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ATTITUDES OF AFRICAN-AMERICAN AGRICULTURAL EDUCATION  
TEACHERS IN NORTH CAROLINA TOWARD INTERNATIONALIZING  
AGRICULTURAL EDUCATION PROGRAMS

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ATTITUDES OF AFRICAN AMERICAN AGRICULTURAL EDUCATION  
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By

Erica Marylyn Battle

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ABSTRACT

ATTITUDES OF AFRICAN AMERICAN AGRICULTURAL EDUCATION  
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By

Erica Marylyn Battle

The purpose of this study was to determine the attitudes of African American agricultural education teachers toward various aspects of making their programs more internationally focused. Specific objectives were to (a) determine the attitudes of these teachers toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused; (b) examine selected demographic characteristics of these teachers; and (c) provide information about these teachers' attitudes and demographic characteristics that will assist in planning and implementing future international agricultural education program thrusts in North Carolina.

A Likert-type scale was used to assess respondents' attitudes. Content validity of the instrument was established by a jury of experts. The instrument was sent

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to all 36 African American agricultural education teachers in North Carolina, and completed responses were received from 34 (94.4%). The African American agricultural education teachers in North Carolina expressed positive attitudes toward making their programs more internationally focused.

Thesis advisor: Dr. Eddie A. Moore

This thesis is dedicated to my father, the late John Dorsie Battle; my mother, Nellie Mae Battle; and my fiance, Bernard Bobbitt.

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Sincere thanks is expressed to my parents, Nellie Mae Battle and the late John Dorsie Battle, for without their love, support, guidance, and protection, I would not be all that I am today. I would like to thank my wonderful fiance, Bernard Bobbitt, who has supported and stood by me since the beginning of my academic endeavors. I only hope I can be as supportive of him as he has been of me. I also would like to thank my sisters, brothers, nieces, nephews, and relatives for their love and support. The love and support received from these wonderful people will not be in vain. Thank you, God.

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## CHAPTER I

### INTRODUCTION TO THE STUDY

#### Background

Since October 1, 1987, the Department of Agricultural Education and Extension at North Carolina Agricultural and Technical State University (NCA&T) and the Department of Agricultural and Extension Education at Michigan State University (MSU) have been involved in a collaborative effort to give greater attention to international agriculture. Even though North Carolina has experienced some difficulty in funding an international effort, the state is most interested in providing high school graduates with an orientation to international agriculture. This is particularly true for the agricultural education faculty at NCA&T. In a North Carolina proposal, Bell (1990) noted that in order for high school graduates to be prepared for the world in which they live, international programs need to be implemented in the vocational agriculture curricula in the high schools.

Martin (1989) gave several reasons for including instruction relative to international agriculture in local vocational agriculture programs. He wrote:

Students need a global perspective if they are to be functional and vital citizens of the world. The truly educated person in today's world cannot function within narrow perspectives. We need citizens who have a knowledge of world agriculture, geography, and the uses of products from around the world. For the economics of agriculture to work in this world, all citizens need to have an understanding of the cultural differences and similarities of all those involved. Only then can we expect to strengthen communication. (p. 4)

Teachers in North Carolina must be prepared to teach students subjects that involve international agriculture. According to Smuckler and Sommers (1988), if graduates of secondary schools in the next decade are to be prepared for the world in which they live, teachers must be prepared to teach subjects with an international orientation. Bell (1990) stated that a number of benefits would result from internationalizing agriculture education programs in North Carolina, including:

1. Instructional materials that are usable in North Carolina's agricultural education programs.
2. Agricultural education professionals who can provide state leadership for internationalizing agricultural education programs.
3. Teachers who have resources to make international concepts relevant and meaningful.
4. A functioning network within the agricultural and educational systems to provide services relating to international agriculture.

Bell (1990) identified several benefits that teachers and students would receive from internationalized agricultural education programs:

1. An increased awareness about international relationships and their effect on agriculture in North Carolina and the United States.

2. An increased awareness that agriculture is an important part of a global economy.

3. Increased participation in the National Future Farmers of America (FFA) international program and, more specifically, participation in the United States-Japan student exchange program.

4. Inservice activities (state and district teacher meetings) relative to how to use the instructional manual and experiences that are related to cultural diversity.

5. Instruction and hands-on experiences provided for students, with a particular focus on international agriculture and global education.

#### Nature of the Problem

The state of North Carolina has not been successful in obtaining adequate funds to implement a comprehensive international agricultural education program thrust throughout the state. Thus, the need to internationalize agricultural education programs in North Carolina is a topic that should be addressed.



The success of internationalizing North Carolina's agricultural education programs depends on the support and acceptance of such efforts by the agricultural education teachers in the state. Many educators were included in an earlier proposal for internationalizing agricultural education programs in North Carolina and are aware of the efforts of NCA&T and MSU in this regard.

\* According to Hossain (1992), a number of researchers have found a relationship between attitudes and information in a given area, suggesting that people acquire most readily those facts that are congruent with their own views. Awareness of the attitudes of agricultural education teachers toward making their secondary school curricula more internationally focused is essential for effective development and progress in agricultural education. Stranger (1941) stated, "Attitudes are also products of education; progress toward democracy at home and international cooperation abroad will depend on the attitudes that are engendered in school children" (p. 77).

The attitudes of agricultural education teachers toward internationally focused programs influence the support given to these programs. Therefore, it is important to learn about and understand how teachers perceive and act toward this new endeavor.

### Purpose of the Study

The researcher's purpose in this study was to determine the attitudes of African American agricultural education teachers in North Carolina toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused. The findings from this study will be useful to those involved in planning and implementing an international thrust in agricultural education in North Carolina. Hossain's (1992) doctoral dissertation entitled "Attitudes of Agriscience Teachers in Michigan Toward Internationalizing Agricultural Education Programs" was used as the basis for the present study.

### Specific Objectives of the Study

To accomplish the purpose of the study, the following specific objectives were developed:

1. To determine the attitudes of African American agricultural education teachers in North Carolina toward student-related aspects, teacher-related aspects, and educational-linkage aspects of making their programs more internationally focused.

2. To examine the following demographic characteristics of African American agricultural education teachers in North Carolina: age, gender, years of teaching experience, membership in professional societies/

organizations, cosmopolitanism, reading Agricultural Education magazine, interest in receiving IAEP instructional materials, reading newspapers for agricultural information, residence, mobility, participation in national and international seminars/conferences, and primary teaching area.

3. To provide information about African American agricultural education teachers' attitudes and their demographic characteristics that will assist in planning and implementing future international agricultural education program thrusts in North Carolina.

#### Limitations of the Study

The study was conducted to gain an understanding of the attitudes of African American agricultural education teachers in North Carolina toward making their programs more internationally focused. To make the study meaningful from a research point of view, the following delimitations and limitations were taken into consideration.

1. The reporting of ideas, beliefs, and attitudes is subject to deficiencies.

2. The researcher depended on information supplied by the participants.

3. Characteristics of agricultural education teachers are many and varied; only 12 such characteristics were



examined in this study (age, gender, years of teaching experience, membership in professional societies/organizations, cosmopolitanism, reading Agricultural Education magazine, interest in receiving IAEP instructional materials, reading newspapers for agricultural information, residence, mobility, participation in national and international seminars/conferences, and primary teaching area).

4. Only African American secondary school agricultural education teachers in North Carolina were studied.

#### Assumptions

The researcher made the following assumptions in undertaking this study:

1. The answers given by the respondents were reliable.

2. The respondents were capable of responding accurately to the items in the questionnaire.

#### Definitions of Terms

For clarity of understanding, the following terms are defined in the context in which they are used in this thesis:

Agricultural education: The broad instructional areas in agriculture, encompassing production, processing, supplies, and services.

Attitude scale: A set of items designed to elicit

respondents' beliefs, feelings, and predispositions or action tendencies about a particular topic (Hossain, 1992).

Attitude toward internationalizing the agricultural education program. An attitude is a predisposition to act toward an object in a certain manner. The agricultural education teacher's attitude toward internationalizing the agricultural education program comprises his or her beliefs, feelings, and predisposition or action tendency toward various concepts of internationalizing such programs.

Educational-linkage aspects: State philosophies, goals for the state, coordination in the state, integration (from the perspective of various grade levels), and undergraduate and graduate curriculum.

International agricultural education: The broad instructional areas of global agriculture through which students gain an understanding of the geographical, political, and economic factors influencing agriculture; global agricultural production and consumption; trends in the production and consumption of food and fiber; agricultural practices in different countries; agricultural trade and banking practices; communication, transportation, and technological developments influencing agriculture; and cultural and religious differences with implications for

agriculture (Hossain, 1992).

Student-related aspects: What secondary agricultural education students should know and experience regarding internationalizing agricultural education programs.

Teacher-related aspects: Teachers' needs, involvement, knowledge, and experience regarding internationalizing agricultural education programs.

Vocational agricultural education teacher: A person who teaches one or more of the following at the secondary school level: production agriculture, horticulture, agricultural mechanics, and forestry and natural resources.

#### Overview of the Remainder of the Thesis

Chapter II contains a review of literature and research on subjects of interest in the study. Included are sections on definitions of attitudes and attitude theory, measurement of attitudes, international agricultural education, and major findings from similar studies regarding attitudes of agriscience teachers and students toward internationalizing agricultural education programs.

The study design, as well as the methods and procedures followed in carrying out the study, is the subject of Chapter III. Included are the conceptual design of the study, the independent and dependent variables, the study population, instrumentation, and the data-collection and data-analysis procedures used in the

study.

The findings pertaining to the African American agricultural education teachers' attitudes toward making their programs more internationally focused and the demographic characteristics of the teachers are presented in Chapter IV.

Chapter V contains a summary of the study, the major findings, comparison of the findings with those from Hossain's (1992) study, conclusions drawn from the findings, implications, and recommendations for further study.



## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

This chapter contains a synthesis of selected research and literature that is applicable to the study. The topics discussed in the review include definitions of attitudes and attitude theory, measurement of attitudes, international agricultural education, and major findings of similar studies regarding attitudes of agriscience teachers and students toward internationalizing agricultural education programs.

#### Definitions of Attitudes and Attitude Theory

Definitions of attitudes can be found in publications focusing on education, political science, psychology, and sociology. Good (1959) viewed an attitude as "a readiness to react toward or against some situation, person, or thing, in a particular manner, for example, with love or hate or fear or resentment, to a particular degree of intensity" (p. 48).

Ajzen (1988) indicated that an attitude is "a disposition to respond favorably or unfavorably to an object, person, institution, or event" (p. 4). Sherif,

Sherif, and Nebergall (1981) linked attitude with a "way of life"; economic, political, or religious institution; family, school, or government. Sherif further stated:

We are speaking of the individual's attitude when we refer to his holding in high esteem his own family, his own school, his own party, his own religion, with all the emotional and affective overtones these terms imply. (p. 4)

Triandis (1971) dealt with the term "attitude" by considering the social behavior a person demonstrated in the presence of a set of situations that had some social objects in common. He stated, "If there is a similarity among these social behaviors, we infer that the person has an attitude toward the social objects that are present in the social situation" (p. 3). Attitudes are likes and dislikes. They are a person's affinities for and aversions to situations, objects, persons, groups, or any other identifiable aspects of one's environment, including abstract ideas and social policies (Walker, 1971, p. 14).

Rosenberg and Hovland (1960) concluded that attitudes are inferred from the way one reacts to a particular stimulus, that is, the "predisposition to respond in a particular way toward a specific class of objects" (p. 1).

Social psychologists have given much attention to social attitudes. According to Bird (1940), "no branch of social psychology has commanded more attention during the last two decades than social attitudes" (p. 142). He noted that 1,500 articles on attitudes had appeared within

a 20-year period; of that number, 360 reported on the measurement of attitudes toward nationalities and social institutions.

### The Measurement of Attitudes

Social scientists have recognized that factors other than an individual's attitude toward an object may influence both one's response to instruments designed to measure the attitude and one's behavior toward the object in everyday life. Thus, when attitudes are studied, what are observed are the evoking stimuli, on the one hand, and the various types of responses on the other (Hovland & Rosenberg, 1960).

In regard to measuring attitudes, social psychologists have noted that items on a questionnaire should be simply stated, in the present tense, and relevant to the topic under consideration. Experts including Bird (1940) and Sudman and Bradburn (1982) have suggested certain criteria for measuring attitudes. According to Sudman and Bradburn, certain points should be considered when formulating the questions to be used in a questionnaire designed to measure attitudes. These are as follows:

1. Make sure that the attitude objects are clearly specified.
2. Decide on the critical aspects of the attitude to measure--affective, cognitive, and action. Do

not assume that these must necessarily be consistent.

3. Measure the strength of the attitude by building a strength dimension into the question itself; by asking a separate question or questions about strength; or by asking a series of independent questions, each of which reflects the general attitude.
4. Avoid double-barreled and one-and-a-half-barreled questions that introduce multiple concepts and do not have a single answer. Where possible, separate issues from individuals or sources connected with the issues.
5. Consider the use of separate unipolar items if there is a possibility that a bipolar item might miss independent dimensions.
6. Recognize that the presence or absence of an explicitly stated alternative can have dramatic effects on response. Specification of alternatives will standardize the question for respondents.
7. Pretest new attitude questions to determine how they are being interpreted by respondents. The use of split ballots in pretests is highly desirable.
8. If general and specific attitude questions are related, ask the general question first.
9. When asking questions of differing degrees of popularity involving the same underlying value, ask the least popular item first.
10. In attempting to measure changes in attitude over time, ask exactly the same questions in all time periods, if at all possible. (p. 73)

Criteria that Bird (1940) thought are important to consider when measuring attitudes on an attitudinal scale are as follows:

1. Statements should be simple, clear, and in direct language.

2. Double negatives and words with many meanings introduce confusion and should be avoided. These types of questions cause analyses in a situation where an immediate feeling of response is desired.

3. Double-barreled statements should be avoided. These types of statements cause ambiguity.

According to Bird, "The first prerequisite of an acceptable attitude scale is that it should reflect as exactly as possible the existing points of view prevailing toward an issue or institution" (p. 148).

#### International Agricultural Education

"A recent series of critical analyses of American educational systems have suggested that the United States is a 'nation at risk'" (International Studies & Programs review and Planning Committee, 1984, p. 6). Curricular deficiencies are known to exist in universities, as well as in elementary and secondary schools. According to an assessment done by the International Studies and Programs Review and Planning Committee at Michigan State University:

Universities do not provide the necessary international education in many essential areas or require students to acquire an adequate knowledge of foreign languages, foreign areas, and international issues in order to meet their future obligations as world citizens. (p. 6)

The attention that international agriculture has been given in agricultural education programs is limited; however, the role of international agriculture is expanding and will become even more vital in the future (Moore, 1990). In addition, agricultural education will play a multifaceted role in global education. Some of the roles Martin (1990) thought that agricultural educators themselves could play in the globalization of agricultural education are as follows:

1. Add a global perspective to instruction in agriculture at all levels--elementary, secondary, postsecondary, and university.

2. Get involved in teacher exchanges with educators in other countries.

3. Facilitate student-to-student exchanges with other countries.

4. Work closely with other teachers in the local school system (i.e., language teachers, social studies teachers) to foster international education activities for students.

5. Broaden their agricultural-experience base by becoming involved in short- and long-term projects in agricultural development to practice the principles of agricultural education in another country.

Many experts have made suggestions with regard to curriculum reform in agricultural education. Foster

(1988), a professor at the University of Nebraska-Lincoln, shared his views regarding internationalizing the curriculum: "Curriculum reform in agricultural education, at both the secondary and university level, is a must if we are to prepare students to be successfully employed in an ever-changing agriculture industry" (p. 1).

Experts like Foster (1988), McCracken and Magisos (1989), and Martin (1989) have shared their thoughts regarding internationalizing the secondary school curriculum. Foster (1988) believed that internationalizing the curriculum could have a positive influence on students of agriculture. He stated: "To be truly educated, they should possess a comprehensive understanding of world issues and policies, not only those affecting agriculture, but those associated with everyday world events" (p. 5).

Similarly, Martin (1989) believed that:

Students need a global perspective if they are to be functional and vital citizens of the world. The truly educated person in today's world cannot function within narrow perspectives. We need citizens who have a knowledge of world agriculture, geography and the uses of products from around the world. For the economics of agriculture to work in this world, all citizens need to have an understanding of the cultural differences and similarities of all those involved. Only then can we expect to strengthen communication. (p. 4)

In his article "A Global Perspective for Agricultural education," Martin (1989) said that one of the major

challenges for agricultural education in the next decade will be how professors address the issue of growing international interdependence in the area of agriculture. The author believed that agricultural educators at all levels would have to respond to such questions as: Why should we teach international agriculture in vocational agriculture? What might be taught in order to add a global perspective to vocational agriculture? What strategies should be implemented to add a global perspective to vocational agriculture? Martin believed that, "for the economics of agriculture to work in this world, all citizens need to have an understanding of the cultural differences and similarities of all those involved" (p. 4).

McCracken and Magisos (1989), professors in the Department of Agricultural Education at The Ohio State University, believed that the first problem in internationalizing the curriculum is "a general lack of knowledge about the world in general, and international agriculture in particular, among secondary students of agriculture. Students need a global perspective if they are to be functional and vital citizens of the world" (p. 4).

Many experts have asserted that concepts of international agriculture should be an integral part of the



agricultural curriculum. Baker, Miller, Brill, and Feliz (1990) wrote:

International agriculture is becoming an increasingly important aspect of agricultural education. The challenge faced by agricultural educators is to inform students of aspects of international agriculture which may affect them as producers and consumers of agricultural products. (p. 9)

Braun (1987) believed that "a local vocational agriculture program has an obligation to incorporate an international understanding of agriculture into its curriculum" (p. 9). He viewed the world as a marketplace and the marketing of agricultural products as a top-priority problem.

Bobbitt and Meaders (1987), professors in the Department of Agricultural and Extension Education at Michigan State University, indicated that:

Secondary agricultural education is a logical place for international agricultural education concepts to be introduced to future participants in the U.S. agricultural/agribusiness work force. Just as it played a key role in improving leadership skills in the rural farm community of America, secondary agriculture must play a more prominent role in educating the agricultural industry of important international concepts. (pp. 13-14)

A number of experts have agreed that international concepts should be integrated into the secondary agricultural education curriculum. Bobbitt and Meaders (1987) shared this viewpoint, stating that "secondary agricultural education is a logical place for these concepts to be

introduced to future participants in the U.S. agricultural/agribusiness work force" (p. 12).

Efforts to internationalize secondary agricultural education programs have received increased attention in Michigan during the past eight years. Even so, in his study of the attitudes of agriscience teachers in Michigan toward making their programs more internationally focused, Hossain (1992) noted that making the curriculum in Michigan schools more internationally focused was not a high priority of personnel in the Michigan Department of Education.

Materials concerning the infusion of international agriculture into the curriculum were prepared and put into the hands of educators who were willing to adopt and use these materials. Michigan project staff members spent a year developing and field testing an instructional manual entitled Internationalizing Agricultural Education Programs (IAEP). The leadership for this effort comprised faculty and staff from the Department of Agricultural and Extension Education at Michigan State University. Funding for the initiative was received from USAID Title XII monies, based on a Joint Memorandum of Understanding among the Agency for International Development, Michigan State University, and North Carolina Agricultural and Technical State University.

In 1988, Dr. Eddie Moore stressed the need for MSU to play an expanded role in international education, particularly as it relates to undergraduate and graduate programs. In 1989, Michigan and California were selected by the National Council for Agricultural Education to provide national leadership for internationalizing agricultural education programs throughout the United States. Universities in these states have been actively involved in developing instructional materials to be used in secondary and postsecondary agricultural classes. Such materials are a step toward internationalizing the agricultural education curriculum.

Major Findings From Studies Regarding Attitudes  
of Agriscience Teachers and Students Toward  
Internationalizing Agricultural Education

In Hossain's study of the attitudes of agriscience teachers in Michigan toward internationalizing agricultural education programs, more than half of the respondents were 40 years old or younger, 41 of them had a bachelor's degree, more than two-thirds of the respondents had 10 years or more of teaching experience, and 62% of the respondents primarily taught agriscience, natural resources, and horticulture. Most of the participants belonged to professional societies, through which they could receive information about internationalizing the agricultural education curriculum. The majority of the

teachers in the study read Agricultural Education magazine.

The findings from Hossain's study indicated that there were significant differences in attitudes, based on respondents' demographic characteristics. Few differences in attitudes were found between teachers who received and did not receive the IAEP instructional materials. Ninety-two percent of the teachers in Hossain's sample had favorable attitudes toward student-related aspects of making their programs more internationally focused. Seventy percent of them had favorable attitudes toward teacher-related aspects, and 84% had favorable attitudes toward educational-linkage aspects of making the curriculum more internationally focused.

In William's (1992) study of Michigan agriscience students' attitudes toward internationalizing agricultural education programs, the sample was relatively homogeneous in terms of demographic characteristics. A significant difference was found in the attitudes of the respondents, based on FFA membership and supervised agricultural experiences. However, no significant differences in attitudes were found, based on gender, place of residence, years of agricultural classes completed, and grade point average.

Students who participated in the study had an overall positive response to internationalizing the agricultural

education curriculum and global/international agricultural concepts. The students gave a high rating to FFA international exchange programs, audio-visuals, computer programs, and television programs as methods of learning about global/international concepts. Few statistically significant differences were found in the responses of students whose instructors had or had not participated in the Michigan IAEP curriculum-development/in-service project.

## CHAPTER III

### DESIGN AND METHODOLOGY

#### Introduction

The researcher's purpose in this study was to determine the attitudes of African American agricultural education teachers in North Carolina toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused. The design of the study was descriptive survey research.

In this chapter, the design and methodology of the study are explained. The conceptual design is discussed first, followed by a description of the independent and dependent variables examined in the study. The study population and the instrumentation used in the study also are discussed. Methods used in collecting and analyzing the data are described.

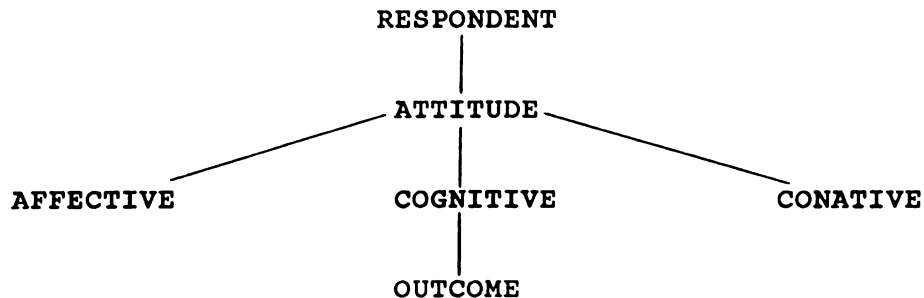
#### Conceptual Design of the Study

"An attitude is a disposition to respond favorably or unfavorably to an object, person, institution, or event" (Ajzen, 1985, p. 4). Attitude is a construct that is not accessible to direct observation; rather, it must be inferred from measurable responses made by a respondent.

Responses to attitude fall into three categories: cognitive, affective, and conative.

Cognitive responses reflect perceptions of, and information about, the attitude object. Affective responses deal with an evaluation of, and feelings about, the attitude object. Conative responses are behavioral inclinations, intentions, commitments, and actions with respect to the attitude object. The following example might help the reader better understand the three constructs:

A particular agricultural education teacher might feel uneasy about internationalizing the agricultural education curriculum (negative affect), but at the same time believe that it is important for students to be aware of the global society in which they live (positive cognitive component) and agree to support efforts to internationalize the curriculum (favorable conative component). The following schematic diagram illustrates the process of measuring the attitudes of the agricultural education teachers who participated in this study:



### The Independent and Dependent Variables

The independent variables in this study were 12 demographic characteristics of the African American agricultural education teachers. These characteristics were age, gender, years of teaching experience, membership in professional societies/organizations, cosmopolitanism, reading Agricultural Education magazine, interest in receiving IAEP instructional materials, reading newspapers for agricultural information, residence, mobility, participation in national and international seminars/conferences, and primary teaching area. The dependent variable was the agricultural education teachers' attitudes toward making their programs more internationally focused.

### The Study Population

The target population was all 36 African American secondary school agricultural education teachers in North Carolina. A current list of these teachers was obtained from the Department of Agricultural Education and Extension at North Carolina Agricultural and Technical State University. Because the total population was included in the study, no sample selection was necessary.

### Instrumentation

#### Development of the Instrument

The instrument used in this study was developed from similar instruments used by Hossain and Williams in their



1992 studies. The instrument consisted of two parts. The first part contained attitudinal statements on three aspects of internationalizing agricultural education curricula: student-related aspects, teacher-related aspects, and educational-linkage aspects. Respondents were asked to indicate their attitude about each of the statements using a 5-point Likert-type attitudinal scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The second part of the instrument contained items concerning personal characteristics of the respondents, including age, gender, years of teaching experience, membership in professional societies/organizations, cosmopolitanism, reading Agricultural Education magazine, interest in receiving IAEP instructional materials, reading newspapers for agricultural information, residence, mobility, participation in national and international seminars/conferences, and primary teaching area.

#### Validity and Reliability

The researcher used statements similar to those used by Hossain (1992). The process Hossain used in validating the instrument items and establishing instrument reliability consisted of the following steps:

1. Selecting a jury of experts, based on their expertise in agricultural education and/or in instrument development.

2. Presenting the jury of experts with a cover letter, a copy of the survey instrument, and a page on which to write comments.

3. Modifying and/or reorganizing the statements, based on suggestions made by the jury of experts.

4. Preparing the instrument in booklet form for pilot testing.

5. Selecting a pilot-test group.

6. Mailing a cover letter, the instrument, and a return-addressed envelope to the pilot-test group.

7. Analyzing the data, using the Statistical Package for the Social Sciences (SPSS/PC+) in the Department of Agricultural and Extension Education at Michigan State University.

8. Calculating the reliability of the instrument items addressing student-related, teacher-related, and educational-linkage aspects of teachers making their programs more internationally focused.

The reliability coefficients for the student-related, teacher-related, and educational-linkage items on Hossain's questionnaire were .91, .93, and .94, respectively.

Williams (1992) used the following process to validate and establish the reliability of his instrument:

1. Selecting a panel of experts to review the survey, in order to help establish content validity and suitability of the language for secondary students.

2. Having a reading consultant review the survey and subjecting the survey to the Grammatik IV computer program for readability levels and linguistic statistics.

3. Revising the survey, based on review by the panel of experts.

4. Pilot testing the survey with a sample group.

The reliability coefficient for Part I of Williams's instrument was .96; for Part II, the reliability coefficient was .83.

Because the present researcher modified instruments whose validity and reliability Hossain and Williams established in their studies, the instrument used in this study had to be validated only for use in North Carolina. According to Oppenheim (1969), a panel of experts should be selected to agree on the content validity of the statements in a questionnaire. He stated that content validity, based on experts' judgment, is of essence. Thus, a jury of experts from the Agricultural Education and Extension Department at NCA&T and members of the researcher's graduate committee were used to establish the content validity of the instrument for use in this study. Members of the jury of experts were sent a cover letter, a copy of the survey instrument, and a page on which to

write their comments about the instrument and suggestions for improving it (see Appendix A). Based on the comments and suggestions made by the jury of experts, certain statements were modified and/or reorganized.

#### Human Subjects Approval

Before initiating the study, the researcher forwarded the instrument and a statement regarding the purpose of the study to the chairperson of the Michigan State University Committee on Research Involving Human Subjects (UCRIHS) for approval. Such approval was necessary because the study involved human subjects. Approval was granted to conduct the research (see Appendix B).

#### Collection of Data

The first mailing was sent to all 36 black secondary school agricultural education teachers in North Carolina on March 15, 1993. A package containing a cover letter explaining the purpose of the study, the questionnaire, and a stamped envelope addressed to the researcher were included in the mailing (see Appendix C). Potential respondents were assured that their replies would be kept confidential; they were encouraged to complete and return their questionnaires in 10 days.

The response rate from the first mailing was 44% (16). A second instrument and a return-addressed stamped

envelope were sent to the 20 nonrespondents on April 5, 1993, with a cover letter urging them to return their completed questionnaires by April 19, 1993 (see Appendix D). The response rate increased to 75% (27). A third instrument and a return-addressed stamped envelope were sent to the remaining nonrespondents on April 26, 1993, with a cover letter urging them to return their completed questionnaires by May 10, 1993 (see Appendix E). As a result of this third and final mailing, the response rate increased to 94% (34). Borg (1981) indicated that a minimum response of 70% is needed to place confidence in the study findings.

#### Data-Analysis Procedures

The data collected from the respondents' questionnaires were coded for processing and analysis. The computer facilities in the Agricultural and Extension Education Department at MSU were used to analyze the data. The SPSS/PC+ computer program was used to perform the data analyses.

Descriptive statistics were used to summarize the data pertaining to the personal characteristics of the respondents. Frequency counts, percentages, and means were calculated for the descriptive data. In addition, t-tests and one-way analyses of variance (ANOVAs) were run to determine whether there were significant differences in

respondents' attitudes toward student-related, teacher-related, and educational-linkage aspects of making their curriculum more internationally focused, based on selected demographic characteristics of the respondents.

On the questionnaire, respondents indicated their attitudes toward various aspects of making their programs more internationally focused, using a 5-point Likert-type scale. A rating of 1 indicated strong disagreement, and a rating of 5 indicated strong agreement. The mean scores for the attitudinal statements were calculated to discover the favorability of the respondents' attitudes toward various aspects of making their programs more internationally focused.

The results of these data analyses are presented in Chapter IV.

## CHAPTER IV

### FINDINGS AND DISCUSSION

#### Introduction

The researcher's purpose in this study was to determine the attitudes of African American agricultural education teachers in North Carolina toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused. In this chapter, the findings of the study are presented in three sections. Demographic characteristics of the African American agricultural education teachers who completed the survey instrument are presented first. Second, the attitudes of the respondents toward student-related aspects, teacher-related aspects, and educational-linkage aspects of making their programs more internationally focused are presented. The third section contains results of the analyses of differences in attitudes based on respondents' demographic characteristics.

#### Demographic Characteristics of the Respondents

The demographic characteristics that were examined in this study were age, gender, years of teaching experience, membership in professional societies/organizations, cosmopolitanism, reading Agricultural Education magazine,

reading newspapers for agricultural information, residence, mobility, participation in national and international seminars/conferences, and primary teaching area. The researcher also was interested in knowing whether the participants were interested in receiving IAEP instructional materials, although this is not a demographic characteristic. Findings regarding each of these characteristics are presented in the following pages.

### Age

The respondents ranged in age from 25 to 63 years; the average age was 38.21 years. As shown in Table 1, the largest proportion (44%) of the agricultural education teachers in this study were 31 to 40 years old, compared to 27% who were 25 to 30 years old. Twenty-one percent of the respondents were 42 to 52 years old, whereas only 9% were 53 to 63 years old. More than two-thirds (71%) of the respondents were 41 years old or younger.

Table 1.--Distribution of African American agricultural education teachers in North Carolina according to their age (N = 34).

Age	Number	Percent
25-30 years	9	26.5
31-41 years	15	44.1
42-52 years	7	20.6
53-63 years	3	8.8
Total	34	100.0



Gender

Table 2 shows the distribution of the respondents according to their gender. As shown in the table, 91% (31) of the respondents were males. The remaining 9% (3) of the respondents were females.

Table 2.--Distribution of African American agricultural education teachers in North Carolina according to their gender (N = 34).

Gender	Number	Percent
Male	31	91.2
Female	3	8.8
Total	34	100.0

Teaching Experience

Data concerning the teaching experience of the respondents are shown in Table 3. More than one-half (59% or 20) of the respondents had 10 years or more of teaching experience. Almost one-third (32% or 11) of the respondents had 2 to 9 years of teaching experience, and only 9% (3) had fewer than 2 years of teaching experience. Thus, the majority (59% or 20) of the teachers in this study had a high level of teaching experience.

Table 3.--Distribution of African American agricultural education teachers in North Carolina according to their teaching experience (N = 34).

Teaching Experience	Number	Percent
Fewer than 2 years	3	8.8
2-5 years	7	20.6
6-9 years	4	11.8
10-13 years	6	17.6
14 years or more	14	41.2
Total	34	100.0

Membership in Professional Societies/Organizations

Respondents were asked to indicate the professional societies/organizations of which they had been members during the last 5 years. These societies/organizations included (a) the North Carolina Vocational Agriculture Teachers Association, (b) the North Carolina Association of Educators, (c) the National Vocational Agriculture Teachers Association, (d) the American Vocational Association, (e) the North Carolina 4-H Agent Association, (f) FFA Alumni, and (g) Gamma Sigma Delta.

As shown in Table 4, 25 (74%) respondents held membership in the North Carolina Vocational Agriculture Teachers Association. Twenty-four (71%) respondents belonged to the National Vocational Agriculture Teachers Association. Twenty (59%) respondents held membership in the North Carolina Association of Educators. Fourteen

(42%) respondents held membership in the American Vocational Association, and 12 (35%) were FFA Alumni. Only 3 (9%) of the 34 agricultural education teachers who participated in this study held membership in the North Carolina 4-H Agent Association. None of the respondents held membership in the Association for International Education and Extension, Phi Delta Kappa, Phi Kappa Phi, or Alpha Zeta.

Table 4.--Distribution of African American agricultural education teachers in North Carolina according to their membership in professional societies/organizations.

Society/Organization	Number	Percent
North Carolina Vocational Teachers Association	25	74
National Vocational Agriculture Teachers Association	24	71
North Carolina Association of Educators	20	59
American Vocational Association	14	41
FFA Alumni	12	35
North Carolina 4-H Agent Association	3	9
Gamma Sigma Delta	1	3

#### Cosmopolitanism

The term "cosmopolitanism" refers to the orientation of an individual external to his or her own social system.

Respondents were asked to indicate their level of cosmopolitanism by responding to the following questions: Have you ever traveled to a foreign country? Have you ever hosted a foreigner in your home? Have you ever hosted a foreigner in your class?

As shown in Table 5, 14 (41%) of the agricultural education teachers who participated in this study had traveled to another country. Thirty percent (10) of the respondents had hosted a foreigner in their class, and 9% (3) of them had hosted a foreigner in their homes.

Table 5.--Distribution of African American agricultural education teachers in North Carolina according to their cosmopolitanism.

Cosmopolitanism	Number	Percent
Traveled to a foreign country	14	41
Hosted a foreigner in class	10	30
Hosted a foreigner in the home	3	9

#### Reading Agricultural Education Magazine

More than two-thirds (73% or 24) of the respondents read Agricultural Education magazine; 27% (9) did not (see Table 6).

Table 6.--Distribution of African American agricultural education teachers in North Carolina according to their reading of Agricultural Education magazine.

Read Magazine	Number	Percent
Yes	24	72.7
No	9	27.3
Total	33	100.0

The teachers who read Agricultural Education magazine were asked how many issues they had read during 1991-92. As shown in Table 7, one-half (50% or 12) of the respondents read 6 to 9 issues of the magazine, compared to 25% (6) who read 10 or more issues. Four respondents (17%) read 2 to 5 issues of the magazine, whereas 8% (2) read fewer than 2 issues during that period. Hence, a majority of the respondents read Agricultural Education magazine.

Table 7.--Distribution of African American agricultural education teachers in North Carolina according to the number of issues of Agricultural Education magazine read during 1991-92.

Number of Issues	Number	Percent
Fewer than 2 issues	4	8.3
2 to 5 issues	4	16.7
6 to 9 issues	12	50.0
10 or more issues	6	25.0

Interest in Receiving IAEP  
Instructional Materials

More than 90% (31) of the respondents were interested in receiving instructional materials relative to making their programs more internationally focused. Two (6%) of the respondents were not interested in receiving such materials (see Table 8).

Table 8.--Distribution of African American agricultural education teachers in North Carolina according to their interest in receiving IAEP instructional materials.

Interested	Number	Percent
Yes	31	93.9
No	2	6.1
Total	33	100.0

Reading of Newspapers for  
Agricultural Information

More than 90% (31) of the respondents read newspapers for agricultural information, whereas only 9% (3) did not (see Table 9).

Table 9.--Distribution of African American agricultural education teachers in North Carolina according to their reading of newspapers for agricultural information.

Read Newspapers for Ag. Info.	Number	Percent
Yes	31	91.2
No	3	8.8
Total	34	100.0

The respondents who read newspapers for agricultural information were asked to furnish the names of those newspapers. Twenty-six newspapers were mentioned. The News and Observer was read by the most respondents, followed by the Charlotte Observer, the Daily Herald, the Fayetteville Observer Times, the Wilson Daily Times, and the Daily Southerner (see Table 10).

#### Residence

The data shown in Table 11 indicate that almost one-half (47.1% or 16) of the respondents lived in rural nonfarm areas. Slightly more than one-fifth (24% or 8) of the respondents lived in rural farm areas, and 18% (6) lived in suburban areas. The lowest proportion (12% or 4) of respondents lived in urban areas.

Table 10.--Distribution of African American agricultural education teachers in North Carolina according to newspapers read.

Newspaper	No.	Newspaper	No.
News and Observer	9	Henderson Daily	1
Charlotte Observer	5	Durham Herald	1
Daily Herald	5	News Reporter	1
Fayetteville Obser.	5	Wilmington Morn. Star	1
Wilson Daily Times	3	Winston-Salem Journal	1
Daily Southerner	2	Farm Journal	1
Robensonian	2	Progressive Farmer	1
Evening Telegram	2	Wallace Enterprise	1
Roanoke Rapids	1	Anson Record	1
Enquirer Journal	1	State News	1
Northampton News	1	Daily Record	1
Harnette News	1	Louisburg Exchange	1
Kinston Free Press	1	FFA Manager	1

Table 11.--Distribution of African American agricultural education teachers in North Carolina according to their residence.

Residence	Number	Percent
Rural nonfarm	16	47.1
Rural farm	8	23.5
Suburban	6	17.6
Urban	4	11.8
Total	34	100.0

### Mobility

As shown in Table 12, more than two-fifths (44% or 15) of the respondents had never changed their residence during the past 10 years, whereas 27% (9) had changed



their residence 2 to 3 times. Fifteen percent (5) of the respondents had changed their residence at least once, compared to 12% (4) who had changed 4 to 6 times; only 3% (1) had changed residence more than 10 times.

Table 12.--Distribution of African American agricultural education teachers in North Carolina according to their changes in residence during the past 10 years.

Number of Changes	Number	Percent
Never changed	15	44.1
1 time	5	14.7
2-3 times	9	26.5
4-6 times	4	11.8
More than 10 times	1	2.9
Total	34	100.0

Participation in National and International Seminars/Conferences

As shown in Table 13, the majority (67% or 22) of the respondents had participated in fewer than 2 national seminars/conferences, and slightly less than one-fourth (24% or 8) had participated in 2 to 5 national seminars/conferences since entering the teaching profession. Six percent (2) of the respondents had participated in 10 to 13 seminars/conferences, and 3% (1) had participated in 14 or more seminars/conferences.

Table 13.--Distribution of African American agricultural education teachers in North Carolina according to their participation in national seminars/conferences.

Amount of Participation	Number	Percent
Fewer than 2 seminars/conferences	22	66.7
2-5 seminars/conferences	8	24.2
10-13 seminars/conferences	2	6.1
14 or more seminars/conferences	1	3.0
Total	33	100.0

The greatest proportion (97% or 32) of respondents had participated in fewer than 2 international seminars/conferences. The remaining respondent (3%) had participated in 2 to 5 international seminars/conferences since entering the teaching profession (see Table 14). Thus, it can be seen that the responding teachers had a very low level of participation in international seminars and conferences.

Table 14.--Distribution of African American agricultural education teachers in North Carolina according to their participation in international seminars/conferences.

Amount of Participation	Number	Percent
Fewer than 2 seminars/conferences	32	97
2-5 seminars/conferences	1	3
Total	33	100

Primary Teaching Area

Table 15 contains data concerning the respondents' primary teaching areas in the secondary schools. More than half (53% or 18) of the respondents primarily taught horticulture, whereas 21% (7) taught production agriculture, 12% (4) taught agriculture mechanics, 9% (3) taught forestry and natural resources, and only 6% (2) taught an introductory agriculture and natural resources course or a class on agriculture in our lives.

Table 15.--Distribution of African American agricultural education teachers in North Carolina according to their primary teaching area.

Teaching Area	Number	Percent
Horticulture	18	52.9
Production agriculture	7	20.6
Agriculture mechanics	4	11.8
Forestry & natural resources	3	8.8
Intro. to agriculture & natural resources/agriculture in our lives	2	5.9
Total	34	100.0

Respondents' Attitudes Toward Various Aspects  
of Making Their Curriculum More  
Internationally Focused

An attitude is "a predisposition to respond favorably or unfavorably" to something (Ajzen, 1988, p. 4). The success of helping secondary school agricultural education

teachers make their programs more internationally focused is directly related to the teachers' attitudes toward various aspects of these program thrusts. In this study, it was important to understand the attitudes of the participants toward making their programs more internationally focused, in order to provide them with the proper guidance for planning and executing such programs.

Three different aspects of making the program more internationally focused were considered in this study. These were (a) student-related aspects, (b) teacher-related aspects, and (c) educational-linkage aspects of the programs.

Respondents' mean scores on the Likert-type statements concerning the three aspects of making their programs more internationally focused were calculated using the SPSS/PC+ computer program. Scores on each statement could range from 1.00 to 5.00, with a rating of 1.00 indicating strongly disagreeable attitudes toward making their programs more internationally focused and a score of 5.00 indicating strongly agreeable attitudes toward this issue. Even though a scale ranging from Strongly Disagree (1) to Strongly Agree (5) was used in the instrument, the researcher developed the following categories as a way of trying to determine the extent to which the respondents were favorable toward the three

aspects of making their programs more internationally focused:

<u>Category</u>	<u>Rating</u>
Highly Unfavorable	< 1.50
Unfavorable	1.50-2.49
Neutral	2.50-3.49
Favorable	3.50-4.49
Highly Favorable	> 4.49

Respondents' attitudes regarding each of the aspects are discussed in the following sections.

Respondents' Attitudes Toward Student-Related Aspects of Making Their Curriculum More Internationally Focused

The survey instrument contained 35 statements concerning student-related aspects of making the programs more internationally focused. Respondents indicated their attitude toward each statement, using a 5-point Likert-type scale ranging from Highly Unfavorable (1) to Highly Favorable (5). Respondents' computed mean scores for these statements ranged from 3.91 to 4.94; the average was 4.43. Thus, the respondents were distributed between only two categories with regard to student-related aspects of making their programs more internationally focused, as shown in Table 16.

Table 16.--Distribution of African American agricultural education teachers in North Carolina according to their mean ratings of student-related aspects of making their programs more internationally focused.

Rating	Number	Percent
Favorable	15	46.9
Highly Favorable	19	53.1
Total	34	100.0

The data in Table 16 indicate that more than half (53% or 19) of the respondents had highly favorable attitudes toward student-related aspects of making their programs more internationally focused. The remaining respondents (47% or 15) had favorable attitudes.

Means also were calculated for each of the statements concerning student-related aspects. These means are shown in Appendix F, Table F.1. All of the means ranged from 4.18 to 4.71 except the mean for the statement, "Basic IAEP concepts are not too complex for the average agriculture education student" (Mean = 3.94).

The findings showed that, in general, the respondents had highly favorable attitudes toward the student-related aspects of making their programs more internationally focused. The respondents agreed that students should understand (a) the basic geography of the state, nation, and world; (b) global agriculture and its effect on U.S.

agriculture; (c) future changes in global agriculture; (d) interaction with people of other countries; (e) international marketing systems; (f) culture, infrastructure, standard of living, economy, politics, and natural resources of other countries; (g) the global perspective with respect to career opportunities; and (h) interdependence.

Respondents' Attitudes Toward Teacher-Related Aspects of Making Their Curriculum More Internationally Focused

The survey instrument contained 27 statements concerning teacher-related aspects of making the programs more internationally focused. Respondents indicated their attitude toward each statement, using a 5-point Likert-type scale ranging from Highly Unfavorable (1) to Highly Favorable (5). Respondents' computed mean scores for these statements ranged from 3.41 to 5.00; the average was 4.11. Thus, the respondents were distributed among only three categories with regard to teacher-related aspects of making their programs more internationally focused, as shown in Table 17.

The data presented in Table 17 indicate that almost three-fourths (73% or 22) of the respondents had favorable attitudes toward teacher-related aspects of making their programs more internationally focused. Almost one-fourth (23% or 7) of the respondents had highly favorable

attitudes, and only 1 (3.3%) had a neutral attitude about such aspects.

Table 17.--Distribution of African American agricultural education teachers in North Carolina according to their mean ratings of teacher-related aspects of making their programs more internationally focused.

Rating	Number	Percent
Neutral	1	3.3
Favorable	22	73.4
Highly Favorable	7	23.3
Total	30	100.0

The means calculated for each statement concerning teacher-related aspects are shown in Appendix F, Table F.2. Twenty-six of the 27 statements had means above 3.5, indicating favorable or highly favorable attitudes. The only statement with a mean below 3.5 was "Internationalizing my agricultural education program will improve my working relationship with other school personnel" (Mean = 3.42).

The respondents had favorable attitudes about the teacher-related aspects of making their programs more internationally focused. They indicated it is a worthy effort and will help them improve their working relations with others and agreed to support the program. They were



also interested in having the FFA host students from other countries, serving on an advisory committee, and participating in overseas study tours. They thought that agricultural education teachers needed inservice training and that successful agricultural education teachers should be recognized by the North Carolina Department of Public Instruction, the local school districts, and the North Carolina Vocational Agricultural Teachers Association for their efforts.

Respondents' Attitudes Toward Educational-Linkage Aspects of Making Their Curriculum More Internationally Focused

The survey instrument contained 30 statements concerning educational-linkage aspects of making the respondents' programs more internationally focused. Respondents indicated their attitude toward each statement, using a 5-point Likert-type scale ranging from Highly Unfavorable (1) to Highly Favorable (5). Respondents' computed mean scores for these statements ranged from 3.53 to 4.93; the average was 4.18. Thus, the respondents were distributed between only two categories, as shown in Table 18. The data presented in the table indicate that 72% (23) of the respondents had favorable attitudes toward educational-linkage aspects of making their programs more internationally focused, whereas 28% (9) of the respondents had highly favorable attitudes.

Table 18.--Distribution of African American agricultural education teachers in North Carolina according to their mean ratings of educational-linkage aspects of making their programs more internationally focused.

Rating	Number	Percent
Favorable	23	71.9
Highly Favorable	9	28.1
Total	32	100.0

The means for all of the statements regarding educational-linkage aspects are shown in Appendix F, Table F.3. The means ranged from 3.59 to 4.53, indicating favorable attitudes toward educational-linkage aspects of making the programs more internationally focused. The findings indicated that the agricultural education teachers who participated in this study were in agreement that, in making their programs more internationally focused, their program should:

1. Be a part of the North Carolina Department of Public Instruction, the Division of Vocational Education Services, the local school district, and the Department of Agricultural Education and Extension at North Carolina A & T State University.

2. Maintain linkages with the United States Department of Agriculture, the North Carolina Department of Agriculture, and the private sector.

3. Be integrated into the graduate and undergraduate programs of schools, colleges, and universities.

4. Involve departmental staff, faculty, administrators, teachers, counselors, advisory committee members, members from the local community, FFA alumni, and parents in the planning, evaluation, and implementation of the international initiatives.

#### Differences in Attitudes Based on Respondents' Demographic Characteristics

Considering that there were only 34 respondents, and there were major differences in the number of respondents relative to demographics, the researcher was not obligated to determine significant differences by examining the demographic characteristics. However, to learn how to use and interpret SPSS/PC+, the researcher decided to run some additional analyses. The statistical analyses that were run on the demographic characteristics were the t-test and ANOVA. The t-test is used to determine whether there was a significant difference between the means of two categories. This test was run on the following demographic characteristics: gender, reading Agricultural Education magazine, reading newspapers for agricultural information, and cosmopolitanism.

The findings indicated that there were no significant differences in the attitudes of the African American

agricultural education teachers based on gender, reading newspapers for agricultural information, and cosmopolitanism. However, the findings did indicate that there was a significant difference in the attitudes of the African American agricultural education teachers toward teacher-related aspects of making their programs more internationally focused, based on reading Agricultural Education magazine. The respondents who read Agricultural Education magazine had a higher mean value on the educational-linkage statements than did those who did not read the magazine.

One-way ANOVA is used to compare the means of more than two variables. Demographic characteristics that were examined using one-way ANOVA included primary teaching area, age, teaching experience, and residence.

The findings indicated that there were no significant differences in the attitudes of the African American agricultural education teachers based on age, teaching experience, and residence. However, the findings did indicate a significant difference in the African American agricultural education teachers' attitudes toward the educational-linkage aspect of making their programs more internationally focused, based on their primary teaching area.

## CHAPTER V

### SUMMARY, MAJOR FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### Summary

Since October 1, 1987, the Department of Agricultural Education and Extension at North Carolina Agricultural and Technical State University (NCA&T) and the Department of Agricultural and Extension Education at Michigan State University (MSU) have collaborated to give greater attention to international agriculture and related efforts. North Carolina has not been successful in obtaining adequate funds to implement a comprehensive international agricultural education program thrust. However, the state is most interested in providing high school graduates with an orientation to international agriculture. This is particularly true for the agricultural education faculty at NCA&T. Agricultural educators have a responsibility to add a global perspective to the study of agricultural systems if students are to be able to apply the principles of agriculture and human development in a complex world community.

In this study, the researcher's purpose was to determine the attitudes of African American secondary

school agricultural education teachers in North Carolina toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused. The specific objectives were:

1. To determine the attitudes of African American agricultural education teachers in North Carolina toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused.

2. To examine the following demographic characteristics of the African American agricultural education teachers: age, gender, years of teaching experience, membership in professional societies/organizations, cosmopolitanism, reading Agricultural Education magazine, interest in receiving IAEP instructional materials, reading newspapers for agricultural information, residence, mobility, participation in national and international seminars/ conferences, and primary teaching area.

3. To provide information about African American agricultural education teachers' attitudes and their demographic characteristics that will assist in planning and implementing future international agricultural education program thrusts in North Carolina.

The design of the study was descriptive in nature. Data were collected by means of questionnaires that were sent to African American agricultural education teachers

(N = 36) in North Carolina in the 1992-93 academic year. The overall response rate was 94.4% (N = 34). The instrument used to collect the data for the study consisted of two sections. The first section contained statements concerning student-related, teacher-related, and educational-linkage aspects of making the secondary school programs more internationally focused. The second section was designed to elicit demographic information about the respondents.

Descriptive statistics (frequencies, means, and percentages) were used to summarize the data pertaining to the demographic characteristics of the respondents and their attitudes toward student-related, teacher-related, and educational-linkage aspects of making their educational programs more internally focused. Major findings are summarized in the following section.

### Major Findings

#### Demographic Characteristics of the Respondents

Almost three-fourths (71% or 24) of the respondents were 41 years old or younger. Ninety-one percent (31) of the respondents were males. More than one-half (59% or 20) of them had 10 or more years of teaching experience. Fifty-three percent (18) of the respondents primarily taught horticulture. The majority (47% or 16) of the





respondents lived in a rural nonfarm area. More than two-fifths (44% or 15) of the respondents had never changed their residence in the past 10 years.

Twenty-five respondents (74%) held membership in the North Carolina Vocational Agriculture Teachers Association, and 24 (71%) belonged to the National Vocational Agriculture Teachers Association. The teachers had a very low level of participation in national and international seminars. The majority (67% or 22) of respondents had participated in fewer than two national seminars, and 97% (32) had participated in fewer than two international seminars. The largest portion of respondents (14 or 41%) had traveled to a foreign country, 10 (30%) respondents had hosted a foreigner in their class, and only 3 (9%) respondents had hosted a foreigner in their homes.

The majority (24 or 73%) of the teachers in this study read Agricultural Education magazine. Fifty percent (12) of those who read the magazine read 6 to 9 issues during 1991-92. Ninety-one percent (31) of the teachers read newspapers for agricultural information. In addition, almost 94% (31) of the respondents were interested in receiving instructional materials relative to making their programs more internationally focused.

Attitudes Toward Student-Related  
Aspects of Making the Curriculum  
More Internationally Focused

All 34 teachers who participated in this study had favorable (47%) or highly favorable (53%) attitudes toward student-related aspects of making their programs more internationally focused. They agreed that students should understand (a) the basic geography of the state, nation, and world; (b) global agriculture and its effect on U.S. agriculture; (c) future changes in global agriculture; (d) interactions with people from other countries; (e) international marketing systems; (f) the culture, infrastructure, standard of living, economy, politics, and natural resources of other countries; (g) global perspectives with respect to career opportunities; and (h) international interdependence.

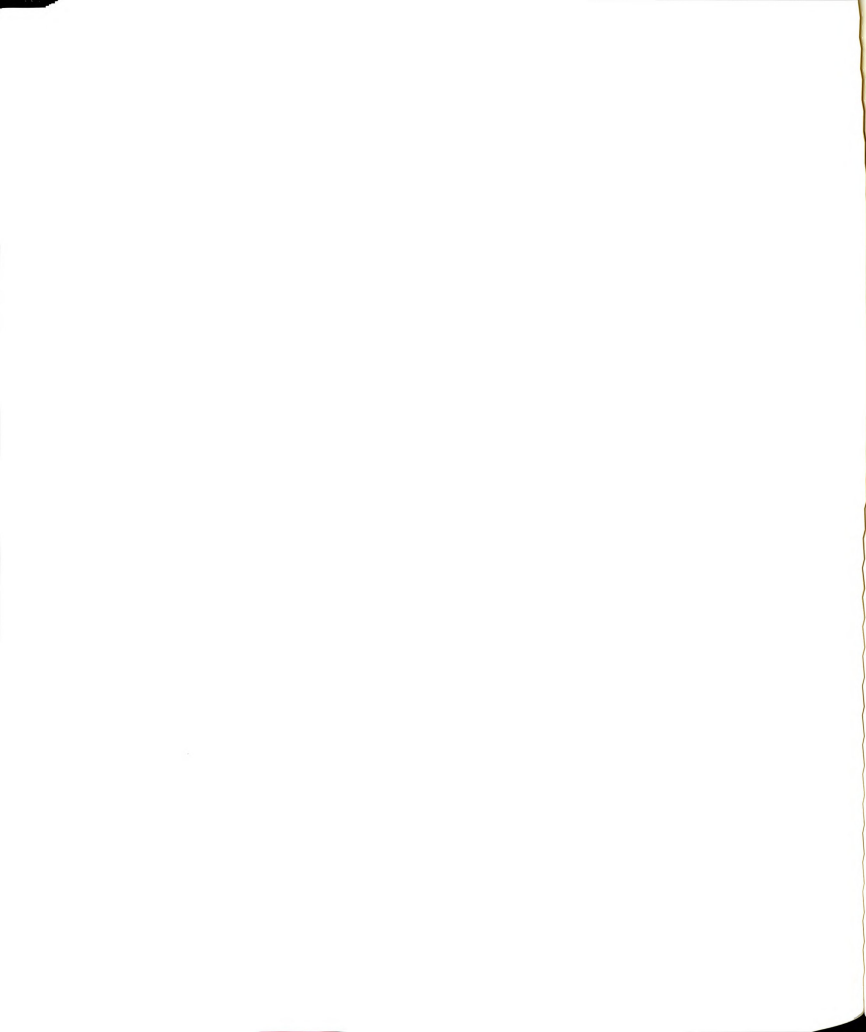
Attitudes Toward Teacher-Related  
Aspects of Making the Curriculum  
More Internationally Focused

The largest portion of the participating teachers had favorable (22 or 73%) or highly favorable (7 or 23%) attitudes toward teacher-related aspects of making their programs more internationally focused. They indicated that the effort was a worthy one, that it would help them improve their working relations with others, and that they were willing to support the program. The respondents were interested in having their FFA chapter host students from

other countries, in serving on an advisory committee, and in participating in an overseas study tour. The respondents thought inservice training was needed and that teachers who were successful should be recognized by the North Carolina Department of Public Instruction, the local school board, and the North Carolina Vocational Agricultural Teacher Association for their international efforts.

Attitudes Toward Educational-Linkage  
Aspects of Making the Curriculum  
More Internationally Focused

Thirty-two of the respondents had favorable (23 or 72%) or highly favorable (9 or 28%) attitudes toward educational-linkage aspects of making their programs more internationally focused. They indicated that internationalizing the agricultural education program should be a part of the North Carolina Department of Public Instruction, the Division of Vocational Education Services, the local school district, and the Department of Agricultural Education and Extension at North Carolina A&T State University. They believed that IAEP programs should maintain linkages with the United States Department of Agriculture, the North Carolina Department of Agriculture, and the private sector. They also believed that these .pa programs should be integrated into schools', colleges', and universities' graduate and undergraduate programs.



Respondents also thought that departmental staff, faculty, administrators, teachers, counselors, advisory committee members, people from the local community, FFA alumni, and parents should be involved in the planning, evaluation, and implementation of the programs.

#### Comparison of the Findings With Those From Hossain's Study

This study of the attitudes of African American agricultural education teachers in North Carolina toward internationalizing their agricultural education programs was based on Hossain's (1992) research on the attitudes of agriscience teachers in Michigan toward internationalizing the agricultural education program. Thus, it is appropriate to compare the findings of the two studies. In examining the comparison of findings shown in Table 19, it should be noted that Hossain's sample comprised 160 teachers, whereas 34 teachers participated in the present study.

#### Conclusions

The agricultural education teachers from North Carolina who participated in this research had favorable or highly favorable attitudes toward student-related, teacher-related, and educational-linkage aspects of making their programs more internationally focused. Based on these findings, the researcher concluded that:

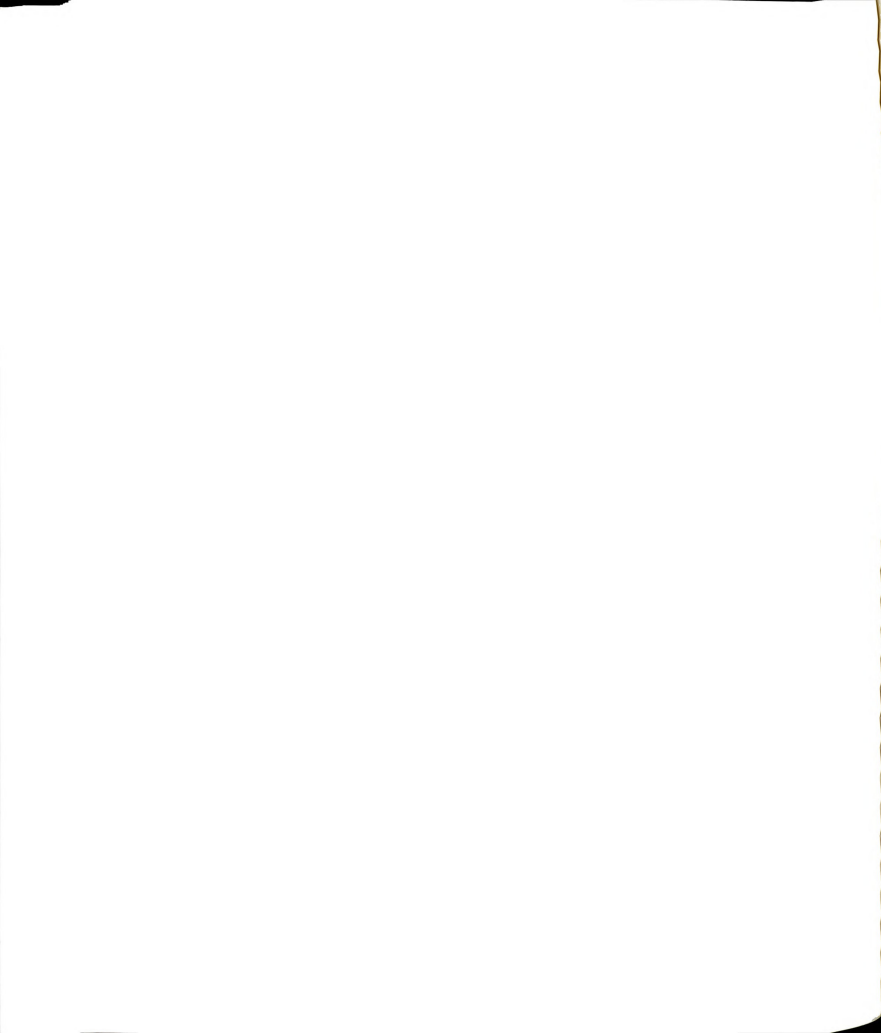


Table 19.--Comparison of the findings from Hossain's study with those from the present study.

Category	North Carolina Agriculture Teachers (N = 34)	Michigan Agriscience Teachers (N = 141)
Age (41 or younger)	71%	56%
Teaching experience (10 or more years)	59%	69%
Primary teaching area	53% (Hortic.)	41% (Ag. & Nat. Resources)
Residence	47% (Rural nonfarm)	45% (Rural farm)
No change in residence in last 10 years	44%	41%
Attitudes toward student-related aspects Favorable/highly favor.	100%	92%
Attitudes toward teacher-related aspects Favorable/highly favor.	97%	70%
Attitudes toward educational-linkage aspects Favorable/highly favor.	100%	80%

1. These agricultural education teachers were interested in internationalizing their programs.

2. These teachers should be involved in the planning, implementation, and evaluation of future internationalizing initiatives in North Carolina.

3. These teachers would support efforts to internationalize the agricultural education programs in their schools.

#### Implications

Internationalizing the agricultural education program is the first step in making students more aware of the global community in which they live. North Carolina has made an effort to internationalize the agricultural education programs in the state. The key implication derived from this study is that North Carolina Agricultural and Technical State University should involve the teachers who participated in this study in future efforts to internationalize the agricultural education programs in the state. These teachers are receptive to internationalizing the program, so it is important for North Carolina Agricultural and Technical State University to take the next step and involve these teachers in the international thrust.



It is also suggested that:

1. Educators in North Carolina should become involved in making their programs more internationally focused.

2. The North Carolina Department of Public Instruction and the Agricultural Education and Extension Department of North Carolina Agricultural and Technical State University should work with the United States Department of Agriculture and the North Carolina Department of Agriculture to make the internationalization effort successful.

3. The North Carolina Department of Agriculture and North Carolina Agricultural and Technical State University should strive to implement internationalization of the program and thereby to increase students' and teachers' global awareness.

4. Selected reading materials and instructional materials on international agriculture should be gathered or prepared for use by the agricultural education teachers in North Carolina.

5. Inservice training should be developed to help agricultural education teachers integrate international concepts into the program.



Recommendations for Further Study

Efforts to internationalize the agricultural education programs in North Carolina are in the beginning stages, and little research has been done on this subject. Thus, the following recommendations are made for further study:

1. A study should be conducted to determine the attitudes of students in North Carolina toward internationalizing the program.

2. A study should be done to determine what factors are associated with agricultural education teachers' participation in internationalizing their programs.

3. The present study should be replicated in other states where internationalizing the agricultural education program has not been given a high priority.

4. Research should be done to determine the attitudes of the entire population of secondary school agricultural education teachers in North Carolina.

APPENDICES

APPENDIX A

LETTER TO JURY OF EXPERTS AND COMMENT SHEET

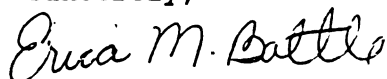
February 9, 1993

Dear Dr.

I am in the process of conducting a Master of Science thesis entitled, "Attitudes of African-American Agricultural Educators Toward Internationalizing Agricultural Education Programs." Enclosed is a draft copy of the questionnaire to be used in the study. It would be a great help to me if you would review the enclosed questionnaire for content validity and make any comments or suggestions. I am particularly interested in your response to the questions on the attached pages. Feel free to make suggestions and/or comments on the questionnaire. Based upon your input and responses from other reviewers, the questionnaire will be revised and sent to the respondents.

If at all possible, I would like to have your reaction to this questionnaire by February 22, 1993. This would allow me to keep on my time schedule for completing all requirements for the Master of Science degree. Thank you for assisting in this study.

Sincerely,



Erica M. Battle  
Master of Science Student

Enclosure (2)

COMMENT SHEET FOR REVIEWERS

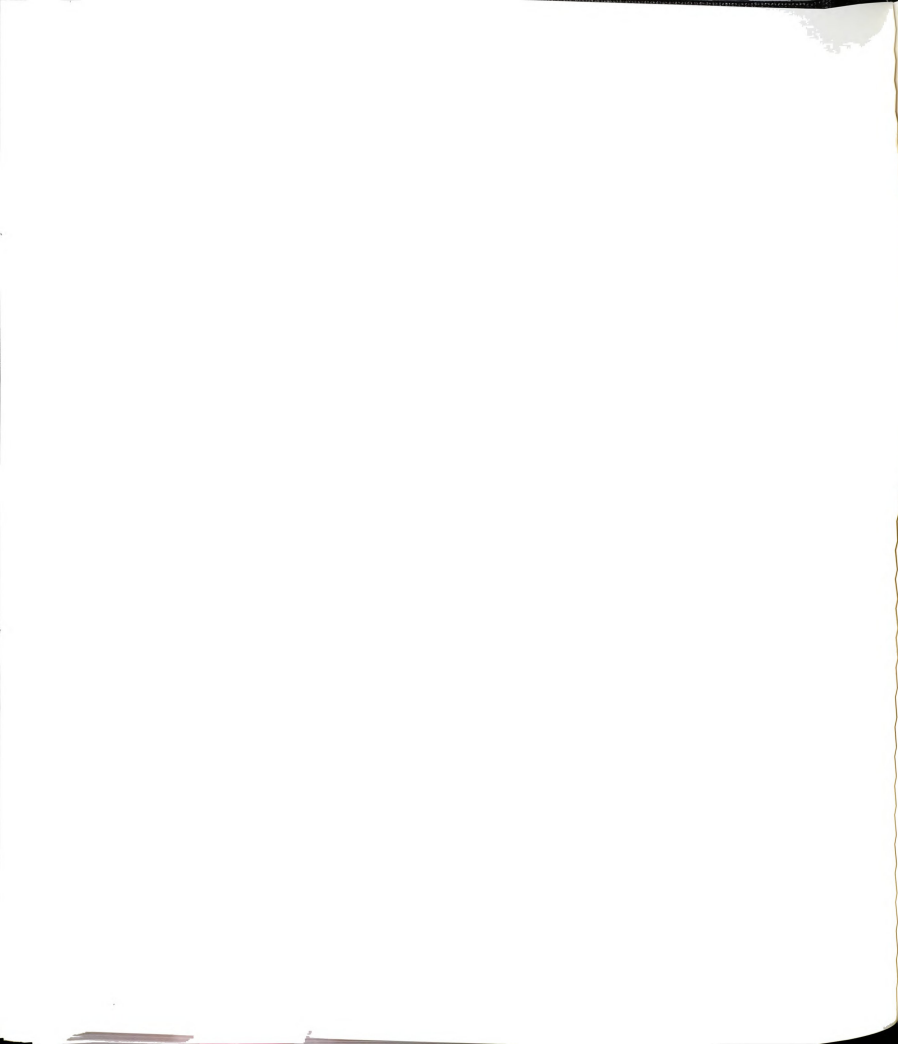
1. Are the directions clear and easy to understand?  
If not, please make suggestions for improving.
  
2. Is the content easy to understand? If not, please explain.
  
3. Are the questions relevant to agricultural educators?
  
4. Do you think any questions should be revised or omitted?  
If not, please make suggestions for improving.

5. Is the length of the questionnaire acceptable?

6. In your opinion, is the questionnaire format conducive to eliciting accurate responses?

7. Additional comments.





APPENDIX B

LETTER OF APPROVAL FROM THE MSU COMMITTEE ON  
RESEARCH INVOLVING HUMAN SUBJECTS

## MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH  
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

February 25, 1993

TO: Ms. Erica M. Battle  
%Dr. Eddie A. Moore  
410 Agriculture Hall

RE: IRB #: 93-064  
TITLE: ATTITUDES OF AFRICAN-AMERICAN AGRICULTURAL  
EDUCATION TEACHERS TOWARD INTERNATIONALIZING  
AGRICULTURAL EDUCATION PROGRAMS  
REVISION REQUESTED: N/A  
CATEGORY: 1-C  
APPROVAL DATE: 02/25/1993

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revision listed above.

UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must seek updated certification. Request for renewed approval must be accompanied by all four of the following mandatory assurances.

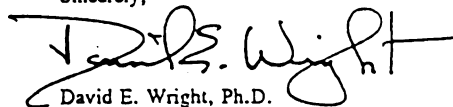
1. The human subjects protocol is the same as in previous studies.
2. There have been no ill effects suffered by the subjects due to their participation in the study.
3. There have been no complaints by the subjects or their representatives related to their participation in the study.
4. There has not been a change in the research environment nor new information which would indicate greater risk to human subjects than that assumed when the protocol was initially reviewed and approved.

There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. Investigators must notify UCRIHS promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 336-1171.

Sincerely,



David E. Wright, Ph.D.  
UCRIHS Chair

DEW:pjm



APPENDIX C

COVER LETTER AND SURVEY QUESTIONNAIRE

March 15, 1993

TO: Selected Secondary Agricultural Educators in North Carolina

FROM: Erica Battle, Master of Science Graduate Student at Michigan State University

Eddie A. Moore, Professor  
Michigan State University

Arthur P. Bell, Chairperson and Professor  
North Carolina Agricultural & Technical State University

SUBJECT: A Master of Science Study Entitled, "Attitudes of Selected Agricultural Educators Toward Internationalizing Agricultural Education Programs"

As part of the Master of Science degree requirement at Michigan State University, Ms. Erica Battle, a 1992 graduate of North Carolina Agricultural and Technical State University, is interested in conducting the above mentioned research. Several states including California, Iowa, Michigan, Ohio, and Pennsylvania have made some progress in recent years to internationalize their secondary school agricultural education programs. A majority of the funding for these efforts has come from the National Council for Agricultural Education, as a result of funding from the United States-Japan Foundation. Additional states around the country have also expressed the need to internationalize their secondary programs including the state of North Carolina. Lack of external funding has prevented many states from making the type of progress they would like to make in the internationalization of their secondary agricultural education programs.

This study is a step in the right direction with regard to internationalizing secondary agricultural education programs in North Carolina. It is reasonable to state that if any internationalizing efforts are going to be successful in the state, it is appropriate to determine the attitudes of teachers relative to this thrust. Your views regarding such an activity are important. However, your participation in this study is voluntary and if you elect to respond to the enclosed questionnaire, your responses will be kept confidential. We are most interested in group responses. Therefore, no attempt will be made to identify individual responses.

It will take about 15 minutes to complete the questionnaire. In order to assist in keeping the study on schedule, we would be most appreciate if you would return the completed questionnaire in the enclosed self-addressed envelope on or before March 15, 1993.

If you would like to have a summary of the study findings, please enclose a note with your name and address, and return it with the questionnaire. If you have any questions, please feel free to call Erica Battle at 517-355-3905 or Professor Eddie Moore at 517-355-6580. Thanks for your assistance in helping to complete this valuable study. Best personal regards!

ERICA BATTLE  
MS.D. CANDIDATE

EDDIE A. MOORE  
PROFESSOR MSU

ARTHUR P. BELL  
CHAIRPERSON NCA&TSU

AGRICULTURE AND EXTENSION EDUCATION  
410 AGRICULTURAL HALL  
MICHIGAN STATE UNIVERSITY  
EAST LANSING, MI 48824

Enclosure

Agricultural & Extension Education  
 410 Agriculture Hall  
 Michigan State University  
 East Lansing, MI 48824-1039

Respondent Number \_\_\_\_\_

Please do not write your name on this questionnaire. The respondent number will be used for group analysis and follow-up if needed. All responses are completely confidential.

Directions: The questionnaire is divided into sections. The first section contains statements concerning how selected agricultural education teachers in North Carolina feel about various aspects of Internationalizing Agricultural Education Programs (IAEP). There are no "right" or "wrong" responses to these items. The correct response is YOUR PERSONAL OPINION. We want to know HOW YOU FEEL about each statement. "You indicate your voluntary agreement to participate by completing and returning this instrument."

Please read each statement carefully. Then indicate your agreement or disagreement by circling a response from the scale shown to the right of each statement.

If you STRONGLY DISAGREE, circle.....SD  
 If you DISAGREE, circle.....D  
 If you are neutral, circle.....N  
 If you AGREE, circle.....A  
 If you STRONGLY AGREE, circle.....SA

---

**EXAMPLE**

"THE DREAMER IS A DANGER TO SOCIETY." SD D N A SA

THE RESPONSE OF A INDICATES THAT THIS INDIVIDUAL AGREES WITH THE STATEMENT; THE INDIVIDUAL SUPPORTS THE STATEMENT, BUT NOT VERY STRONGLY.

---

**SECTION I: STATEMENT REGARDING INTERNATIONALIZING AGRICULTURAL EDUCATION PROGRAMS (IAEP)**

[International Agricultural Education is a broad instructional area of global agriculture through which students gain an understanding of geographical, political, and economic factors influencing agriculture; global agricultural production and consumption; trends in the production and consumption of food and fiber; agricultural practices in different countries; agricultural trade and banking practices; communication, transportation, and technological developments influencing agriculture; and cultural and religious differences with implications for agriculture.]



## STUDENT-RELATED STATEMENT

(circle your response)

1. For secondary students to understand global agriculture, they should first have a basic understanding of geography of their state such as:
  - a. Where they reside on a county map. SD D N A SA
  - b. Location of county on a state map. SD D N A SA
  - c. Identification of major cities in the state where large quantities of agricultural products are consumed. SD D N A SA
  - d. Location of major ports for shipping agricultural products. SD D N A SA
  
2. To help students understand agriculture from a global perspective, they should have a basic understanding of the United States and world geography such as:
  - a. Major regions in the United States. SD D N A SA
  - b. Location of states in major regions in the United States. SD D N A SA
  - c. Location of the seven continents in the world. SD D N A SA
  - d. Location of countries on those continents. SD D N A SA
  - e. Major oceans used in shipping agricultural products. SD D N A SA
  - f. Countries that are the most densely populated. SD D N A SA
  
3. Internationalizing Agricultural Education Programs (IAEP) will increase student awareness of the need for the United States to work closely with countries around the world for:
  - a. Economic benefits SD D N A SA
  - b. Political benefits SD D N A SA
  - c. Humanitarian benefits SD D N A SA



4. Students are more likely to understand global agriculture if they are given instruction about:
- a. Major agricultural products that are produced in the county. SD D N A SA
  - b. What happens to local products once they leave the community. SD D N A SA
  - c. Major agricultural products that are produced in North Carolina. SD D N A SA
  - d. Major export markets for North Carolina's agricultural products. SD D N A SA
  - e. Other states in the U.S. that are competing with North Carolina's major agricultural products. SD D N A SA
  - f. Other countries that are competing with North Carolina's major agricultural products. SD D N A SA
  - g. Countries that need and are capable of purchasing North Carolina's major agricultural products. SD D N A SA
5. IAEP will increase student's awareness of:
- a. Global agriculture. SD D N A SA
  - b. Global effects on American agriculture. SD D N A SA
6. With proper instruction and materials, students will be able to understand basic international agriculture concepts. SD D N A SA
7. Considering the countries that are projected to be the best market for North Carolina's major products, students need to have knowledge on those countries':
- a. Culture. SD D N A SA
  - b. Infrastructure (educational system, transportation system, major industries, etc.). SD D N A SA
  - c. Standard of living SD D N A SA
  - d. Natural resources SD D N A SA

- |     |   |    |   |   |   |    |
|-----|---|----|---|---|---|----|
| 8.  | IAEP will provide students with a global perspective with respect to career opportunities.  | SD | D | N | A | SA |
| 9.  | Students should be encouraged to participate in the various national FFA international programs (World Agriculture Studies, Work Experience Abroad, Travel Seminars, etc.). | SD | D | N | A | SA |
| 10. | Basic IAEP concepts are not too complex for the average agricultural education student.   | SD | D | N | A | SA |
| 11. | IAEP will provide students with an appreciation of nations around the world.  | SD | D | N | A | SA |
| 12. | IAEP will prepare students for future changes in global agriculture.  | SD | D | N | A | SA |
| 13. | Through IAEP, students will have an opportunity to interact with people in other parts of the world.  | SD | D | N | A | SA |
| 14. | IAEP will help students understand global agricultural marketing systems.   | SD | D | N | A | SA |
| 15. | IAEP will help students function better as citizens in a global society.  | SD | D | N | A | SA |

#### TEACHER-RELATED STATEMENTS

- |    |   |    |   |   |   |    |
|----|---|----|---|---|---|----|
| 1. | International agricultural education program efforts could benefit me personally.   | SD | D | N | A | SA |
| 2. | Internationalizing my agricultural education program will:                          |    |   |   |   |    |
| a. | Strengthen the agricultural education program.                                      | SD | D | N | A | SA |
| b. | Improve my working relationship with other school personnel.                        | SD | D | N | A | SA |
| c. | Create a better relationship with the agricultural community.                       | SD | D | N | A | SA |
| d. | Aid in recruiting better quality students.  | SD | D | N | A | SA |
| 3. | IAEP should be given a high priority because U.S. agriculture will benefit from it. | SD | D | N | A | SA |

- |     |   |    |   |   |   |    |
|-----|---|----|---|---|---|----|
| 4.  | IAEP addresses the issue of a growing international interdependence in the area of agriculture.   | SD | D | N | A | SA |
| 5.  | Agriculture teachers need in-service training to internationalize their programs.   | SD | D | N | A | SA |
| 6.  | I would be interested in attending an in-service training session on how to internationalize my program.  | SD | D | N | A | SA |
| 7.  | Agricultural education teachers who would receive in-service training on how to internationalize agricultural education programs are likely to be more successful in this integration effort than teachers who would not receive such training. | SD | D | N | A | SA |
| 8.  | For teachers to understand global agriculture they should be given selected reading materials that they can easily use in the classroom.  | SD | D | N | A | SA |
| 9.  | Internationalizing my program is worth the effort.  | SD | D | N | A | SA |
| 10  | I would be supportive of an initiative to internationalize agricultural education programs in North Carolina.   | SD | D | N | A | SA |
| 11. | North Carolina A&T State University's Department of Agricultural Education and Extension should provide resources to support the infusion of an international dimension into agriculture education programs.                                    | SD | D | N | A | SA |
| 12. | I would encourage my students to participate in National FFA international programs.  | SD | D | N | A | SA |
| 13. | I would be interested in having my FFA chapter serve as a host chapter for a student from another country.  | SD | D | N | A | SA |
| 14. | I wish to increase my understanding of global agriculture by participating in a planned overseas study tour.  | SD | D | N | A | SA |

15. Agricultural education teachers who are successful in internationalizing their programs should be recognized by:
- a. The North Carolina Department of Public Instruction. SD D N A SA
  - b. The local school district. SD D N A SA
  - c. The North Carolina Vocational Agriculture Teachers Association. SD D N A SA
16. A well-implemented IAEP will improve the image of the agricultural education teacher. SD D N A SA
17. If statewide IAEP efforts are to be successful, teachers should be directly involved in:
- a. Planning statewide programs. SD D N A SA
  - b. Implementing statewide programs. SD D N A SA
  - c. Evaluating statewide programs. SD D N A SA
18. I would be willing to serve on an advisory committee for the purpose of strengthening IAEP thrusts. SD D N A SA
19. Internationalizing agricultural education programs in this state should receive high priority. SD D N A SA
20. As agricultural education teachers, we should view the world as our laboratory to prepare students for working and living in a global society. SD D N A SA

#### EDUCATIONAL LINKAGES

1. Global education/international understanding should be a part of the philosophy statement of:
- a. The North Carolina Department of Public Instruction. SD D N A SA
  - b. The Division of Vocational Education Services. SD D N A SA
  - c. The local school district. SD D N A SA
  - d. The Department of Agricultural Education and Extension at NCA&T State University. SD D N A SA

2. Global education/international understanding should be a part of the goal statements of:
  - a. The North Carolina Department of Education. SD D N A SA
  - b. The Division of Vocational Education Services. SD D N A SA
  - c. The local school district. SD D N A SA
  - d. The Department of Agricultural Education and Extension at NCA&T State University. SD D N A SA
  
3. Local global education/international understanding initiatives should be funded by:
  - a. The North Carolina Department of Public Instruction. SD D N A SA
  - b. The Division of Vocational Education Services. SD D N A SA
  - c. The local school district. SD D N A SA
  
4. IAEP should be linked directly to international efforts of:
  - a. The United States Department of Agriculture. SD D N A SA
  - b. The North Carolina Department of Agriculture. SD D N A SA
  - c. The private sector. SD D N A SA
  
5. International concepts should be integrated into every facet of the school curriculum, including:
  - a. Grades K-5 SD D N A SA
  - b. Grades 6-8 SD D N A SA
  - c. Grades 9-12 SD D N A SA
  
6. International concepts should be included in the undergraduate curriculum of college students. SD D N A SA
  
7. International concepts should be included in university graduate programs. SD D N A SA

8. Local agricultural education internationalizing initiatives are more likely to be successful if they involve:
- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| a. North Carolina Department of Public Instruction staff.                             | SD | D | N | A | SA |
| b. NCA&T State University Department of Agricultural Education and Extension faculty. | SD | D | N | A | SA |
| c. School administrators.   | SD | D | N | A | SA |
| d. The Division of Vocational Education Services.                                     | SD | D | N | A | SA |
| e. Local Teachers.  | SD | D | N | A | SA |
| f. Local counselors.  | SD | D | N | A | SA |
| g. Advisory committee members.  | SD | D | N | A | SA |
| h. Individuals from the local agricultural community.                                 | SD | D | N | A | SA |
| i. FFA alumni.  | SD | D | N | A | SA |
| j. Parents.   | SD | D | N | A | SA |
| k. Agricultural Education Faculty at North Carolina State University.                 | SD | D | N | A | SA |
| l. Other (specify) _____  | SD | D | N | A | SA |

## SECTION II: DEMOGRAPHIC ITEMS

1. Please indicate your primary area of teaching:
  - (1) Forestry and Natural Resources
  - (2) Horticulture
  - (3) Agriculture Mechanics
  - (4) Production agriculture
  - (5) Other (specify) \_\_\_\_\_
2. Would you be interested in receiving instructional materials for Internationalizing Agricultural Education Programs?
  - (1) Yes
  - (2) No
3. Your age: \_\_\_\_\_ Years.



4. Gender:

- (1) Female
- (2) Male

5. Do you read the Agricultural Education Magazine?

- (1) No
- (2) Yes

If yes, please indicate the number of issues you read during the 1991-1992 year.

- (1) Fewer than 2
- (2) 2 - 5
- (3) 6 - 9
- (4) 10 or more

6. Do you read agricultural information in your newspaper?

- (1) No
- (2) Yes

If yes, please indicate the names of the newspaper(s).

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---

---

7. How many national seminars/conferences have you participated in since entering the teaching profession?

- (1) Fewer than 2 seminars/conferences
- (2) 2 - 5 seminars/conferences
- (3) 6 - 9 seminars/conferences
- (4) 10 - 13 seminars/conferences
- (5) 14 or more seminars/conferences

8. How many international seminars/conferences have you participated in since entering the teaching profession?

- (1) Fewer than 2 seminars/conferences
- (2) 2 - 5 seminars/conferences
- (3) 6 - 9 seminars/conferences
- (4) 10 - 13 seminars/conferences
- (5) 14 or more seminars/conferences

9. How much teaching experience have you had?

- (1) Fewer than 2 years
- (2) 2 - 5 years
- (3) 6 - 9 years
- (4) 10 - 13 years
- (5) 14 years or more

10. Please indicate the location of your present residence?

- (1) Rural farm
- (2) Rural non-farm
- (3) Suburban
- (4) Urban

11. Please check all the professional societies/organizations in which you have held membership in during the last five years.

- (1) North Carolina Vocational Agriculture Teachers Association
  - (2) North Carolina Association of Educators
  - (3) National Vocational Agriculture Teacher Association
  - (4) Association for International Agricultural Education and Extension
  - (5) American Vocational Association
  - (6) Phi Delta Kappa
  - (7) Phi Kappa Phi
  - (8) Alpha Zeta
  - (9) Gamma Sigma Delta
  - (10) North Carolina 4-H Agent Association
  - (11) FFA Alumni
  - (12) others (please specify)
- 
- 
- 

12. About how many times have you changed residence during the past 10 years?

- (1) None
- (2) 1 time
- (3) 2-3 times
- (4) 4-6 times
- (5) 7-10 times
- (6) over 10 times

13. Have you ever traveled to a foreign country?

- (1) yes
- (2) no

14. Have you ever hosted a foreigner in your home?

- (1) yes
- (2) no



16. Have you ever hosted a foreigner in your class?

-(1) yes

-(2) no

17. Additional Comments:

Thank you so much for taking time to answer the questionnaire!

APPENDIX D

FIRST FOLLOW-UP LETTER

April 5, 1993

TO: Selected Secondary Agricultural Educators in North  
Carolina

From: Erica Battle, Master of Science Graduate Student at  
Michigan State University

Eddie A. Moore, Professor  
Michigan State University

Arthur P. Bell, Chairperson and Professor  
North Carolina Agricultural & Technical State  
University

Subject: A Master of Science Study Entitled, "Attitudes of  
Selected Agricultural Educators Toward  
Internationalizing Agricultural Education Programs"

Three weeks ago a questionnaire seeking your opinion about Internationalizing Agricultural Education Programs was mailed to you. As of today we have not received your completed survey.

In case the initial correspondence regarding the study did not reach you, another survey is included. Please complete and return the questionnaire by April 19, 1993. Your response is very important to the study and will remain confidential.

If you would like to have a summary of the findings, please enclose a note with your name and address, and return it with the questionnaire. If you have any questions please feel free to call Erica Battle at 517-355-3905 or Professor Eddie Moore at 517-355-6580.

If you have returned the completed questionnaire please disregard this letter. Thank you for your assistance in helping to complete this valuable study. Best personal regards!

Agricultural And Extension Education  
410 Agricultural Hall  
Michigan State University  
East Lansing, MI 48824

Enclosure



APPENDIX E

SECOND FOLLOW-UP LETTER





April 26, 1993

TO: Selected Secondary Agricultural Educators in North  
Carolina

From: Erica Battle, Master of Science Graduate Student at  
Michigan State University

Eddie A. Moore, Professor  
Michigan State University

Arthur P. Bell, Chairperson and Professor  
North Carolina Agricultural & Technical State  
University

Subject: A Master of Science Study Entitled, "Attitudes of  
Selected Agricultural Educators Toward  
Internationalizing Agricultural Education Programs"

Three weeks ago, a questionnaire seeking your opinion about Internationalizing Agricultural Education Programs was mailed to you. As of today, we have not received your completed survey.

In case the initial correspondence regarding the study did not reach you, another survey is included. Please complete and return the questionnaire by MAY 10, 1993. Your response is very important to the study and will remain confidential. Ms. Battle plans to complete her Master of Science degree this summer, and she needs your assistance so that she can complete her program on time.

If you would like to have a summary of the findings, please enclose a note with your name and address, and return it with the questionnaire. If you have any questions, please feel free to call Erica Battle at 517-355-3905 or Professor Eddie Moore at 517-355-6580.

If you have returned the completed questionnaire, mail please disregard this letter. Thank you for your assistance in helping to complete this valuable study. Best personal regards!

Agricultural And Extension Education  
410 Agricultural Hall  
Michigan State University  
East Lansing, MI 48824

Enclosure



APPENDIX F

SUPPLEMENTARY TABLES

Table F.1.--Means and standard deviations of North Carolina African American agricultural education teachers' attitudes toward **student-related aspects** of making their programs more internationally focused.

Statement	Mean
1. For secondary students to understand global agriculture, they should first have a basic understanding of geography of their <u>state</u> such as:	
a. Where they reside on a county map.	4.59
b. Location of county on a state map.	4.62
c. Identification of major cities in the state where large quantities of agricultural products are consumed.	4.59
d. Location of major ports for shipping agricultural products.	4.38
2. To help students understand agriculture from a global perspective, they should have a basic understanding of the United States and world geography such as:	
a. Major regions in the United States.	4.71
b. Location of states in major regions in the United States.	4.53
c. Location of the seven continents in the world.	4.56
d. Location of countries on those continents.	4.29
e. Major oceans used in shipping agricultural products.	4.50
f. Countries that are the most densely populated.	4.41

Table F.1.--Continued.

Statement	Mean
3. Internationalizing Agricultural Education Programs (IAEP) will increase student awareness of the need for the United States to work closely with countries around the world for:	
a. Economic benefits.	4.59
b. Political benefits.	4.32
c. Humanitarian benefits.	4.44
4. Students are more likely to understand global agriculture if they are given instruction about:	
a. Major agricultural products that are produced in the county.	4.44
b. What happens to local products once they leave the community.	4.47
c. Major agricultural products that are produced in North Carolina.	4.71
d. Major export markets for North Carolina's agricultural products.	4.62
e. Other states in the U.S. that are competing with North Carolina's major agricultural products.	4.56
f. Other countries that are competing with North Carolina's major agricultural products.	4.59
g. Countries that need and are capable of purchasing North Carolina's major agricultural products.	4.53
5. IAEP will increase students' awareness of:	
a. Global agriculture.	4.47
b. Global effects on American agriculture.	4.41



Table F.1.--Continued.

Statement	Mean
6. With proper instruction and materials, students will be able to understand basic international agriculture concepts.	4.29
7. Considering the countries that are projected to be the best market for North Carolina's major products, students need to have knowledge on those countries':	
a. Culture.	4.27
b. Infrastructure (educational system, transportation system, major industries, etc.).	4.18
c. Standard of living.	4.27
d. Natural resources.	4.35
8. IAEP will provide students with a global perspective with respect to career opportunities.	4.47
9. Students should be encouraged to participate in the various national FFA international programs (World Agriculture Studies, Work Experience Abroad, Travel Seminars, etc.).	4.55
10. Basic IAEP concepts are not too complex for the average agricultural education student.	3.94
11. IAEP will provide students with an appreciation of nations around the world.	4.18
12. IAEP will prepare students for future changes in global agriculture.	4.24
13. Through IAEP, students will have an opportunity to interact with people in other parts of the world.	4.24



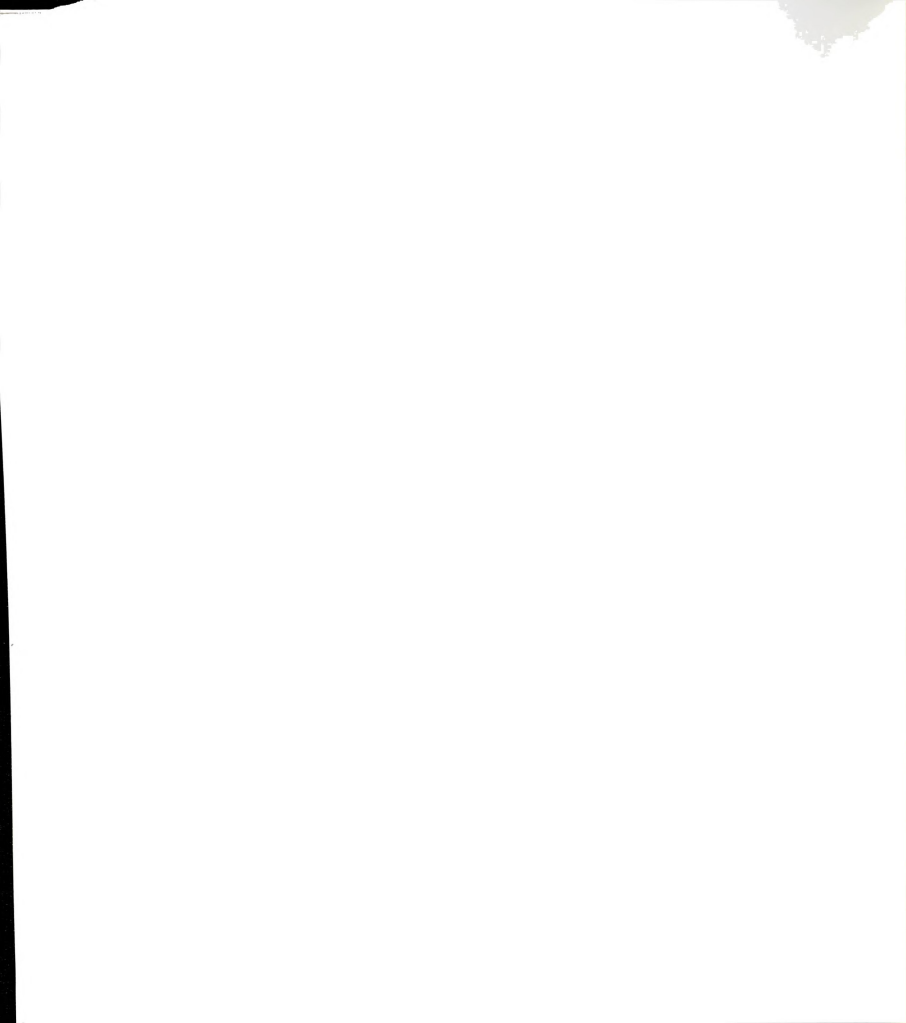


Table F.1.--Continued.

Statement	Mean
14. IAEP will help students understand global agricultural marketing systems.	4.33
15. IAEP will help students function better as citizens in a global society.	4.24
AVERAGE MEAN RATING	4.43

Note: Means were calculated on the basis of the following 5-point Likert-type scale:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Table F.2.--Means and standard deviations of North Carolina African American agricultural education teachers' attitudes toward **teacher-related aspects** of making their programs more internationally focused.

Statement	Mean
1. International agricultural education program efforts could benefit me personally.	4.18
2. Internationalizing my agricultural education program will:	
a. Strengthen the agricultural education program.	4.09
b. Improve my working relationship with other school personnel.	3.42
c. Create a better relationship with the agricultural community.	4.03
d. Aid in recruiting better quality students.	4.06
3. IAEP should be given a high priority because U.S. agriculture will benefit from it.	4.15
4. IAEP addresses the issue of a growing international interdependence in the area of agriculture.	4.18
5. Agriculture teachers need inservice training to internationalize their programs.	4.24
6. I would be interested in attending an inservice training session on how to internationalize my program.	4.24
7. Agricultural education teachers who would receive inservice training on how to internationalize agricultural education programs are likely to be more successful in this integration effort than teachers who would not receive such training.	4.27

Table F.2.--Continued.

Statement	Mean
8. For teachers to understand global agriculture they should be given selected reading materials that they can easily use in the classroom.	4.35
9. Internationalizing my program is worth the effort.	4.03
10. I would be supportive of an initiative to internationalize agricultural education programs in North Carolina.	4.27
11. North Carolina A&T State University's Department of Agricultural Education and Extension should provide resources to support the infusion of an international dimension into agriculture education programs.	4.29
12. I would encourage my students to participate in National FFA international programs.	4.24
13. I would be interested in having my FFA chapter serve as a host chapter for a student from another country.	3.64
14. I wish to increase my understanding of global agriculture by participating in a planned overseas study tour.	3.97
15. Agricultural education teachers who are successful in internationalizing their programs should be recognized by:	
a. The North Carolina Department of Public Instruction.	4.24
b. The local school district.	4.24
c. The North Carolina Vocational Agriculture Teachers Association.	4.21
16. A well-implemented IAEP will improve the image of the agricultural education teacher.	4.12

Table F.2.--Continued.

Statement	Mean
17. If statewide IAEP efforts are to be successful, teachers should be directly involved in:	
a. Planning statewide programs.	4.44
b. Implementing statewide programs.	4.35
c. Evaluating statewide programs.	4.21
18. I would be willing to serve on an advisory committee for the purpose of strengthening IAEP thrusts.	3.74
19. Internationalizing agricultural education programs in this state should receive high priority.	4.00
20. As agricultural education teachers, we should view the world as our laboratory to prepare students for working and living in a global society.	4.41
AVERAGE MEAN RATING	4.11

Note: Means were calculated on the basis of the following 5-point Likert-type scale:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Table F.3.--Means and standard deviations of North Carolina African American agricultural education teachers' attitudes toward **educational-linkage aspects** of making their programs more internationally focused.

Statement	Mean
1. Global education/international understanding should be a part of the <u>philosophy statement</u> of:	
a. The North Carolina Department of Public Instruction.	4.03
b. The Division of Vocational Education Services.	4.15
c. The local school district.	4.00
d. The Department of Agricultural Education and Extension at NCA&T State University.	4.38
2. Global education/international understanding should be a part of the <u>goal statements</u> of:	
a. The North Carolina Department of Education.	4.12
b. The Division of Vocational Education Services.	4.12
c. The local school district.	3.85
d. The Department of Agricultural Education and Extension at NCA&T State University.	4.38
3. Local global education/international understanding initiatives should be funded by:	
a. The North Carolina Department of Public Instruction.	4.12
b. The Division of Vocational Education Services.	4.03
c. The local school district.	3.59

Table F.3.--Continued.

Statement	Mean
4. IAEP should be linked directly to international efforts of:	
a. The United States Department of Agriculture.	4.44
b. The North Carolina Department of Agriculture.	4.29
c. The private sector.	3.88
5. International concepts should be integrated into every facet of the school curriculum, including:	
a. Grades K-5.	3.61
b. Grades 6-8.	4.09
c. Grades 9-12.	4.53
6. International concepts should be included in the undergraduate curriculum of college students.	4.44
7. International concepts should be included in university graduate programs.	4.53
8. Local agricultural education internationalizing initiatives are more likely to be successful if they involved:	
a. North Carolina Department of Public Instruction staff.	4.15
b. NCA&T State University Department of Agricultural Education and Extension faculty.	4.35
c. School administrators.	4.12
d. The Division of Vocational Education Services.	4.32
e. Local teachers.	4.15

Table F.3.--Continued.

Statement	Mean
8. (Continued):	
f. Local counselors.	4.09
g. Advisory committee members.	4.29
h. Individuals from the local agricultural community.	4.32
i. FFA alumni.	4.27
j. Parents.	4.12
k. Agricultural education faculty at North Carolina State University.	4.24
	-----
AVERAGE MEAN RATING	4.18

Note: Means were calculated on the basis of the following 5-point Likert-type scale:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree



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