INTERNATIONAL STUDENTS' PERCEPTIONS OF SELECTED ASPECTS OF ACTIVITIES AND LEARNING EXPERIENCES IN AGRICULTURAL PROGRAMS AT OKLAHOMA STATE UNIVERSITY

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CHAPTER I

INTRODUCTION

Foreign nationals who have graduated and those still attending Oklahoma State University may be concerned about the unique knowledge, skills and techniques which are obtainable at Oklahoma State University. Perhaps that has been their strongest motivation in deciding to study at Oklahoma State University. The unique programs of study in agriculture and the increasing demand for graduate teachers and researchers in specialty areas attracted myriads of international students from developing countries during the 1970's and 1980's. Whether or not Oklahoma State University is providing outstanding international training is the judgement and perceptions of benefits of international students who receive their training from Oklahoma State University.

With the increasing role of American universities in providing international training, many educators and college administrators across the United States have adapted their programs to meet the diverse needs of students from different socio-economic backgrounds.

> A great deal has been accomplished since World War II in building capacities in U.S. universities for training and research in international development. Substantial expertise has been

> developed through participation in technical assistance programs sponsored by various development agencies and in working with and advising the large numbers of foreign students that have been and continue to be trained in U.S. universities (Fienup, 1974).

The influx of students from the developing countries in the 70's was necessitated by those countries embarkment on technological development schemes. For instance, during the period of 1977 to 1980, the Federal government of Nigeria embarked on their middle-level manpower training program. This program which was implemented through the AGENCY FOR INTERNATIONAL DEVELOPMENT (AID) was intended to provide middle-level manpower to fill up supervisory and technical positions in the work-force. Many governments and agencies across West Africa and in some other parts of the developing world have had similar programs. In addition to these large numbers of Federal and State sponsored students, there were many other students who had no option but to come to the United States to pursue educational programs of their choices since the few Nigerian colleges and universities could only absorb limited numbers of students. Although these students may have had a common view about obtaining education in the United States (exceptional training and prestigious degree), their primary motive was to obtain education by all means.

The close of the 80's was marked by a decline in the enrollment of foreign nationals in the College of Agriculture at OSU, more especially African students. This decline in enrollment may be attributed to the wave of eco-

nomic crises that hit many parts of the Africas, Nigeria in particular. While many African countries flourished in the 50's, 60's, and parts of the 70's, it was hardly conceivable that such an economic crisis such as the one affecting Nigeria could erupt.

The enrollment of American citizens graduating from high school in agriculture have also dropped with the close of the decade but that is the result of misconceptions about the future of agriculturally related professions.

Many youths graduating from American high schools see agriculture as merely growing of crops and livestock with just very few attractive jobs for agriculture graduates (agriculture forum, OSU; Oct., 1989). The researcher had occasion to chat with a student in his early twenties regarding his major field of study; The student related that the reason he chose computer technology in preference to an agriculturally-related profession was because of the tediousness of farming. That illustrates how ignorant many youths are of the numerous opportunities in the future of agriculture.

Perceptions of benefits of educational experiences at OSU and other institutions of higher learning in the United States have been a subject of great concern by both educators in the United States and the foreign nationals in attendance in U.S. institutions. The internationalization of American institutions has been suggested to meet the increasing demand for foreign student training and training

efforts directed toward the home country conditions of foreign nationals. Benefits of training foreign nationals in U.S. institutions as pointed by several writers include fostering good relations between the U.S. and the rest of the world and to strengthen the United States' capacity to compete effectively in world markets. Benefits of educational experience in the United States from the foreign national's point of view relates to his measure of the usefulness and applicability of his learning experience.

> Since the earliest times, students have been drawn to study in those countries they perceive as offering them opportunities to advance academic skills and obtain degrees that may be more prestigious than those available to them (Presnal, 1985).

This is true of many African nationals who received their education in countries like Great Britain, West Germany, the United States, the Soviet Union, and other advanced countries during the early part of this twentieth century and late nineteenth century.

Statement of the Problem

The major problem confronted in this study is that it is important for faculty, parents and students to be aware of the student's perceptions and appraisal of the activities and learning experiences at Oklahoma State University. The expectations of most international students in terms of take-home learning experience from their respective institutions in the United States are indeed related to their

common view about obtaining education in the United States; that is exceptional training and prestigious degree. Therefore it would be a worthwhile endeavor to assess their judgments regarding their experiences.

There have been studies in the past that were directed to the assessment of international students' career objectives and their judgement as to the effectiveness of their learning experiences. In each case the investigators noted the need for follow-up studies. Many of the studies done in the past compared the judgments of alumni with those of students who were enrolled at Oklahoma State University during the time of the investigation. This study was based on the researcher's belief that students currently enrolled at the University could make accurate judgments and provide valuable suggestions for improvements based on their present needs. The investigator wished to find out weaknesses and strengths of selected activities and learning experiences based on the judgments of the respondents. The result of the findings can be used to make necessary recommendations.

Purpose

The major purpose of this study was to determine international students' perceptions of selected activities and learning experiences in agricultural programs at Oklahoma State University in terms of meeting the needs and objectives of those students.

Objectives

The objectives of the study were:

1. To determine the extent of involvement and level of usefulness of selected aspects of instruction as perceived by international students in agriculture at Oklahoma State University.
2. To determine international students' ratings of selected aspects of instructor/instructional procedures with respect to the level of effectiveness in their learning process.
3. To determine the extent of involvement and level of usefulness of selected resources and reference materials as perceived by international students.
4. To determine the perceived extent of involvement in selected aspects of practical training and its relevance to the career objectives of international students.
5. To determine the extent of students' involvement in selected non-academic activities and their judgment with respect to the usefulness of these activities.

Assumptions

For the purpose of this study the follow assumptions were made:

1. It was assumed that the population of international students being surveyed have had some

learning experience and practical training at Oklahoma State University.

2. It was assumed that the respondents will provide relatively unbiased information about their experiences at Oklahoma State University.
3. It was also assumed that students who are currently attending Oklahoma State University are the most reliable source of information related to this study.
4. It was also assumed that the population of respondents are all international students; with similar needs.

Scope and Limitations

This survey was limited to international students currently enrolled in the College of Agriculture at Oklahoma State University during the 1990 summer term. The investigator had no control over the on and off movement of students during the survey because the survey was done during the summer session and this impacted on the population surveyed.

The investigator did not make any attempt to examine the population of respondents regarding:

I. Parental/socio-economic background.

II. Previous employment/salary.

III. Home-country political/economic situation.

Definition of Terms

Learning Activity: This term is used to refer to all exercises and actions that produce a change in knowledge, both classroom and outside classroom, theoretical and practical, individual and group.

Instructor/Instructional Procedures: The instructor and all behavioral skills and instructional aids employed in teaching.

Agbus: Short for Agribusiness. This term is used to refer to all agricultural business owned by Oklahoma State University.

United States Agency for International Development (USAID): This agency has the major program of bringing participants from all over the world to the United States to participate in training, observation or consultation in keeping with the objectives of human resource development as contained in Foreign Assistance Act of 1961 as amended.

On/Off Farm Experience: All theoretical and practical experience gained either directly on the farm or in a farm related business.

Test Of English as a Foreign Language (TOEFL): This test is designed by the Educational Testing Service at Princeton, New Jersey. It is an admission requirement for

entry into U.S. institutions for students whose native language is not English.

International Content Course: Any course that addresses world and international issues and concerns at OSU.

West African School Certificate Examination: This is an equivalent of the U.S. high school diploma. The examination is designed and administered by the West African Examinations Council (WAEC) to all high school finalists throughout West Africa in conjunction with the general Certificate of Education London.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The enrollment of foreign students from the developing world in American Universities could be traced back to the time of President Kwame Nkruma of Ghana. Some of the memorable experiences of foreign black students like Nkruma were loneliness and fear of rejection. There have been many instances where students met with frustration while studying in foreign lands; namely, the plight of some Nigerian students studying in some European countries where English is not the official language. There are advantages in educating foreign students in U.S. institutions. They can contribute to good relations between the U.S. and the rest of the world, expose American students to new cultures, and provide economic support to institutions (Pruitt, 1978). Students who study in countries where English is not the official language are usually required to spend the first nine months of their program in learning the native or commonly used language of those countries. The author counts himself lucky to be studying in the United States where he was not compelled to learn a second foreign language, but for many foreign students in the

United States, they had to learn to read and write in English upon arrival in the United States.

Gabriel (1973) points to the expression of dissatisfaction by many foreign students with their study in the United States. One of the major reasons for dissatisfaction being their inability to be involved in the mainstream of American life. For many foreign students, prior to coming to the United States, they usually have made very little contact with American culture and their ideas about American culture are usually somewhat illusory. Thus, what they observe about their social life in America is usually contrary to their expectations.

Objectives of International Training in Agriculture

Agriculture professionals are concerned about how much the young men and women from developing countries learn in terms of acquisition of theoretical knowledge, skills and techniques and their applicability to their home country conditions. Training in agriculture and technology should be directed towards the students transferability of knowledge, skills and techniques to home country condition by comparing learning experiences in the institution with on-going programs in the international students environment.

Johnson (1974), outlined four major objectives of graduate education in agricultural economics:

1. A firm understanding of the major principles and theories of economics.
2. A grasp of the fundamentals of empirical analysis adequate to permit understanding research on important economic problems involving the application of economic analysis.
3. An understanding of essentials of the analysis of public policies, including an appreciation of the strengths and limitations of economic analysis in such evaluations.
4. The capacity to grow and develop one's capacity as scholar, researcher, administrator, and policy analyst.

According to Johnson's (1974) views, the objectives of graduate education in agricultural economics for foreign nationals should be the same as the objectives of high quality programs for Americans. If the objectives of graduate education are the same for foreign nationals and American students and if both groups of students receive the same quality of agricultural economics training, certainly one would expect close to equal performance in providing the services of agricultural economists. For many foreign nationals returning to their home countries after their training, they often meet with the problem of lack of appropriate tools, economic and political unrest which hinder the practice and application of knowledge and skills acquired in school. The problem remains that students from under-

developed countries often face difficulties in applying these tools when they return to their countries (Fienup, 1974). Even when specialization has been achieved by foreign nationals, success in their home countries is usually jeopardized by lack of support from their home country counterparts and the expectations from their community that they should perform a wide range of roles. Hence, these students sometimes end up in other careers such as politics.

Besides emphasizing the teaching of principles, theory and tools as the objectives of training students from developing countries, Johnson (1974) also specified additional ways in which to provide support and assistance for foreign students. First, he suggests a comparison of output per farm worker between the developing countries and the industrialized nations by foreign students. While current significant differences exist in productivity measures between the developing and industrialized nations today, the output per farm worker in the industrialized countries were similar to the measures in the developing countries in the past.

The historical progression of productivity measures in the industrialized world to their present level of output should be recognized by the developing world agricultural professionals. Guevara (1979) found that the excellence of U.S. Animal Science education was the most influential factor that made Venezuelan students decide to study in the U.S. His study also revealed that Venezuelan students per-

ceived library services and reference materials in U.S. institutions very effective. Johnson (1974) and Fienup (1974) suggested some ways of improving the effectiveness of graduate training for internationals which include adequacy of the program, active participation of the student in the planning of his program, adequacy of the program length, extracurricular experience, individuality of training and applicability of research. This entails gearing the program plan to meet individual needs, stretching the program length to provide enough experience and using data from students' home country to make research more relevant.

Transferring Relevant Farm Technologies to Students From Less Industrialized Nations

The major purpose of training students from the less developed countries of the world in the U.S. colleges of agriculture is to provide them relevant experience in modern agricultural technologies to solve production problems in their home countries.

Cashman (1987) found that the education and training of agriculturalists in the U.S. institutions of higher learning does not relate sufficiently to the domestic needs of farming cultures in the less industrialized countries.

This is true of modern agricultural technology, while highly transferrable to many regions of the world, cultural practices in many less developed countries contrast sharply with the farming practices of the United States. Tradi-

tional farming practices such as shifting cultivation, green manuring and crop rotation that are prevalent in the less industrialized countries could be introduced, or similar farming methods in the U.S. could become part of practical experience for students from those countries. Lee (1981) found that foreign students listed practical experiences as their least met need in U.S. institutions. His study recommended that practical experiences, such as internships, should be part of the degree program.

Students from less industrialized countries are often faced with the problem of transferring skills such as farm mechanics, research, extension services and problem solving. Transferability of problems solving requires not only the knowledge of what makes things happen, but the capability to implement that knowledge effectively (Mibey, 1984). The role of the extensionist is to increase productivity levels, but the peasant farmer in his home country may not well cope with modern agricultural technique. The success of agricultural extensionists have been recorded in many parts of the developing countries, but productivity has not reached desirable levels.

Traditional farming systems in less industrialized countries in the hands of peasant farmers have not changed to the level of modern agricultural technique. It is common belief that agriculture in many regions of the world is tradition. In many developing countries of the world, agriculture is still characterized by subsistence level of farm-

ing, illiteracy, lack of improved varieties of crop and livestock, shortage of farm credit, lack of assess roads and worst of all, too much human labor are employed. Caballero (1976) found that agricultural training in Latin America suffers from deficiencies which produce professionals who are not always competent in their fields. These professionals lack the knowledge of farm operation and how the production system works.

Another finding by Cashman (1987) were the factors that limit productive capacity such as poor soil fertility, water shortages, lack of local regional and national infrastructure and absence of appropriate agricultural inputs in the less developed countries.

These problems can be solved through the development of appropriate training in technology and diversification of farming systems by selecting various crop and livestock production that have complementary effects.

Problems Encountered in Meeting the Particular Needs of Students From Developing Countries

> Because of the complex problems involved in meeting the needs of students from developing countries and because of the wide variety of educational resources available in the U.S., the institutions must clearly define the nature of its educational programs (Mibey, 1984).

The first problem a foreign student faces is making the right decision regarding the appropriate university that

will serve him in reaching his academic goals. This decision could be made well ahead of time by the student prior to the date of intended enrollment in a U.S. institution. It is advisable for a student to gather information from his home country relative to the trend in his major field of study. Such information will guide the student in planning throughout his course of study.

The next decision pertinent to the success of the foreign student is the selection of an academic advisor with experience in advising foreign students. There must be an understanding and cooperation among the advisor, the faculty and the student (Caballero, 1977). If an experienced advisor is working with a foreign national, he or she could consider when the student indicates an option of taking a course that has an international base or appeals to his home country situation in preference to one that has less international base.

Meeting the English Proficiency Requirements

The author's first enrollment in a U.S. institution was in a two year college. At the time he enrolled for the first quarter, he was given a number of English proficiency tests including the Michigan Test. Most U.S. institutions have developed effective methods of determining where a student falls in terms of the level of English the student should be taking at his first semester. Where a student is

lacking in any respect of English language, like comprehension or writing, remedial courses should be utilized to remove the weak point. Caballero (1977) recommends intensive orientation courses to be offered to the foreign candidate in the U.S. before entering the university. The TOEFL (Test of English as a Foreign Language) has been the criterion for determining the foreign student's ability in grammar and listening comprehension. A student with at least a credit pass in the "West African School Certificate Examination" will certainly find the TOEFL within his reach, but even so, some students who performed well in the TOEFL may sometimes lack in certain areas of English such as writing. Ordonez (1977), suggests that technical English classes at the graduate level be developed such as those existing in French, German, or Russian and that credit be awarded to those taking these particular classes.

Results of surveys and information from the Graduate Record Examination Board and the Educational Testing Service recognizes that the Graduate Record Examination do not completely represent the potential of the individual student.

Therefore, in selecting students for admission to U.S. institutions, it is recommended that other criteria be considered such as evaluating the students previous work in his/her country, his/her rank in class and letters of recommendation from the principal of the high school which he/she graduated or from a school official in his/her previous school.

Undergraduate and Graduate Training Limitations

While the argument is that the objectives in training for foreign students should be the same as those for American students, the needs of the foreign national may differ a little bit from the American student. The foreign national often desires the knowledge, skills, practical training and problem-solving approach to situations that are peculiar to his environment. Graduate education of foreigners in the U.S. without proper guidance may cause more damage than benefits or may promote frustration and runaway of the technician from his own medium (Caballero, 1977). The institutions must provide a training package of the nature that is highly transferable and applicable. In order for the student to reach his or her goals, should seek a strong scientific and technological base in his or her community. In many underdeveloped countries, technological stagnation, food shortages and underemployment has posed serious problems for scientific advancement and applicability of skills and knowledge.

Adequate preparation on the part of the student is essential in order to grasp the theoretical and practical training offered by the institutions. Course plan should be gradually implemented and deficiencies removed. Very often the main goal of students is completing all the requirements of a degree program since they are usually expected to perform various roles in their community that do not require

overspecialization. As a result specialization are often neglected. The net result is that the student and his advisor fail to come to agreement as regards his needs and objectives.

Institutional Roles and Training Issues in International Agricultural Development

Training issues and concerns by agriculture professionals focus on the present and future roles of the developed nations in providing Masters and Doctoral training to students from the less developed countries. Improving the effectiveness of formal degree training and consolidation of non-degree programs is a worthwhile commitment pertinent to the future of the agriculture profession.

Need for Non-Degree Training

Price Gittenger (1974) defined non-degree training to include everything that is not part of a formal academic degree program. In many developing countries, less attention has been given to non-degree training, not because non-degree training does not contribute to agricultural development, but because many of the developing countries took up more research type training as a way of problem solving. Opportunities exist for utilizing non-degree training in increasing experience and output of agricultural workers. Based on Gittenger's definition, non-degree training include such programs like in-service training, seminars and short

courses. International programs of that nature have been more frequently implemented through the USAID (United States Agency for International Development).

The role of non-degree training in agricultural development is of primary importance in the developing countries where in many regions, agriculture still provide employment for over sixty-five percent of the population. But unlike the United States vocational agricultural education in high schools has not received adequate support and attention in many developing countries. However, vocational agricultural education at the high school level needs more international recognition and training efforts directed towards youth development in the underdeveloped parts of the world. One of the non-degree training for agricultural workers in many countries like Nigeria is the in-service training. In-service training has been very effective in increasing practical knowledge for agricultural workers. In-service training emphasize a variety of practical experience such as planting, fertilization, pest control, plant breeding and selection and a host of other cultural practices. Agricultural professionals, agencies, research institutes and colleges and universities need to be aware of the little emphasis given to non-degree training for the improvement of international agricultural development.

Formal Degree Training

A comparison of formal degree and non-degree programs offered to students from the developing countries will indicate that a greater percentage of the students are pursuing formal degree programs. For instance, the agricultural economics profession had a greater proportion of training of students from the developing countries to the level of formal degree, may be perhaps due to the nature of the profession. The major objectives of training in agricultural economics is to prepare the student to be able to apply the general tools and skills of an economist in solving problems. Because of the different circumstances in the underdeveloped countries, there is usually more need for a broader training than that which is often provided to American students (Johnson, 1974). For the foreign student returning to his country, he should be able to apply skills developed through academic training and initiate research studies relative to his or her environment. He or she should be able to develop and apply the problem solving technique while dealing with a variety of situation. A major concern is for the students returning to their home country to be able to provide answers to their problems with less dependent on their former institutions. Many agriculture professionals recognize the need for establishment of international co-operative agencies between institutions in the developed countries and developing countries as way of assisting joint research and seminars. Fienup (1974) recom-

mends follow-up activities for students returning to the less developed countries to conduct research. This is necessary because the fresh Ph.D. conducting research by himself may need some kind of guided practice. Follow-up assistance could be an effective means by which the agricultural economics professional in the developed countries institutions could co-operate and interchange with the institutions in the developing countries.

Summary of Review of Literature

In summary, the literature review provided evidence of the diverse needs of international students and the problems confronted in the process of meeting these needs. The fundamental issues being the acquisition of applicable knowledge and skills by international students studying agriculture in the United States and other developed countries and the problem of initiating and building up their own research and training institutions suitable for their community. This study is meant to assess the international students rating of his educational experience at OSU with particular reference to agricultural learning activities. Moreover OSU is such an acknowledged institution in the area of animal sciences, and agriculture as a whole, it deserves the opinion and judgement of international students to that respect.

CHAPTER III

METHODOLOGY AND PROCEDURES

The purpose of this chapter is to discuss the method used to design and conduct this study, which was directed towards international students' perceptions of selected activities and learning experiences at Oklahoma State University.

The following steps had to be accomplished in order to conduct this study:

1. Develop the instrument for collecting data.
2. Determine the population for the study.
3. Develop the procedure for collecting data.
4. Select method of analysis of data.

Population

The population used in this study was made up of both graduate and undergraduate international students enrolled in the College of Agriculture during the summer of 1990. The list of international students in this study was furnished by the Registrar's Office. Since there was a limited number of students enrolled during the summer session, the researcher felt that all these students should

be included in this survey. There were 60 students included in the study from nine academic disciplines as follows: Agricultural Economics with 22 respondents, Agricultural Engineering with 8 respondents, Animal Science with 8 respondents, Agricultural Education had 7 respondents, Entomology 4 respondents, Dairy and Food Science 2 respondents, Agricultural Marketing/Statistics 2 respondents, Soil Science 2 respondents, and Agronomy with 3 respondents. The study did not include instructors teaching in the various departments of the College of Agriculture.

Development of the Instrument

After reviewing a number of questionnaires and chatting with some other research students, the investigator came up with a comprehensive list of questions pertinent to his survey objectives. The questionnaire was designed to follow the wording and questioning sequence of some similar surveys. The questionnaire as designed reflected the following characteristics:

1. The questions were important enough to rouse a respondent to produce an answer.
2. Questions were sequenced as to not complicate answers.
3. They were as short as possible, but long enough to obtain the required data.
4. The questions were neatly and clearly arranged.

Faculty members and graduate students reviewed the questionnaire and their suggestions were used to revise it. The revised questionnaire was then pilot tested with several students and faculty members to insure that the questionnaire covered the required information.

The first section of the questionnaire inquired about respondent's name, which was optional, home country, major field of study and classification in school. The second part of the questionnaire consisted of forty-two questions related to learning experiences in the College of Agriculture, such as instructional activities, instructor/instructional procedures and practical training. An open-ended type of question was used at the end of the questionnaire to draw out students' suggestions and comments on the improvement of the College of Agriculture. After the instrument was revised and refined, it was submitted to the OSU Institutional Review Board. This group is charged with monitoring all research involving human subjects. Approval from the IRB was received on June 26, 1990. The investigator considered the option of a face-to-face contact with his respondents as the best way to insure return of questionnaires and to save time and money.

Data Treatment

The analysis of the findings was done using descriptive statistics. Computer and statistical program assistance was provided by a qualified statistician from the Statistics

Department of OSU. The computer program employed was the Statistical Analysis System (SAS) P.C. version No. 6. Means, frequencies and standard deviations were tabulated to describe responses. Percentages, mean responses in each category, and standard deviations were used as the basis for making conclusions. To allow for comparisons, it was necessary to calculate mean responses. This was accomplished by multiplying the assigned numerical value of each category of response by the number of respondents in each category, summing these products and then dividing by the total number of respondents.

To permit interpretation of calculated numerical mean responses, ranges of values were established for each response category. For instance, a mean response of 1.30 could be translated as a rating of slightly useful, or slightly involved, or effective. Figure 1 provides details of this process.

Administration of the Questionnaire

A list of international students enrolled in the College of Agriculture was provided by the Office of the Registrar. To facilitate location of names and addresses of respondents the International Students Office (316 Student Union Building) and fellow international students were consulted. A questionnaire was hand-carried directly from the researcher to each respondent.

Numerical Values of Response Category	Range of Real Limits	Category of Response
1	0.00 - 0.49	No involvements, not useful, not effective
2	0.50 - 1.49	Slightly involved, slightly useful, slightly effective
3	1.50 - 2.49	Moderately involved, moderately useful, moderately effective
4	2.50 - 3.49	Very involved, very useful, very effective
5	3.50 - 4.00	Extremely involved, extremely useful, extremely effective

Figure 1. Scales of Values Applied to Response Categories

Although all questionnaires used in the survey were hand-delivered, some questionnaires were returned by mail while a majority of them were collected on the spot as respondents completed them. A total of 60 questionnaires were given out. Of these, there were 57 valid responses and three were not returned. Valid responses accounted for 95% of the total questionnaires. The patterns of response are illustrated in Table I.

TABLE I

SUMMARY OF RESPONSE PATTERNS

	N	Percent of Total
Questionnaires Given Out	60	100
Valid Returns	57	95
Invalid or not returned	3	5

Analysis of the Data

Data obtained in the survey were analyzed using the following procedures. Figures and tables were used to display frequencies and percentages of respondents. In section two of the questionnaire, a likert type scale was used to elicit answers. The likert scales utilized and values assigned to each for the various areas investigated were as follows:

1. Level of involvement in learning experiences.
   (0) = no involvement
   (1) = slightly involved
   (2) = moderately involved
   (3) = very involved
   (4) = extremely involved

2. Level of usefulness of learning experiences.
   (0) = not useful
   (1) = slightly useful
   (2) = moderately useful
   (3) = very useful
   (4) = extremely useful

3. Level of effectiveness of instructor/instructional procedures.
   (0) = not effective
   (1) = slightly effective
   (2) = moderately effective
   (3) = very effective
   (4) = extremely effective

4. Level of involvement in resources and reference materials.
   (0) = no involvement
   (1) = slightly involved
   (2) = moderately involved
   (3) = very involved
   (4) = extremely involved

5. Level of usefulness of resources and reference materials.
   (0) = not useful
   (1) = slightly useful
   (2) = moderately useful
   (3) = very useful
   (4) = extremely useful

6. Level of involvement in practical training and leadership activities
   (0) = no involvement
   (1) = slightly involved
   (2) = moderately involved
   (3) = very involved
   (4) = extremely involved

7. Degree of relevance of practical training and leadership activities.
   (0) = not relevant
   (1) = slightly relevant
   (2) = moderately relevant
   (3) = very relevant
   (4) = extremely relevant

8. Level of involvement in non-academic activities.
   (0) = no involvement
   (1) = slightly involved
   (2) = moderately involved
   (3) = very involved
   (4) = extremely involved

9. Level of usefulness of non-academic activities.
   (0) = not useful
   (1) = slightly useful
   (2) = moderately useful
   (3) = very useful
   (4) = extremely useful

The same was true for personal information about the respondents such as previous employment, previous salary, and size of city in which the respondent lived.

Table V is a presentation of respondents' perceptions as to their level of involvement in selected instructional activities at OSU. Based upon mean extent of involvement expressed by respondents, they perceived themselves to be "moderately involved" in courses with international content, Assistantship Programs, and American/Foreign Student Interaction with 1.7, 1.3, and 1.8 mean extent of involvement scores respectively. The respondents generally indicated higher mean extent of involvement scores for Department Seminars, Work with Computers, Class Presentations, and Take-Home Assignments. The respective mean extent of involvement scores were 2.1, 2.2, 2.3, and 2.4. However, all of these scores also fit into the "moderately involved" category. The group indicated they were "very involved" in Term Paper projects by their 2.8 mean response. Wide margins between standard deviation values and mean responses result because of the pattern of response. Some respondents' ratings in scale of 0-4 was as low as 0 while some rated as high as 3. This is the case for assistantship programs, while 32 respondents rated 0 (no involvement) and 24 respondents rated as high as 1 (slightly involved) to 3 (very involved). The overall mean response for extent of involvement in instructional activities was 2.1, which was interpreted as a moderate level of involvement.

TABLE V

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF INVOLVEMENT IN SELECTED INSTRUCTIONAL ACTIVITIES

Instructional Activities	N	Mean Extent of Involvement	Rating	Standard Deviation
Class Presentation	56	2.3	Moderately Involved	1.1
Work with Computers	57	2.2	Moderately Involved	1.0
Term Paper-Project	54	2.8	Very Involved	1.1
Take Home Assignments	56	2.6	Very Involved	1.1
International Course Content	55	1.7	Moderately Involved	1.3
Assistantship	56	1.3	Moderately Involved	1.5
Dept. Seminar	57	2.1	Moderately Involved	1.1
USA-Foreign Interaction	57	1.8	Moderately Involved	1.0
Overall		2.1	Moderately Involved	0.8

Data reported in Table VI refer to respondents' perceptions as to level of usefulness of instructional activities. The lowest rated activities, American/foreign Student Interaction and Assistantship Programs were both perceived as

TABLE VI

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF USEFULNESS OF SELECTED INSTRUCTIONAL ACTIVITIES

Instructional Activities	N	Mean Extent of Usefulness	Rating	Standard Deviation
Class Presentation	53	2.7	Very Useful	0.8
Work with Computers	56	3.0	Very Useful	0.8
Term Paper-Project	53	3.1	Very Useful	0.8
Take Home Assignments	53	2.7	Very Useful	0.9
International Course Content	51	2.6	Very Useful	1.2
Assistantship	51	2.0	Moderately Useful	1.7
Dept. Seminar	55	2.7	Very Useful	1.0
USA-Foreign Interaction	56	2.2	Moderately Useful	1.1
Overall		2.6	Very Useful	0.7

"moderately useful" with mean extent of usefulness scores of 2.2 and 2.0 respectively. The remainder were perceived as "very useful." Mean extent of usefulness ratings for these ranged from a 2.6 for International Content Courses to a 2.1 for Term Paper/Projects Department Seminars, Take Home

Assignments and Class Presentations were each rated at 2.7. Work with Computers received a 3.0 mean extent of usefulness score. An overall mean score of 2.6 was reported for respondents' perceptions of extent of usefulness of instructional activities. This mean score was interpreted as "very useful."

The perceptions of respondents with regard to the effectiveness of selected instructor/instructional procedures are displayed in Table VII. From Table VII, it can be determined that Instructor's Knowledge, with a score of 3.1 was thought to be "very effective" in the learning process by respondents and was the most highly rated procedure. Others rated as "very effective" listed in order according to mean scores were Instructors Effort in Teaching, Instructors Fairness in Grading, Exploration of Subject, Presentation of Material, Lecture Method of Teaching, Overall Instructor Procedures, and Instructors Guiding Research. Respective means calculated for these were 2.9, 2.9, 2.8, 2.7, 2.7, and 2.7. The lowest mean extent of effectiveness scores were recorded for Instructor's Concern for Individual Learners, Instructors Concern for International Matters and Instructional Aids Employed in Teaching. Respondents perceived these to be "moderately effective" with mean extent of effectiveness ratings of 2.2, 2.1 and 2.0, respectively. Instructors' Concern for Individual Learning Ability was thought to be "moderately effective" with a mean extent of effectiveness rating of 2.2.

Taken as a whole, respondents perceived instructor/ instructional procedures as "very effective" in their learning process with a mean extent of effectiveness score of 2.6.

TABLE VII

PERCEPTIONS OF RESPONDENTS AS TO THE EFFECTIVENESS OF SELECTED INSTRUCTOR/ INSTRUCTIONAL PROCEDURES

Instructor/ Instructional Procedures	N	Mean	Rating	Standard Deviation
Inst. can Explain Subject	57	2.8	Very Effective	0.7
Instructor's Knowledge	57	3.1	Very Effective	0.7
Presentation of Material	56	2.7	Very Effective	0.8
Lecture Method of Teaching	55	2.7	Very Effective	0.7
Instructor's Effort Teaching	55	2.9	Very Effective	0.8
Instructor's Guiding of Research	55	2.5	Very Effective	1.1
Instructor's Concern International	57	2.1	Moderately Effective	1.0
Instructor's Concern Indi. Learn	55	2.2	Moderately Effective	0.9
Instructor's Fairness in Grading	55	2.9	Very Effective	0.8
Instructional Aids (T.V., etc.)	55	2.0	Moderately Effective	1.2
Overall Instructor	57	2.7	Very Effective	0.6
Overall		2.6	Very Effective	0.7

Respondents' perceptions as to extent of involvement in selected resources and reference materials are reported in Table VIII. From the data presented in Table VIII, it can be determined that respondents perceived themselves to be "very involved" in the use of OSU Library, Textbooks, and Computer Labs. The respective mean extent of involvement scores for each were 2.5. The remainder of the resources and reference materials were perceived as of "moderate involvement" by respondents. Mean extent of involvement rating for these ranged from 2.4 for Library Staff to 1.7 for Library Microform. College of Agriculture Reference Library received a rating of 2.1 and Library CD-ROM was rated at 1.8. Standard deviations calculated for the remaining response categories were either 1.0 or a little above 1.0, indicating there was considerable variance of responses from the mean. An average mean score of 2.3 was reported for respondents' perceived extent of involvement in resources and reference materials which was interpreted as "moderate involvement."

Data presented in Table IX refer to perceptions of respondents as to level of usefulness of selected resources and reference materials. This indicated that Computer Labs was the most highly rated resource material with a mean extent of usefulness rating of 3.0 and which was interpreted as "very useful." Other resources and reference materials rated as "very useful" were OSU Library, Library Staff each with a mean score of 2.7 and Textbooks which received a mean

TABLE VIII

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF INVOLVEMENT IN SELECTED RESOURCES AND REFERENCE MATERIALS

Resources and Reference Materials	N	Mean Extent of Involvement	Rating	Standard Deviation
Library Staff	57	2.4	Moderately Involved	1.1
Library CD-ROM	54	1.8	Moderately Involved	1.4
Library Microform	54	1.7	Moderately Involved	1.3
College of Agri. Reference Libr.	55	2.1	Moderately Involved	1.2
OSU Library	54	2.5	Very Involved	1.0
Textbooks in Use	55	2.5	Very Involved	0.9
Computer Labs	54	2.5	Very Involved	1.0
Overall		2.3	Moderately Involved	0.7

score of 2.5. The remainder of the resources and reference materials were rated as "moderately useful." Mean extent of usefulness scores for these ranged from 2.4 for College of Agriculture Reference Library to 2.2 for Library Microform. Library CD-ROM received a mean score of 2.3. In general, respondents perceived OSU resources and reference materials

as "very useful," as indicated by an overall mean score of 2.6.

TABLE IX

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF USEFULNESS OF SELECTED RESOURCES AND REFERENCE MATERIALS

Resources and Reference Materials	N	Mean Extent of Usefulness	Rating	Standard Deviation
Library Staff	56	2.7	Very Useful	1.1
Library CD-ROM	47	2.3	Moderately Useful	1.4
Library Microform	51	2.2	Moderately Useful	1.4
College of Agri. Reference Libr.	52	2.4	Moderately Useful	1.2
OSU Library	52	2.7	Very Useful	1.0
Textbooks in Use	53	2.5	Very Useful	0.9
Computer Labs	54	3.0	Very Useful	0.9
Overall		2.6	Very Useful	0.7

Respondents perceptions as to the level of involvement in selected aspects of practical training and leadership activities are presented in Table X. In comparison with other areas investigated, respondents perceived they had had much less involvement in Practical Training and Leadership Activities. As indicated in Table X, Computer Management instruction received the highest mean extent of involvement rating of 1.9 which was interpreted as "moderate involvement." Other Practical Training activities rated at "moderate involvement" were International Students Organization Activities, with a mean score of 1.7, and Lab Training with a mean score of 1.5. The ratings for the remainder of the Practical Training activities included 1.2 for Practical Teaching and Visit to Ag-Project respectively. These fit into the "slightly involved" category. Other Practical Training activities rated at the "slightly involved" category were Physical and Health Education with a mean score of 1.0, and Working at OSU Agbus and On/Off Farm Experience received a 0.8 mean score respectively. The overall mean score recorded for respondents' perceived level of involvement in Practical Training was 1.3 which was interpreted as "moderately useful."

Data reported on Table XI refer to respondents' perceptions as to degree of relevance of selected aspects of Practical Training and Leadership Activities. As summarized on Table XI, it can be determined that respondents perceived Computer Management Instruction to be "very relevant" to

TABLE X

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF INVOLVEMENT IN SELECTED ASPECTS OF PRACTICAL TRAINING AND LEADERSHIP ACTIVITIES

Practical Training and Leadership Activities	N	Mean Extent of Involvement	Rating	Standard Deviation
Practical Teaching	56	1.2	Slightly Involved	1.2
Visit Ag. Project	57	1.2	Slightly Involved	1.3
Lab Training	55	1.5	Moderately Involved	1.3
Computer Mgmt Inst.	56	1.9	Moderately Involved	1.1
Work at OSU Agbus	55	0.8	Moderately Involved	1.2
Phys/Health Ed.	55	1.0	Slightly Involved	1.2
On/Off Farm Experience	5	0.8	Slightly Involved	1.1
Intnt'l Student Org.	57	1.7	Moderately Involved	1.1
Overall		1.3	Moderately Involved	1.0

their career objectives with their 2.8 mean response. Lab Training also fell into the category of "very relevant" with a mean response of 2.5. The remainder of the Practical Training Activities were rated as "moderately relevant" by

TABLE XI

PERCEPTIONS OF RESPONDENTS AS TO DEGREE OF RELEVANCE OF SELECTED ASPECTS OF PRACTICAL TRAINING AND LEADERSHIP ACTIVITIES

Practical Training and Leadership Activities	N	Mean Extent of Relevance	Rating	Standard Deviation
Practical Teaching	50	2.1	Moderately Relevant	1.3
Visit Ag. Project	49	2.1	Moderately Relevant	1.5
Lab Training	51	2.5	Very Relevant	1.4
Computer Mgmt Inst.	52	2.8	Very Relevant	1.0
Work at OSU Agbus	46	1.9	Moderately Relevant	1.6
Phys/Health Ed.	47	1.8	Moderately Relevant	1.3
On/Off Farm Experience	48	2.0	Moderately Relevant	1.5
Intnt'l Student Org.	57	1.7	Moderately Involved	1.1
Overall		2.2	Moderately Relevant	1.1

respondents ranging from 2.1 for Practical Teaching and Visit to Ag. Project respectively to a 1.7 mean score for International Student Organization. The remaining activities rated as "moderately relevant" were On/Off Farm Experi-

ence with a mean score of 2.0, Physical and Health Education with a mean score of 1.8 and Work at OSU Agbus with a mean score of 1.9. The overall mean score for respondents' perceptions of the degree of relevance of Practical Training and Leadership Activities combined was 2.2, which was interpreted as "moderately relevant."

Respondents' perceptions as to extent of involvement in non-academic activities are presented in Table XII. Generally, perceived involvement in non-academic activities was lower than other activities and learning experiences. As shown in Table XII, Sports Activities, Attendance of Professional Meetings and International Student's Activities were the most highly rated activities and fell into the "moderately involved" category. Mean scores for these were each 1.7. The remainder of the non-academic activities were rated at "slightly involved." Mean scores for these ranged from 1.4 for Religious Services to 1.0 for Financial Assistance Programs, On Campus Employment and Physical/Health Education respectively. Fraternity/Sorority was rated at "no involvement" with a mean score 0.4. The overall mean score for respondents' perceptions as to extent of involvement in non-academic activities was 1.2 and this was interpreted as "moderately involved."

Table XIII represents respondents' perceptions as to level of usefulness of non-academic activities. Although respondents indicated much less involvement in non-academic activities, the perceived levels of usefulness were somewhat

TABLE XII

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF INVOLVEMENT IN SELECTED NON-ACADEMIC ACTIVITIES

Non-Academic Activities	N	Mean Extent of Involvement	Rating	Standard Deviation
Religious Services	56	1.4	Slightly Involved	1.3
Financial Assistance	55	1.0	Slightly Involved	1.3
On-campus Employ	54	1.0	Slightly Involved	1.3
Attend Prof. Mtg.	56	1.7	Moderately Involved	1.3
Phys/Health Program	57	1.0	Slightly Involved	1.2
Fraternity/Sorority	55	0.4	No Involvement	1.0
Sports Activities	55	1.7	Moderately Involved	1.1
Intnt'l Student Org.	57	1.7	Moderately Involved	1.1
Overall		1.2	Moderately Involved	0.8

higher for these activities. Sports Activities and Attendance of Professional Meetings were rated as "very useful" and were the most highly rated in this category with mean scores of 2.5 and 2.7 respectively. The rest of the

TABLE XIII

PERCEPTIONS OF RESPONDENTS AS TO EXTENT OF USEFULNESS OF SELECTED NON-ACADEMIC ACTIVITIES

Non-Academic Activities	N	Mean Extent of Usefulness	Rating	Standard Deviation
Religious Services	52	1.9	Moderately Useful	1.5
Financial Assistance	50	2.2	Moderately Useful	1.4
On-campus Employ	48	2.2	Moderately Useful	1.5
Attend Prof. Mtg.	54	2.7	Very Useful	1.0
Phys/Health Program	51	1.9	Moderately Useful	1.1
Fraternity/Sorority	45	0.7	Slightly Useful	1.1
Sports Activities	53	2.5	Very Useful	1.1
Intnt'l Student Org.	55	2.3	Moderately Useful	1.2
Overall		2.0	Moderately Useful	0.8

non-academic activities were rated as "moderately useful" by respondents. These include Religious Services, Financial Assistance Programs, On Campus Employment, Physical and Health Education, and International Students Organization Activities. Mean scores for these were 1.9, 2.2, 2.2, 1.9,

0.7, and 2.3. Fraternity/Sorority was the lowest rated activity in this category with a mean score of 0.7 and this fell into the category of "slightly useful." An overall mean score of 2.0 was calculated for respondents' perceptions as to the extent of usefulness of non-academic activities and was interpreted as moderately useful.

Any response category with mean and standard deviation very close, e.g., extent of involvement in Practical Training with an overall mean of 1.3 and a standard deviation of 1.0 would be an indication that the respondents were not close in their rating; some rated it high, while others rated it low. A response category with high mean and a low standard deviation is an indication that the respondents were very close in their rating, e.g, instructor/instructional procedures with an overall mean of 2.6 and a standard deviation of 0.7.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to summarize some major topics discussed earlier and to make appropriate conclusions and recommendations based on the findings of the study. The chapter will summarize purpose of the study, objectives of the study, methodology and major findings of the study and conclusions and recommendations.

Summary

This section is a summary of the general plan of the study. The major problem confronted in this study is that the foreign national's perceptions and appraisal of the activities and learning experiences at Oklahoma State University should be of primary importance to faculty and parents as a tool for future planning and improvement of curriculum, teaching methods, and services to internationals. This study was an attempt to assess the foreign national's perceptions and rating of his educational experiences at Oklahoma State University, with emphasis on agricultural learning experiences.

Purpose of the Study

The major and controlling purpose of this study was to determine international students' perceptions of selected activities and learning experiences in agricultural programs of study at Oklahoma State University in terms of meeting the needs and objectives of these students. Further, it was designed to investigate possible ways to improve the University academic and general services to the internationals.

Objectives of the Study

The following objectives were established to accomplish the purpose of the study.

1. Determine the extent of involvement and level of usefulness of selected aspects of instruction by international students in agriculture at Oklahoma State University.
2. Determine international students rating of selected aspects of instructor/instructional procedures with respect to the level of effectiveness in their learning process.
3. Determine the extent of involvement and level of usefulness of selected resources and reference materials by international students.
4. Determine the extent of involvement in selected aspects of practical training and its relevance to the career objectives of international students.

5. Determine the extent of involvement in selected non-academic activities and their judgement with respect to the usefulness of these activities.

Design and Methodology

The study was designed to satisfy the above mentioned purpose and objectives.

Scope and Limitations

Only graduate and undergraduate international students enrolled in the College of Agriculture during the summer term of 1990 were included in the study. The investigator had no control over the on and off movement of students during this term and this impacted on the population.

Population

The population used in the study consisted of undergraduate and graduate international students enrolled in the College of Agriculture during the Summer of 1990.

Development of the Instrument

Use of the questionnaire was considered the most effective method of data collection for the study. The questionnaire used in this study was designed following the wording sequence of similar surveys. The questionnaire consisted of two parts. The first part of the questionnaire asked for respondents name which was optional, country of citizenship

and classification and major field of study. Part two of the questionnaire consisted of forty two questions addressing learning experiences in the College of Agriculture and one open ended question asking for respondents suggestions and comments concerning the present curriculum in the College of Agriculture.

Data Collection

Before data collection, the survey instrument was approved by the OSU internal review board (IRB). Questionnaires were hand- delivered by the investigator to respondents homes or offices. Out of 60 survey sample, 57 valid responses were collected by the end of the summer session which amounted to 95% response.

Analysis of Data

Data obtained in the survey were analyzed using figures and tables to display frequencies and percentages of respondents. The SAS PC version NO-6 program was employed to perform the calculations required.

Major Findings of the Study

Fifty-six of the 57 respondents came from 23 countries while one respondent did not indicate country of origin. Forty-seven of the 57 respondents were graduate students, while 10 were undergraduates. The group were enrolled in 9 different academic disciplines in the College of

Agriculture, including Agricultural Economics, Agricultural Engineering, Agricultural Education, Animal Science, Agronomy, Soil Science, Food/Dairy Science, Agricultural Marketing/Statistics and Entomology.

The following findings were developed to answer the objectives of the study. Data displayed in Table XIV represents the overall perception of OSU international agricultural students as to involvement, usefulness, effectiveness, or relevance of selected activities and learning experience.

1. Based upon overall mean response, respondents perceived themselves to be moderately involved in instructional activities at OSU. Overall mean score was 2.1. However, their perceptions as to the usefulness of instructional activities was "very useful" by an overall mean response of 2.6.
2. The perceptions of the group as to the effectiveness of instructor/instructional procedures was "very effective" by an overall mean response of 2.6.
3. The group perceived themselves to be moderately involved in the use of OSU resources and reference materials by their overall mean response of 2.3. Resource and Reference Materials were perceived as "very useful" by their overall mean response of 2.6. Usefulness of Resources and Reference Materials was one of the most highly rated

TABLE XIV

OVERALL PERCEPTIONS OF OSU INTERNATIONAL AGRICULTURAL STUDENTS AS TO INVOLVEMENT, USEFULNESS, EFFECTIVENESS, OR RELEVANCE OF SELECTED ACTIVITIES AND LEARNING EXPERIENCE

Activities & Learning Experiences	Area of Perception Measure	Mean Response		Standard Deviation
		Value	Category	
Instructional Activities	Involvement	2.1	Moderately Involved	0.8
	Usefulness	2.6	Very Useful	0.7
Instr/Instruc. Procedures	Effectiveness	2.6	Very Effective	0.7
Resources/Ref. Materials	Involvement	2.3	Moderately Involved	0.7
	Usefulness	2.6	Very Useful	0.7
Prac. Training/ Leadership Act.	Involvement	1.3	Moderately Involved	1.0
	Relevance	2.2	Moderately Relevant	1.1
Non-Academic Activities	Involvement	1.2	Moderately Involved	0.8
	Usefulness	2.0	Moderately Useful	0.8

activities. However, as mentioned earlier, usefulness of Instructional Activities and effectiveness of Instructor/Instructional Experience were also perceived as "very useful" and "very effective" with overall mean scores of 2.6 each.

4. With respect to Practical Training, respondents perceived themselves to be "moderately involved" by their overall mean response of 1.3. The group also perceived Practical Training and Leadership Activities at OSU to be "moderately relevant" to their career objectives. Overall mean response was 2.2.
5. As to involvements in Non-Academic Activities, respondents perceived themselves to be "moderately involved" in Non-Academic Activities at OSU by their overall mean response of 1.2. Respondents also perceived these Non-Academic Activities as "moderately useful" in their learning process by their overall mean response of 2.0.

Conclusions

The ensuing conclusions were drawn based on the mean responses, review of literature and the personal experiences of the investigator.

1. It was concluded that while international students pursuing degree programs in agriculture did not have particularly high levels of involvement in selected instructional activities, they placed a high value on the usefulness of the investigated instructional activities in helping them achieve their career objectives.
2. It was also concluded that the selected instructor/instructional activities addressed here in this survey were perceived as having a highly positive impact in helping students reach their educational goals, and indicates that they had had positive experiences at OSU.
3. With regard to resources/reference materials, it was concluded that international students enrolled in the College of Agriculture perceived the usefulness of selected resources and reference materials to be considerably greater than was true for the extent to which they were able to be involved in their use.
4. Further, it was concluded that compared to the above-mentioned activities and learning experiences, international students enrolled in the agriculture college had experienced a somewhat lower level of involvement in the array of practical training activities. This would indicate that Oklahoma State University needs to

increase the amount of practical training experience available to international students. The relevance of these experiences to the situations of these students also should be improved.

5. International students were both involved with and valued selected non-academic experiences and activities at lower levels than was the case for all other groups of learning activities that were addressed in this survey.
6. As a final conclusion, it can be said that international agricultural students were satisfied with their educational experience at Oklahoma State University. In addition to the perceptions already addressed, students expressed satisfaction by making positive and interesting comments for the improvement of the agriculture curriculum at Oklahoma State University.

Recommendations

Based on the conclusions drawn from the mean responses, review of literature and personal experiences of the investigator, the following recommendations were made.

1. International students should be encouraged to participate in a wide variety of courses with international dimension in the College of Agriculture coursework; more especially courses that

address world agriculture and food production problems with special emphasis to the problems of the developing countries. Students should involve themselves in courses of international dimension on a regular basis.

2. It is recommended that research of international nature should involve faculty members, international students, and American students for mutual understanding.
3. Increased non-academic services to international students is highly recommended. These should include special assistantships, scholarships and other types of financial assistance programs to deserving internationals. International student advisement should be given special consideration in order to achieve career objectives and employment opportunities. Intercultural programs such as the international exposition that portray cultural heritage should be encouraged and partly funded by Oklahoma State University. On the whole, international students participation and involvement in non-academic programs such as sports and athletics, physical and health education is low and therefore should be encouraged.
4. It is also recommended that Oklahoma State University should review its admissions criteria for international students. Admission requirements

should include letters of recommendation and approval from the student's principal or school official for undergraduate admission. In addition to the usual (TOEFL) Test of English as a Foreign Language, consideration should be given to students who have performed well in their high school English courses.

5. Establishment of international workshops that will include faculty and international students is recommended. The workshops should review ways of encouraging and increasing international students participation in extra-curricular activities. Clubs and organizations should be encouraged to include intercultural and international activities in their annual programs. The workshops should also be used as an avenue for further exploring needs and educational objectives of international students. In such workshops, an attempt should be made to compare the differences that may exist in teaching methods between the student's home country institutions and Oklahoma State University.
6. It is further recommended that the College of Agriculture and all the departments within it should review their curriculum in view of meeting practical training needs of international students. The curriculum should include enough practical experience that allows students frequent

visits to farms and agricultural projects within and outside the state of Oklahoma. Students should be given opportunity to enroll in courses that they may deem relevant to their home country situation and level of development.

7. At the undergraduate level there is still a lack of American-international student interaction. The best way for a newly arrived international to learn faster and cope with the classroom situation is by interacting with American citizens. Isolation in a classroom situation can make learning bitter for foreign nationals. Learning activities both in the classroom and outside the classroom at the undergraduate level should be designed in a way to foster better interaction between American citizens and foreign nationals. In fact, it has to be encouraged.

8. Finally, this study cannot be completed without the author admitting the fact that international students have expressed satisfaction with their education at Oklahoma State University. The result of this survey provided evidence of strengths and weaknesses in the programs of study in the College of Agriculture. There was high degree of satisfactions for instructor/instructional procedure, instructional experience and resources and reference materials and lesser sat-

isfaction for non-academic activities and practical training. Future planning should consider some of the findings, conclusions and recommendations of this survey in order to achieve more effective learning activities.

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APPENDIXES

APPENDIX A

LETTER OF THE CONDUCTOR OF STUDY TO THE INTERNATIONAL STUDENTS SELECTED AS RESPONDENTS

OSU

Oklahoma State University

DEPARTMENT OF AGRICULTURAL EDUCATION
DIVISION OF AGRICULTURE

STILLWATER, OKLAHOMA 74078-0484
448 AGRICULTURAL HALL
405 744-5129

Dear fellow students:

I am enrolled as a graduate student at Oklahoma State University and in the process of collecting data for my dissertation. I have chosen a research subject of interest to me and which pertains to the improvement and modification of selected aspects of learning experiences in the college of agriculture at Oklahoma State University. The results of this survey I hope will be of great assistance to the persons concerned with modification and improvement of programs of study in the college of agriculture and the services to international students. Please respond to this questionnaire as accurately as possible. I realize that you have such a busy schedule, but your response is very important for the success of this study and for the improvement of selected learning experiences in agriculture at OSU. I will be very grateful for your full cooperation in expressing your feelings.

Sincerely,

Francis Eloi

Approved:

H. Robert Terry, Professor and Head

APPENDIX B

DATA COLLECTION INSTRUMENT

International Students' perceptions of selected activities and learning experiences in Agricultural programs at Oklahoma State University.

SURVEY RESPONSE SCHEDULE.

1. General information:
   a) Name: (optional) _____
   b) Native country/country of citizenship: _____
   c) Major field of study: _____
   d) Classification (mark one): Undergraduate _____
      Graduate _____
      Other/professional_____

PART I.

A. INSTRUCTIONAL EXPERIENCE

Please respond to the following questions with regard to your perceptions of the usefullness and your extent of involvement in each of these instructional activities in the college of agriculture at Oklahoma State University.

GENERAL DIRECTIONS

Use the scale on the right-hand margin to rank the statements according to your extent of involvement and level of usefulness in your learning process as follows:

(0)=not useful (1)=slightly useful (2)=moderately useful (3)=very useful (4)=extremely useful.

(0)=no involvement (1)=slightly involved (2)=moderately involved (3)=very involved (4)=extremely involved. Circle your answer.

Using the scales below, what would be the best description of your extent of involvement and usefulness in these instructional activities. Circle 0 if the question does not apply to you.

	Level of involvement					Level of usefulness				
	None	Slightly	Moderately	Very	Extremely	Not	Slightly	Moderately	Very	Extremely
1. Class presentation in major subject.	0	1	2	3	4	0	1	2	3	4
2. Experience in working with computers.	0	1	2	3	4	0	1	2	3	4
3. Term paper/class project.	0	1	2	3	4	0	1	2	3	4

4. Take home assignment in major field of study.	0	1	2	3	4		0	1	2	3	4
5. Class group activities.	0	1	2	3	4		0	1	2	3	4
6. Courses with international content.	0	1	2	3	4		0	1	2	3	4
7. Assistantship experience in the department.	0	1	2	3	4		0	1	2	3	4
8. Attendance of a seminar in your department.	0	1	2	3	4		0	1	2	3	4
9. Interaction between American students and International students.	0	1	2	3	4		0	1	2	3	4

B. INSTRUCTOR/INSTRUCTIONAL PROCEDURES

What would be your rating of the following instructional procedures at OSU with regard to how effective they were in your learning process. Circle your answer.

	Level of effectiveness				
	Not	Slightly	Moderately	Very	Extremely
10. Instructors ability to explain subject matter.	0	1	2	3	4
11. Instructors knowledge of subject.	0	1	2	3	4
12. Presentation of material.	0	1	2	3	4
13. Lecture method of teaching.	0	1	2	3	4
14. Effort devoted to teaching by instructor.	0	1	2	3	4
15. Instructor's ability to guide in research.	0	1	2	3	4
16. Instructor's concern for international students/international matters.	0	1	2	3	4
17. Instructor's concern for individual learning ability.	0	1	2	3	4
18. Instructor's fairness in grading.	0	1	2	3	4
19. Instructional aids employed in teaching (TV, film, video, etc).	0	1	2	3	4
20. Overall instructor appraisal.	0	1	2	3	4

C. RESOURCES AND REFERENCE MATERIALS

What would be your judgement as to the extent of involvement and level of usefulness of the following resources and reference materials. Circle 0 if the question does not apply to you.

	Extent of involvement					Level of usefulness				
	None	Slightly	Moderately	Very	Extremely	Not	Slightly	Moderately	Very	Extremely
21. Library staff.	0	1	2	3	4	0	1	2	3	4
22. CD-ROM resources in OSU library.	0	1	2	3	4	0	1	2	3	4
23. Library microform or media.	0	1	2	3	4	0	1	2	3	4
24. Reference materials used in the College of Agriculture.	0	1	2	3	4	0	1	2	3	4
25. The OSU campus libraries as a whole.	0	1	2	3	4	0	1	2	3	4
26. Textbooks currently used.	0	1	2	3	4	0	1	2	3	4
27. Computer laboratories.	0	1	2	3	4	0	1	2	3	4

PART II

A. Relevance of practical training and leadership activities.

From a standpoint of need and home country situation, rank each of these practical training and leadership activities at OSU according to your extent of involvement and degree of relevance using both scales.

	Extent of Involvement					Degree of relevance				
	None	Slightly	Moderately	Very	Extremely	Not	Slightly	Moderately	Very	Extremely
28. Practical teaching experience.	0	1	2	3	4	0	1	2	3	4
29. Visit to a farm or agricultural project.	0	1	2	3	4	0	1	2	3	4
30. Laboratory training in major field.	0	1	2	3	4	0	1	2	3	4
31. Use of computer managed instruction.	0	1	2	3	4	0	1	2	3	4
32. Working to gain experience in an OSU farm or agribusiness.	0	1	2	3	4	0	1	2	3	4

33. Physical and health education program.	0	1	2	3	4	0	1	2	3	4
34. On the farm and off farm experience.	0	1	2	3	4	0	1	2	3	4

B. Non-academic activities

What would be your judgement with regard to your extent of involvement and level of usefullness in these non-academic activities.

	Extent of involvement					Level of usefulness				
	None	Slightly	Moderately	Very	Extremely	Not	Slightly	Moderately	Very	Extremely
35. Religious services.	0	1	2	3	4	0	1	2	3	4
36. Financial assistance for internationals.	0	1	2	3	4	0	1	2	3	4
37. On-campus employment.	0	1	2	3	4	0	1	2	3	4
38. Attendance at professional meeting or seminar.	0	1	2	3	4	0	1	2	3	4
39. Physical and health education program.	0	1	2	3	4	0	1	2	3	4
40. Fraternity/sorority.	0	1	2	3	4	0	1	2	3	4
41. Sports/athletic activities.	0	1	2	3	4	0	1	2	3	4
42. International Students Organization activities.	0	1	2	3	4	0	1	2	3	4

43. Your suggestions and comments:

Please return the completed questionnaire to: Mr. Francis Eloi
P. O. Box 283
Stillwater, Oklahoma
74076

Thank you for taking part of your precious time in completing this questionnaire.

VITA

Francis Isu Eloi

Candidate for the Degree of

Master of Science

Thesis: INTERNATIONAL STUDENTS' PERCEPTIONS OF SELECTED ASPECTS OF ACTIVITIES AND LEARNING EXPERIENCES IN AGRICULTURAL PROGRAMS AT OKLAHOMA STATE UNIVERSITY

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Afikpo, Imo State of Nigeria, March 12, 1954, son of Alu and Oyiri Eloi.

Education: Graduated from County Secondary School Abakaliki in Anambra State, Nigeria, in May 1973 and Macgregor College, Afikpo in Imo State, June 1975. Received Associate of Science degree in Animal Science from Yakima Valley College, Yakima, Washington, December 1979. Received a Bachelor of Science degree in Agriculture with major in Animal Science from Oklahoma State University, May 1985. Completed the requirements for the Master of Science degree at Oklahoma State University, Stillwater, Oklahoma, December 1990.

Professional Experience: Taught high school science in Nigeria for two years, 1976-1979. Employed as receptionist at the Yakima Valley Art Gallery, 1978-1979.

Goals: I like to be involved in agricultural and community development programs that will accelerate the production of high quality protein food for the third world countries. I have great desire for community and adult education leadership and obtaining a Master of Science degree in Agricultural Education would help me attain these goals in my country.