cultural diversity, and practices rated lowest

were those dealing specifically with minorities or cultural differences.

5. Teachers acquired their preparation for serving the culturally diverse from a variety of sources.

Recommendations

Data similar to that presented in this study was very limited for agricultural education. Results of this study indicate that secondary agricultural education teachers can do much better in serving the needs of culturally diverse students in their programs. Some recommendations specific to agricultural education can be made.

1. Secondary agricultural education teachers should make a greater effort to specifically recruit minority students interested in agricultural occupations. Perhaps program revisions are necessary to attract culturally diverse students. It is suggested that FFA advisors encourage and strive to increase minority membership.
2. Inasmuch as it was evident that agriculture teachers need additional improvement in serving the culturally diverse, it is recommended that secondary agriculture teachers be provided inservice opportunities to improve their cultural diversity teaching practices.
3. To help improve the extent to which cultural diversity is addressed in the future by secondary agriculture teachers, preservice teacher education students should also be required to take courses dealing with teaching the culturally diverse, with strong encouragement to implement the practices into their teaching. Courses designed to prepare agriculture teachers to serve the culturally diverse populations should contain

content recommended by experts in multicultural education.

4. This study should be repeated in about five years to determine if teaching practices addressing cultural diversity has improved.

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