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THE IMPACT OF THE NIGERIAN
MANPOWER PROJECT ON STUDENTS
IN SELECTED U.S. JUNIOR AND
COMMUNITY COLLEGES

IGBOEGWU, CHARLES EJIKE
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IN SELECTED U. S. JUNIOR AND COMMUNITY COLLEGES**

University of Illinois at Urbana-Champaign

PH.D. 1980

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**THE IMPACT OF THE NIGERIAN MANPOWER PROJECT
ON STUDENTS IN SELECTED U.S. JUNIOR AND
COMMUNITY COLLEGES**

BY

CHARLES EJIKE IGBOEGWU

**Dipl., University of Nigeria, 1973
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THESIS

**Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Education
in the Graduate College of the
University of Illinois, Urbana-Champaign, 1980**

Urbana, Illinois

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

THE GRADUATE COLLEGE

July 9, 1980

WE HEREBY RECOMMEND THAT THE THESIS BY

CHARLES EJIKE IGBOEGWU

ENTITLED THE IMPACT OF THE NIGERIAN MANPOWER PROJECT ON

STUDENTS IN SELECTED U.S. JUNIOR AND COMMUNITY COLLEGES

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I. INTRODUCTION

It has been estimated that every engineer in America has three to four technical assistants who read his blueprints and translate them into job activities. In Nigeria, the estimate is that there is less than one technician per engineer (USAID Nigerian Manpower Project, School Coordinator Handbook, 1979. p. 2). If this is really so, it is a disproportionately high ratio of professionals to technicians, and this, therefore, has tended to slow down the much advocated technological development of Nigeria.

The immediate need to improve this ratio spurred the then Military Government of Nigeria in 1977, to embark on two schemes for expanding the post-secondary technical school system, on a long term basis, and in the short term, for sending thousands of students abroad to be trained as middle-level technicians. Both schemes were undertaken in attempts to meet the goals of the Five-Year Plan on Technical Education namely, to provide:

a broadened program that can cope with the tremendous demand for technical expertise to implement our development programs across sectors of the Nigerian economy.

(USAID Nigerian Manpower Project, School Coordinator Handbook, 1979. p. 58). A cursory manpower survey conducted in the spring of 1977 indicated that a minimum of 60,000 additional technically trained people were needed in Nigeria within the five-year plan period (1975 - 1980) (USAID-Nigerian Manpower Project, School Coordinator Handbook, 1979. p. 58).

This study led to the establishment of a high-level commission charged with the task to immediately implement programs to train the estimated sixty thousand technicians within the plan period.

The Commission established for this implementation embarked on a world-wide contracting of the Technical Manpower Development Projects to governmental and private agencies in technically-advanced countries. These countries included the United States of America, Great Britain, France, Italy, Canada, Yugoslavia, Rumania and Bulgaria (USAID Nigerian Manpower Project, School Coordinator Handbook, 1979. p. 59). On August 16, 1977, the Nigerian Federal Ministry of Education contracted a segment of the Technical Manpower Development Project to the United States Agency for International Development (USAID) hence the USAID Nigerian Manpower Project (NMP) was established. (see Nigeria/U.S. Agreement, 1977, Appendix A). In the USAID-NMP School Coordinator Handbook (1979), the USAID described the Project as follows:

fully financed by the Nigerian Government, the (USAID) Nigerian Manpower Project becomes the first major training project under the Agency's Office of Reimbursable Development Programs, which provides technical assistance and goods to developing countries able and willing to pay for such services. (p. 3).

The USAID agreed to train up to 10,000 students in prescribed technical areas over the next five years. For the period of this study, the Nigerian students involved in the Project in the U.S. represented one-third of the total number that Nigeria has sent all over the world for the technical training.

Since September of 1977, nearly 2,500 Nigerians have come to the U.S. to acquire technical training in a variety of vocational and technical areas crucial to the Nigerian manpower development. These technical training programs vary in scope and content, ranging from technical licenses and certificate programs at Technical Institutes, to Associate Degree programs in Junior and Community Colleges, to Bachelor of Science Degree programs in four-year institutions. Fields of study identified by the Nigerian government as priorities, and which were not yet offered on a large scale in Nigerian institutions, included civil and mechanical engineering, agriculture, construction, electronics, accounting and health related fields (USAID-NMP School Coordinator Handbook, 1979. p. 3). By 1978, a total of 174 vocational and technical institutes, community and junior colleges, colleges and universities had enrolled Nigerian students in the USAID-NMP (School Coordinator Handbook, 1979. p. 3).

The Nigerian Manpower Development Project has been a large and expensive project. A USAID-NMP Staff member interviewed indicated that the Nigerian government paid the USAID a minimum cost of \$10,000 per year for each student on the U.S. two year associate degree program.

Large scale projects such as this require extensive monitoring and evaluation systems to ensure a higher probability of overall success. Formative studies therefore, would appear to be useful at the infant stages of the Project in order to assess and restructure any aspects or components of the Project that might not be operating optimally. Research and evaluation studies would be needed, for example, to assess the impacts of the Project's programs on students

in the programs, or the participating training institutions, or to make cost-benefit and cost-effectiveness analyses of the various programs.

While the Nigerian students have been enrolled in a broad range of U.S. institutions and programs, the researcher focused an initial study on students in one group of programs: namely, two-year associate of applied science degree programs in U.S. Junior and Community Colleges. A few other institutions not designated "Junior" or "Community" colleges also enrolled Nigerian students in their two-year associate degree programs. This formative research study, therefore, focused on the "impact" of the USAID Nigerian Manpower Project on students in two-year associate of applied Science degree programs in selected U.S. Junior and Community Colleges.

It was anticipated that the findings of such a study would be valuable to the administrators of the USAID Nigerian Manpower Project, and planners of other internationally administered technical manpower training projects that were similar in design and intent. The anticipated benefits of the study were expressed by the USAID Project Director for the North Central States. His letter of March 30, 1979 (Appendix B) indicated that the results of this study could:

provide an insight into the adaptation of our (Nigerian) students to the U.S., and through this, we (AID) will be able to understand and deal with their problems more effectively.

It was also anticipated that officials in Nigeria and other nations sponsoring similar technical education projects would gain insight into the nature and extent of existing concerns around the students'

programs, as well as other potential concerns with which prospective students are likely to be confronted. The findings also could be valuable to the officials in selecting and preparing student orientation programs. The institutions in which these students have been trained would also have some insight into what they could do to improve or insure the expected benefits of the program. The parallel study conducted by Patricia Skinner (1979) on The Impact of the Nigerian Manpower Project on Selected Community Colleges, and another being conducted by Gene Peuse on The Impact of the Nigerian Manpower Project on Waukipsee College, both provide much deeper insight in this regard.

Rationale for the study

The term "impact" used in a broad sense could include many variables. For example, it may be broadly used to describe formative (pilot) studies, summative studies, cost-benefit and cost-effectiveness studies, follow-up studies, and current status case and field studies. However, impacts of an educational project like this can be considered as the measurable or observable changes or influences (positive or negative) that are intended or unintended, immediate or subsequent. These changes or influences could be quantitative as well as qualitative and might relate to the process, inputs, products and environmental setting of the educational system in which the project is administered. This sort of impact requires a chain of assessments at the beginning, formative, summative and subsequent stages (Cheney-Stern and Evans, 1979). In this study, however, the assessment of the "impact" of the project was narrowly defined to refer to a current status, formative case study of students in a post-secondary technical education project. Further, the expression specifically refers to (1) those observable non-numerical CHANGES (if any) in students' career goals and aspirations, and self awareness including awareness and influences of new opportunities available to them - all of which may have resulted from their enrollment in the project, and (2) those CONCERNS (problems) - vocational, academic and social in nature, that students are confronted with in their programs.

A study of changes in career goals and aspirations is important for several reasons. One of the central objectives of the Nigerian technical manpower development project was to expand the quality and quantity of skilled mid-level technical manpower needed "to assume key middle-level technical positions" in Nigeria (School Coordinator Handbook, 1979. p. 3). The nature and extent of changes in students' career goals and aspiration becomes important in this process if, for instance, the hypothesis is true that the majority of Nigerian students trained for middle-level technical positions plan to or immediately advance to the high-level positions by obtaining four-year college degrees; then it would appear that the Nigerian labor force would suffer perpetual shortages of the middle-level technical manpower. If such a hypothesis were found to be true, it would appear to become imperative for the Nigerian government to reconsider its policies and strategies for generating and retaining the needed skilled technical manpower at the middle-level for a considerable length of time.

A close examination of the vocational, academic and social adjustment problems of the Nigerian students also has major importance. The U.S. institutions in which these Nigerian students were enrolled were specifically designed in structure and content, to meet the post-secondary education needs of a specific U.S. community. It would be expected that Nigerian students coming from an entirely different socio-cultural school system, and thus having had different curriculum backgrounds, are likely to encounter vocational and academic adjustment

problems. Considering that for most of these students, this would probably be their first time living in a different socio-cultural environment, it would also be expected that they would be likely to encounter some social adjustment problems which if promptly determined could be addressed by the administrators so as to reduce them.

Critical background information about the study

In order to better understand and appreciate the study, the researcher thought it would perhaps be necessary to describe briefly some aspects of the background situation out of which the intended population came. Portions of this description are based on the researcher's knowledge and experiences as a Nigerian, and on his discussions with Nigerians in related African studies at the University of Illinois at Urbana-Champaign, and with other Nigerians enrolled at other college campuses in the U.S.

The Nigerian Government's attitude towards practical technical training appears to be gradually changing. For instance, the Chairman of the National Implementation Committee on Technical Manpower Training recently stressed the importance of technical skills over credentials (USAID-NMP Annual Report to the Federal Military Government of Nigeria, 1978). As Cowan, O'Connell and Scanlon (1965) appeared to indicate, the Nigerian society, in general, has for a long time been more concerned about "what is your qualification" in terms of certificates, diplomas and degrees, than "what skills do you have." Thus, the acquisition of higher education diplomas and certifications has been the order of the day in Nigeria. The Program Director, USAID Nigerian Manpower Project, indicated in the School Coordinator Handbook (1979, p. 56), that since political independence in 1960, education has been a major government concern and the society

had since then also believed in it with passion. Cowan et al., (1965) further indicated that Nigeria is one of a few African nations whose

political leaders regard education as the basic component in nation-building and the foundation from which they hope the economic revolution of Africa will be launched. Their faith in education is matched by that of parents and students, whose demands for increased educational facilities have often outstripped the ability of the governments to provide them. (p. 3).

A majority of the average Nigerian high school students therefore seek to obtain a university degree. For most of these students, it makes little or no difference in what field the degree is obtained or from which university. Most parents wish the same for their children. In other words, a university degree in the Nigerian society meanwhile is not only considered by many as a status symbol, it has also long been considered a sure ladder for social and economic advancement (Cowan et al., 1965). Unfortunately, the existing Nigerian universities can only serve a very limited number of students each year.

This apparent response to a social situation tends to relegate to the background fields of study in which one does not usually earn a university degree. Even when these fields of study are undertaken, they are usually intended to serve as a step-ladder to getting a university degree in the future.

Consequently, fields of study requiring vocational, technical or manual training are not regarded highly by the society, (and thus not

compensated adequately) because the resulting certification is less than a university degree. The policy makers have tended to believe that these kinds of fields of study are not for "college-bound" students. This may account for the reason why technical, vocational and manual training appeared to be looked down upon by the youth of the society. After studying the situation in the early 1960's, Cowan and his co-authors (1965) recommended that

It should be the aim of the education system (in Nigeria) to instill into pupils the view that vocational (especially industrial and manual) careers are no less honourable than the clerical, and of Governments to make them at least as attractive - and thus to counteract the tendency to look down on manual labour. (p. 51).

Even with the growing number of institutions of higher education in Nigeria, there are still thousands of Nigerian students who are not offered admissions to these institutions because the facilities can handle only a limited number of students each year. As a result of this limitation, alternative international higher institutions (many of which are overseas) are desperately sought by this surplus of qualified, but inadmissible school-leavers and unemployed youths.

Because most materials and equipment needed and taught about in vocational and technical programs in Nigerian schools are scarce, and sometimes unavailable, most concepts remain purely theoretical. For example, some of the USAID-NMP students in Agricultural Mechanics areas

may not have seen a simple or modern farm tractor before coming to the U.S. Some of the students in the Food Services probably had not seen or used a micro-wave oven before enrolling in the program. Nigeria's technological advancements appear to be at such developing stages that one would not expect that such contemporary U.S. facilities would be readily available in Nigerian secondary schools.

Other background situations considered pertinent to the appreciation of the study include those associated with career education and occupational information. The Nigerian secondary schools are yet very inadequately provided with (in some schools totally without) professional career guidance and counselling, including occupational information. Students merely choose from among what is available, or what is determined by the government as educational priorities, with little regard to their individual abilities, aptitudes, career goals and aspirations. This situation was interestingly noted in a report from the Washington Bureau of the Phelps-Stokes Fund, contained in the School Coordinator Handbook, (1979):

...We (AID selecting officials in Nigeria) were told in no uncertain terms that scholarships recipients were to be selected to fill the needs of the Nigerian national society. We were not told anything about fitting the scholarships to meet the needs of the individual student. Never! (p. 6).

Under these circumstances, most students are likely to be subjected to some degree of tense, uncomfortable competition in order to adjust to the order of the society. Such adjustments are far more difficult to make when students have had little or no career guidance and counselling, career information, orientation or preparation.

Though English language is the official language of Nigeria, and the central language of instruction in most Nigerian schools, it is not spoken extensively outside the classroom or school environments. Native vernacular and "pigeon language" are usually handy substitutes for the official language. However, most Nigerian students (and other Nigerians) speak English with accents influenced by accents of their native dialects. This makes it difficult sometimes for most foreigners to understand Nigerians when they speak English language. Similarly, most Nigerians have problems understanding foreign, especially American accents. Also in the School Coordinator Handbook, (1979), The Phelps-Stokes Fund offers an explanation for these so-called language problems of foreign, especially African students in the U.S.:

...Often they do not completely understand American English because tonal, inflectional, stress and phonemic characteristics which are peculiar to their variety of English are absent from American English. Sometimes they are not completely understood because these characteristics are present in their oral English; sometimes their version of the English language is perceived as inferior by insensitive, as well as ignorant or uninformed Americans and Europeans. (p. 15).

Thus, most Nigerians who suddenly find themselves in situations where they have to speak to foreigners in English regularly, are likely to have problems of communication unless such foreigners have had previous associations with Nigerians or vice versa.

Most Nigerian youngsters have never before left the boarding house, or the homes of their parents or extended families to live on their own while attending school or working. Most of them have not had much experience with the social and economic responsibilities involved in living away from parents or extended families, even in Nigeria, let alone in a foreign country. The emotional, economic and social pressures associated with living away from home, with race and color, could be quite substantial, especially for young Nigerians who for the first time find themselves in a foreign country such as the U.S.

The foregoing background information was considered to be of vital importance in appreciating the need to understand the nature and extent of the problems examined in this study.

Statement of the problem

The purpose of this study was to assess the impact of the USAID Nigerian Manpower Project (USAID-NMP) on students in selected two-year associate degree programs in selected U.S. junior and community colleges. The specific problem related to impact upon students addressed in the study was twofold:

- (1) To determine the nature and extent of changes in students' career goals and aspirations over time.
- (2) To determine the nature and extent of vocational, academic, and social adjustment problems that these students have encountered or are encountering in their programs.

Research questions

In a formative study such as this, a broad range of research questions could be asked. Based on the foregoing rationale for this study, the following research questions were asked:

- (1) To what extent have students' career goals and aspirations changed over time?
- (2) What major factors contributed to changes (if any) in career goals and aspirations?
- (3) What is the nature and extent of vocational adjustment problems that students encountered?

- (4) What is the nature and extent of academic adjustment problems that students encountered?
- (5) What is the nature and extent of social adjustment problems that students encountered?
- (6) To what extent do the students feel they could have been better prepared for their subject areas?

Definition of terms

(1) Vocational adjustment problems

Students' vocational problems may be theoretically defined or determined through considerations and analysis of a number of factors such as: student aspiration level, student dignity, academic climate, educational background, academic or vocational achievement, self-expression, group life, and vocational climate (Buros, 1970). In this study however, vocational adjustment problems were defined operationally to include:

- a. the extent to which the student sought to change his/her vocational program, but was prevented from changing?
- b. the number of vocational program changes made by the student,
- c. limited or inappropriate vocational background or experience student brought to the program,
- d. below average class performance in vocational subjects,
- e. standards of vocational programs in the institution too high or too low,

- f. Lack of qualified vocational counselling and occupational information prior to enrollment in the program,
- g. the extent to which student saw the content of vocational courses as having future utility,
- h. differences in kinds of equipment and materials used in the program from those available in home country,
- i. student's dislike for manual work, including working with tools and machines,
- j. the extent to which student perceived racial bias in vocational program,
- k. the extent to which student perceived cultural bias in the vocational programs,
- l. the extent to which student engaged in meaningful practical application of what has been learned.

(2) Academic adjustment problems

These were operationally defined as:

- a. below average academic background,
- b. below average academic class performance,
- c. the extent to which student saw the rate of instruction as too rapid or too slow,
- d. problems associated with different school or educational system such as examination methods,

- a. the extent to which student saw the academic standards as too high or too low,
- f. dislike for theoretical academic courses in preference to practical vocational-technical courses.

(3) Social adjustment problems

These were operationally defined in this study as

- a. limited English-speaking skills,
- b. handicaps in interpersonal relationships, for example
 - in making cross-cultural friends
 - in the knowledge of and getting around the community,
 - in getting accepted in the community (Brolin, 1976).
- c. problems associated with living arrangements, and transportation,
- d. limited choice of food items, e.g. unavailability of most native food stuffs,
- e. insufficient funds for living expenses.

(4) Junior and Community Colleges

Historical precedence distinguished community colleges from junior colleges. Most of the two-year institutions established in the U.S. before the 1960's were designated junior colleges. In the early 1960's a movement developed in sections of United States advocating the re-orientation of junior colleges to the needs of the local community.

In response to this movement, many junior colleges were renamed community colleges. Subsequent colleges established since then have adopted this designation while others have retained the old designation of junior colleges (USAID-NMP Annual Report, 1978). For purposes of this study, "community college" as defined in the Illinois School Code, #101-2, was used:

an institution organized by a local educational agency under the Public Community College Act, to provide and maintain higher education programs which include courses in (1) liberal arts and sciences, and general education, (2) adult education, (3) occupational, semi-technical or technical fields leading directly to employment.

(5) Secondary education

Secondary education in Nigeria is the form of education that children receive after their primary education but before tertiary stage. The broad aims of this form of education within the overall national objectives are:

"to prepare for useful living within the society, and preparation for higher education," (Federal Republic of Nigeria, National Policy on Education, 1977. p. 10).

Secondary (grammar) school education in Nigeria was, however, defined in this study as the five years of post-primary education in a Nigerian Government approved school in which subjects taught belong strictly to general education, liberal arts and sciences. This is comparable to grades 8 through 12 in the U.S. traditional high school structure.

(6) Technical education

In the Federal Republic of Nigeria, National Policy on Education, (1977. p. 19), technical education was defined as "that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge". Pre-vocational and vocational schools at post-primary level, the technical colleges, poly-technics and colleges of technology and technical teacher education at post-secondary level are among the institutions that offer programs in technical education below a baccalaureate degree.

Secondary (technical) education in Nigeria was defined in this study as five years of post-primary education in a Nigerian Government approved school in which subjects offered are essentially technical in content, the major emphasis being on the development of basic pre-vocational skills (Ashby et al., 1960).

Post-secondary (technical) education in Nigeria was defined in this study as formal technical training beyond secondary education, but less than a baccalaureate degree; and leading to a qualification as a specified intermediate-level technician. Institutions in Nigeria that provide this level of technical education include Institutes of Management and Technology, Polytechnic Colleges, and Colleges of Technology. These are comparable to the U.S. junior and community college associate degree programs.

Assumptions

A number of key assumptions were made in the conduct of this study. The researcher assumed that the Nigerian students in the USAID Nigerian

Manpower Project

- (a) encountered vocational, academic and/or social adjustment problems during the first year in the program.
- (b) had formulated a set of goals and aspirations prior to enrolling in the program,

The researcher also assumed that student and staff respondents to the questionnaires and those persons interviewed were as accurate and unbiased as possible in their responses.

Limitations

There were several limitations within the study that limited the scope of the study, and consequently limited the generalizability of the findings:

- (a) This study focused only on Nigerian students in the USAID-NMP in two-year associate degree programs in U.S. Junior and Community Colleges. Students enrolled in four-year programs and technical institutes were not studied.
- (b) Limited resources available to the researcher restricted the number of institutions studied and the number of student respondents interviewed to 42. The data collected via the case study sites were from three states in the mid-western section of the U.S. These would limit the generalizability of the findings accordingly.

- (c) Student respondents to the National Survey and at the case study sites were limited to those who had been enrolled in the program for at least one full academic year.

II. REVIEW OF LITERATURE

This chapter presents a review of the history and development of pre-vocational and vocational and technical training leading to the state of the art in vocational and technical education in Nigeria. Brief reviews of related research studies that have been conducted were also presented with highlights on the similarities and differences between them and this study. A brief review of literature on the Case Study Methodology is also presented in this chapter.

Developments of Vocational-Technical Education in Nigeria

Similar to the early developments of vocational-technical training in most other countries, the earliest method of meeting the manpower needs in the early traditional societies of Nigeria was the transmission of trade and occupation from father to son, mother to daughter or from and to some person within the kindred. Under this arrangement, it was possible that, within a few generations, an entire community or village group of kindreds would dominate a particular trade or occupation. This was particularly so in Nigeria in such trades and occupations as were found in the historic art and carvings of the Ife people of Western Nigeria, the leather crafts and cattle rearing of parts of Northern Nigeria, the textile weaving, pottery, black-smithing and fishing in the various parts of Eastern Nigeria. Taiwo (1974) observed that there is no community in the various parts of the country where children

of primary school age do not actively participate in the occupation of their parents. He further indicated that it is for the same reason that schools in the various communities of Nigerian traditional societies offered their children the opportunity to engage in elementary vocational and technical skill development related to the dominant trades and occupations of the neighboring communities. These offerings were usually at the initiative of the respective schools whose teachers were drawn from within the communities.

Apprenticeship was another and later form of vocational and technical training that was practiced, and still is practiced in Nigeria. Primary school leavers or drop-outs, secondary school drop-outs or even youths whose parents do not have sufficient funds for them to pursue continued formal education, have often become apprenticed to "street-corner" trades and businesses such as carpentry, welding, auto-mechanics and driving, photography and retailing. These trainees are apprenticed to their masters for periods ranging from two to five years at the end of which period they - the trainees who have become qualified - may leave and establish independently or seek employment with their former masters or with another employer.

However, there were public and government concerns as early as the late 1800's over formal vocational and technical training. The earliest Education Ordinance of 1887, for example, provided for increased government participation through grants-in-aid for agriculture and industrial related programs in schools. These

programs were broadly conceived to include such trades and vocations as gardening, sewing, weaving, carpentry, art, handicrafts and domestic science. The then government schools and some outstanding community schools such as the Hope Waddell Institute, Calabar, the Massarawa School in the Northern Nigeria which opened in 1909, were among the first schools to offer vocational and technical programs. The Colonial Report #630 - Southern Nigeria (1908) carried reports of the establishment of an industrial technical section of the Hope Waddell Institute, Calabar where students studied, among other subjects, tailoring, carpentry, printing, agriculture and crafts. As time went on, other community and mission schools began structured and semi-structured vocational training relevant to the needs of the community.

Phelps-Stokes (1920) on the Reports on Education in Africa, conceptualized guidelines for starting vocational and technical education in schools in various African nations. This was followed up in 1925 by a Memorandum on the Education of African Communities which did provide that education should be adapted to the mentality, aptitudes, occupations and traditions of the various people. This provision or policy statement further won the involvement of the regional governments of Nigeria as they tried to provide basic adaptive vocational and technical training programs in the schools, while the more specific industrial technical training would be adequately handled in government workshops where proper instruction was provided.

When government workshops could not meet the demands of the society, the Government of Nigeria began to open a few trade and technical institutes. These trade and technical institutes were initially intended to serve the needs of the government-owned and operated establishments. These establishments included the Public Works Department (P.W.D.), now known as the Ministry of Works (M.O.W.), the Post and Telegraph Department (P & T), now called the Ministry of Communications. The Nigerian Railways, The Nigerian Airways, The Nigerian Ports Authority and the Department (now) Ministry of Agriculture are other such government-owned and operated establishments (Nduka, 1964). These establishments had (and some still have) formal training schools administered in their departments or in conjunction with other related departments, but each department further reinforced the formal training received with specific on-the-job training in their respective plants.

While the government was seemingly doing these things for itself, other non-government-owned commercial and industrial businesses felt a need for similar training for their immediate and potential workers. So, in the late 1920's many more Nigerian Middle Schools (now known as Secondary Schools), adopted basic industrial and business oriented vocational and technical education into the existing literary curriculum (Taiwo, 1974). This new combination was intended to simulate the curricula in the English Polytechnics and public Modern Schools.

Not long afterwards however, these schools separated into independent trade centers, modern schools, technical schools, farm (agricultural) centers and experimental comprehensive schools. In 1934, these separations resulted in the establishment of one of the nation's earliest and most viable vocational training schools - the Yaba Higher College, now known as the Yaba College of Technology (Okorodudu, 1936). In this and similar occupational preparation institutions, students were specially prepared for specific semi-skilled jobs and positions in government and private concerns.

In addition to the technical schools, trade centers and training departments established and administered by the government, private concerns such as industrial and commercial enterprises also early in their years, established vocational schools which substantially increased the opportunities for technical training in Nigeria. For example, the Shell-BP Company in Port Harcourt trained fitters, machinists, welders and diesel mechanics. In Enugu, the United Trading Company (U.T.C.) trained automechanics. The United African Company (U.A.C.) at Aba also provided training in various technical areas for Nigerian youth (Burns, 1965).

Women were not neglected in this early development of vocational training in Nigeria. In Western Nigeria, courses for women were offered in housecrafts, needlework, dress-making, and machine embroidery at the Women's Occupational Center at Abeokuta. The Occupational Center at Aba in Eastern Nigeria also offered two-year vocational and technical courses for women (Burns, 1965)

From the time Yaba High College and similar viable training schools were established, there evolved various efforts and provisions for the "... development of technical and vocational education, the establishment of Rural Education Centers and of Mass-Literacy Programs..." (Ten Year Development Plan, 1941 - 1950). The Ashby Commission (1960) also recommended in its report, the introduction of vocational and technical education in primary and secondary schools in timely response to and preparation for the projected needs of technical manpower in Nigeria. Frederick Harbison's study on Nigeria's high-level manpower needs reported by Ashby et al., (1960) was the basic document used by the Ashby Commission in 1960 to project the educational needs of Nigeria. Harbison in his report concluded that Nigeria's education system (at that time) was not capable of providing the estimated 55,000 additional technical and supervisory personnel needed by 1970. He also concluded that Nigeria's most urgent need is for a five-fold expansion of intermediate technical education. His recommendations were aimed at upgrading current skills and redesigning the secondary and post-secondary education system to prepare the additional manpower.

It would appear that there were considerable efforts made by the pre-independence governments of Nigeria to develop vocational and technical education in Nigeria. A good question to ask would have been, to what extent were these efforts successful or effective? The 1951 cursory Survey on African Education sponsored jointly by

the Nuffield Foundation and the Colonial Office in Lagos, Nigeria, indicated that the objectives of the 1925 policy statements were not achieved to any reasonable degree of significance (Nduka, 1964). Nduka (1964) further observed that despite the policy statement on education, the education given at this point in time was not really adapted to the "occupations and traditions of the various people". The curricula in most schools and colleges were still heavily oriented to the "white man's" jobs and businesses. The effects of that orientation such as the mass-migration of the youths of Nigeria to the city, and the preference of "white-collar" jobs and businesses to agricultural and industrial technical occupations, Nduka further observed, will probably continue to be felt in Nigerian societies for quite a while.

Post-Independence Developmental Efforts in Technical Education

The first decade after political independence (1960 - 1970) did not contain much evidence of government efforts to develop technical education as much of this period was stricken by civil unrest. The besetment of this period by chains of political events tended to halt the developmental plans that could have resulted from the then popular 1960 Ashby Commission. Under the chairmanship of Sir Eric Ashby, the 1960 Commission composed of three Nigerian, three British and three American educators, recommended a "massive, unconventional and expensive" set of proposals that "will be applicable only if Nigerian education seeks outside aid

and if the Nigerian people themselves are prepared to accord education first priority and to make sacrifices for it" (Kitchen, 1962. p. 383).

However, there were at this time, outstanding examples of Nigeria's technical education programs, such as the already mentioned Yaba College of Technology in Lagos. The Yaba Trade Center in Lagos and the Government Trade Center (G.T.C.) in Enugu in the then Eastern Nigeria were also outstanding examples of technical education programs. These institutions offered three-year courses intended to prepare students to become blacksmiths, bricklayers, cabinet-makers, carpenters, electricians, fitters, industrial and motor mechanics, plumbers, painters, wood-machinists and sheet-metal workers. This was followed by a two-year practical training in related industries, plants or departments. The Yaba Technical Institute in Lagos and the Government Technical Institute (G.T.I.) also in Enugu, offered four-year technical and commercial courses including general education courses, leading to the General Certificate of Education (G.C.E.), or the West African School Certificate (W.A.S.C.) (Kitchen, 1962). These institutions also offered programs leading to post-secondary technical certificates. Courses offered included mechanical and electrical engineering, architecture, building construction and printing. The three regional branches of Nigeria's College of Arts, Science and Technology were at this time also offering courses in technical areas (Kitchen, 1962).

In addition to these already existing viable or exemplary institutions, a few new similar institutions were opened during this decade. The Ibadan Technical Institute which opened in 1961 for example, offered full-time courses in civil, mechanical and electrical engineering (Kitchen, 1962).

Thus, at this time an Advisory Board was in operation to coordinate the joint efforts of the Ministries of Education, public corporations, industries and government departments in adjusting curriculum in these and similar institutions, to the technical manpower needs of the country (Kitchen, 1962).

Another noteworthy development in vocational-technical education early in this decade was the establishment of the first Vocational Teacher Education program at the university level in Nigeria, in fact, in West Africa. In 1961, The Ford Foundation of America under the auspices of Michigan State University, founded the Department of Vocational Teacher Education at the University of Nigeria at Nsukka in the then Eastern Nigeria. This Department offered a three-year Diploma program in Industrial-Technical Education (now phased out) but then equivalent to the National Certificate of Education - Technical (N.C.E. - Technical). It later also offered four-year programs leading to Bachelor of Science degrees in Industrial-Technical Education, Business Education, Home Economics Education and Agricultural Education. The main objective of this teacher education program was to prepare graduates who would assume training and leadership positions in industrial and business establishments, and in institutions that offered vocational and technical education programs

(University of Nigeria Catalog, 1970 - 1973). However, the experimental nature of the program, the unfamiliarity of the concept of the program to the general public, and the intervening period of civil unrest in Nigeria were all significant factors that tended to retard the initial growth of the program. The follow-up study of the 1961 - 1974 (first) graduates of the programs reflected some measure of their dissatisfaction with the outcomes of the programs. Among the reasons for dissatisfaction given by the graduates surveyed included: "not using training received or talents on the job, poor salary and conditions of service, and university degree (in this field) not given sufficient recognition" (Eze, 1975, p. 79). Given the circumstances under which these pioneer graduates completed such a new and so little understood program, one would not be very surprised to find responses such as were given above. It was however anticipated that as the general public and the ruling government become aware of the role of and need for vocational and technical education and accordingly support it, the responses of students to the program would probably be of a more positive nature.

Post-independence Nigerian government was also formally concerned with agricultural education as agricultural programs were commonly organized by related specialist institutions or Department of Agriculture. For example, training programs for technicians in agriculture, animal husbandry and forestry were established in this decade in the various parts of the then Eastern and Western Nigeria, by their Ministries of Agriculture and Natural Resources. Burns (1965) reported the re-

commendations of the Ashby Commission on Education in Nigeria (1960) which resulted in the establishment of these institutes:

...We believe that these (agriculture related schools) should conduct not only full-time courses for students in training but should be centers for refresher courses for young farmers and places for the training of rural science teachers for primary schools. (p. 105).

Burns (1965) further indicated that the intention of these programs was

to train young prospective farmers who will then be placed on a Farm Settlement where they will assist in the establishment under supervision, of farms carefully designed to suit the local conditions of soil and climate. (p. 105).

The average level of recruitment for these programs was the West African School Certificate (W.A.S.C.) level. Each of these institutes was expected to admit one hundred trainees yearly for a two-year program; to occupy between six hundred and one thousand acres of land; and to have its own farms modelled to those designed by the existing Farm Settlements and intended to meet local conditions of soil and climate, and also intended to meet local needs (Ministry of Agriculture and Natural Resources, Western Nigeria, 1960).

Other outstanding examples of these kinds of related agricultural education programs included the Agricultural Research Institute in Samaru in Northern Nigeria, the Forestry School in Ibadan in the Western Nigeria, and the School of Agriculture in Umudike near Umuahia in the Eastern Nigeria (Kitchen, 1962).

Concerns and encouragements for these kinds of programs grew out of the understanding that "investment in agricultural improvements and education could double Nigeria's wealth" (Investment in Education, 1960). But agriculture was rarely in the public eye, as a majority of the graduates from these agricultural education programs did not end up as farmers because, according to Kitchen (1962):

the lot of a Nigerian farmer is not an appealing one, and the trained agriculturist often finds a better-paying job only indirectly related to farming. Many "modern farmers" trained by dedicated staffs in the country's several post-primary agricultural training centers end up as teachers of rural science... or in some other job offering status and income above that of a dirt farmer. (p. 377).

Publicity was geared more to industrialization, construction and technical skills which, for a traditional economy based on subsistence agriculture and cash crops for export, could present an inevitable tendency or temptation to concentrate unduly on industrialization (Cowan et al., 1965). Some African political leaders have been observed to be faced with the dilemma between maintaining a balance between the capital demands of industrialization and the demands of improving agricultural production on which the immediate future of the country's standard of living depended. This seemed to be the case with the then government of Nigeria — a dilemma between agricultural improvements or investment in new industry-related programs. It was stated in the Investment in Education (1960) that:

We (Federal Ministry of Education) are in a dilemma when we come to make recommendations about agricultural education because the chief weakness of the present system is not the agricultural schools but the reluctance of the students to go to them. It is scarcely an exaggeration to say that the effect of education from primary school to university, is to draw boys away from the farms to the towns and cities. (p. 21).

This dilemma seems to explain why developments in technical agricultural education appeared to lag behind its counterpart areas of commercial and industrial technical education in the early years in Nigeria. Burns (1965), attributed this to the lack of guidance and incentives by the Nigerian education system and the ruling government, and recommended that pupils passing out of the national systems of primary and secondary education should be provided adequate guidance to enable them to adjust themselves to the tensions and demands of a wage-earning society. Swanson (1979), an authority in International Agricultural Programs and Professor in Vocational Agricultural Education at the University of Illinois, emphasized the need for the ruling government in a developing country such as Nigeria whose economy is largely agricultural, to take serious steps aimed at reducing the rural migration of the youths to urban settings. Such steps, added Swanson, would include localizing such agricultural education programs and attractively remunerating "on-the-farm" occupations.

The post-civil unrest Third National Development Plan (1975-80) contained substantial evidence of renewed government efforts to develop vocational and technical education in Nigeria:

... to demonstrate the government's serious orientation towards technical education (at the post-secondary level), tuition fees charged in all polytechnics and colleges of science and technology throughout the federation will be harmonized and pegged at the level currently obtaining in the Federal Government-owned institutions of similar status... (p. 247).

Also contained in the Third National Development Plan was a policy statement which further guaranteed a

... Federal matching grant of 50% on both capital and recurrent accounts ... during the Plan period in respect of approved development projects. In all cases, support will be directly tied to programs clearly identified as meeting specific manpower requirements of the country ... (p. 247).

The policy statement on Technical Education contained in the 1977 Federal Republic of Nigeria National Policy on Education, was an outgrowth of the Third National Development Plan (1975 - 80), under Post-Secondary Technical Education. A review of the highlights of the policy statements are presented as follows:

A review of the National Policy on (Technical) Education (1977)

Technical Education was defined in the National Policy on Education, (1977), as "that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge" (p. 19).

The aims of technical education were also identified in this publication as:

- (a) to provide trained manpower in applied science, technology and commerce particularly at sub-professional grades;
- (b) to provide the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development;
- (c) to provide people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man;
- (d) to give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant, and
- (f) to enable our young men and women to have an intelligent understanding of the increasing complexity of technology (p. 19).

Among the measures stated also in the National Policy on Education (1977. pp. 19 - 20) which the Nigerian Government wished to take for the development of technical education included:

- (a) Since there were limited facilities for Technical Teacher Education in Nigeria, Government made a commitment to expand such facilities particularly since the new structure proposed for secondary school education will require more such teachers.
- (b) High premiums would be given to teachers who have had considerable industrial experience. For this reason, Government recognized in-service training including industrial attachment as necessary for up-dating technical teacher competencies;
- (c) Since limited opportunities exist for practical in-school experiences, Government would take measures to provide out-of-school supervised practical experiences for trainees;
- (d) Government deplored the attitude of the general public which tended to regard technical education as somewhat inferior to other types of education. At the early phases of the education system steps would be taken to inculcate in the youths the attitude of respect for and appreciation of the role of technology in the society. Pre-vocational and technology education would therefore be introduced in the curriculum as early as possible.

- (e) Government would take steps to improve the status and remuneration of technical graduates in relation to their counterparts in other fields. Holders of the Higher National Diploma (HND) in technical fields, for example, would be placed on the same salary scale (Level 08) as university graduates;
- (f) "Recognizing that technical education forms the basis of our technological development, the Federal Government has substantially increased its expenditure in this field in the current Plan period. A greater portion of educational expenditure will continue to be devoted to technical education by government at both the Federal and State levels". (p. 20).
- (g) Government would require that career officers, guidance and counseling officers and placement officers be placed in each institution to assist technical trainees with making suitable occupational choices based on their aptitudes, and to direct graduates to the fields and industries where they would be most needed;
- (h) The curriculum structure and content of these technical education programs would necessarily reflect the present and future needs of the country. Therefore, industry and Government would be consulted in designing such curriculum to ensure its relevance. More polytechnics and colleges of technology would be established to further provide a wider range of courses needed to meet national employment needs.

- (1) "Government will continue to welcome international aid and co-operation in higher technical education. Such aid and co-operation would be in the form of exchanges of personnel, exchanges of ideas, curriculum development and staff development". (p. 20).

As was stated earlier, one of the immediate measures taken by the high level Commission charged with the implementation of the "Crash Program" for technical manpower development was the world-wide contracting of internationally administered Nigerian Manpower Projects. It appeared that this program was paramount to "meeting specific manpower requirements of this country". According to a supplementary White Paper on the implementation of the policy on technical education, the implementation of the "Crash Program" for the development of intermediate technical manpower was considered to be the largest single scheme on technical education ever undertaken by the Government of Nigeria, and in fact, on any single aspect of post-secondary education within a Plan period.

Related evaluation studies

The Bureau of Cultural Affairs of the State Department (1966) has been evaluating the experiences and impacts of special developmental projects on foreigners in United States mainly through questionnaires, personal and group interviews.

In 1966, a group of Asian visitors came to the U.S. to attend a series of project seminars designed and sponsored by the University of Minnesota, Morris, for the purpose of acquainting the English-

speaking Asian participants from India, Nepal, Ceylon and Afghanistan with the technical skills in personnel services and practices that would have direct relevance to Asian students. These participants, twenty in all, were College teachers and officials in these countries. The participants were selected on the basis of their outstanding academic backgrounds.

Besides attending series of seminars, participants also attended series of lectures on related academic subjects, visited a number of schools and colleges, and travelled to other major cities and visited with several American families.

Nine out of the twenty participants voluntarily attended the Training Laboratory for evaluation. The purpose of the evaluation was to obtain data, namely, participants' responses to the program, which would be used in part as a guide in future programs similar to this. Specifically, the evaluation looked at the problems that these foreigners were concerned about during the special program, and generally during their short stay in the United States.

The findings of the evaluation seemed to indicate that:

- (a) participants in the program did not have the opportunity to interact with the Program Directors and resource speakers who were invited. Participants said that they needed the opportunity to "consolidate the ideas presented."
- (b) the academic programs were over-scheduled and rushed. The programs were also very theoretical in content.

- (c) the duration of the program was rather short; it lasted only eight weeks.
- (d) the participants experienced a culture shock. They saw America differently from what they thought.
- (e) food and scheduling of meals especially during their visits to American families, were common problems to most participants.
- (f) on the program objective to acquaint participants with relevant skills in personnel services, the consensus seemed to be that the techniques presented and discussed were too ideal and theoretical for "our own societies of very different peoples and values". On their return, they appeared to indicate, they would have to do a lot of restructuring of concepts and practices to suit their situations.

The basic similarity of this study to that on students of the NMP exists in the foreign nationality of the populations studied and the objectives of the two studies. Both studies were aimed at obtaining data that would be used in part in better understanding and dealing with future participants such as these.

Dean Chester Ruadisili of the University of Wisconsin in 1962 - 63 conducted an extensive study to examine the philosophy, objectives, operations, and accomplishments of the programs of the U.S. educational institutions in their participation in international education. He surveyed hundreds of students and faculty at the University of Wisconsin

Students' opinions	Faculty opinions
1. Lack of time for study	English language deficiencies (academic backgrounds)
2. Lonely and homesick	Poor preparation in subject matter
3. Inability with English	Financial difficulties
4. Not enough money	Difficulty in evaluating foreign transcripts
5. Difficulty with school work	Inadequate housing
6. Taking courses not desired	Inadequate orientation and counseling programs
7. Eating strange foods	Program not meeting the needs of students
8. School work not demanding	Failure of foreign students to "mix with Americans"
9. Lack of knowledge of course to take	Inability to do laboratory work with hands
10. Poor health	Cross-cultural misunderstandings
11. Inability to find jobs	Failure to adjust to educational system
12. Not taking desired courses	Inadequate materials sent to foreign students overseas
	(Clarke and Ozawa, 1970, p. 31)

Table 2-1

Student - Faculty opinions

and other U.S. educational institutions, and extensively examined published materials. Specifically, he looked at questions that a university should ask itself if it sincerely wishes to improve its foreign student programs. He also sampled the opinions of foreign students and faculty regarding students' problems. The top twelve problems identified by students and faculty are listed in page 43.

Again, Dean Ruedisili's study is similar to the study on the NMP students in its objective to monitor students' and faculty perceptions of students' problems with the intention of addressing such problems where they did in fact exist. Dean Ruedisili's study and that of the Bureau of Cultural Affairs both, however, differed from the NMP study in at least three significant respects:

- (a) the constitution of the population sampled - in terms of nationalities,
- (b) the educational background and level of the population sampled,
- (c) the nature and objectives of students'/participants, programs.

Skinner (1979) at the Ohio State University conducted a dissemination research study to determine The Impact of the NMP on Selected Community Colleges - within an open systems framework. She carried out a multiplecase-study project on three institutions in a mid-western state, specifically to identify those institutional issues related to three specific areas: assumption, planning and impact (see Appendix C).

While Skinner's study was not directly similar to this study, it was related in its basic intent to understand something about the NMP from another perspective. Skinner's target group was the administration rather than the students themselves. Similarities in the two studies exist in the data collection methodologies and the fact that they were both addressing the same Project though from different perspectives.

However, several of Skinner's findings were closely related to this study. For example, students' instructors in one of Skinner's study units reported these problems around the NMP students:

- (a) Difficulty in advising students due to insufficient information regarding students' educational background,
- (b) Incomplete understanding of the job classification system in Nigeria,
- (c) Conflicts between which classes advisors felt students should take and those students wanted to enroll in,
- (d) Additional time required of classroom instructors many of whom were part time and unavailable,
- (e) Language difficulties (spoken English and ability to understand "Americanese") of students in classes,
- (f) Difficulties of students taking certain types of tests, and
- (g) Differences in cultural values/sexual norms of the NMP students which affected their relationship with women in classes.

Further efforts were made to retrieve reports of other studies on similar project impacts. A lengthy one-line library search was conducted under call-titles such as, Developing-Nations; Manpower-Development Programs Surveys; Economic-Development; Manpower-Development; Technical-Training; Evaluation-Methods; Culture-Contact-Evaluation; Program-Feedbacks; and Student-Evaluation. Also United Nations Documents: Economic and Social Council Official Reports (ESCOR) (1976) were extensively reviewed for related reports on manpower project evaluations. Call-titles used included: Education and Training (based on developing African nations' manpower needs); Manpower-Development; Human-Resource-Development; and Manpower-Training.

The reports on the study on Asian visitors and that of the study on foreign students in the United States conducted at the University of Wisconsin were the only related student-feedback evaluation study found. Most other reports were mainly resolutions and descriptions of the state of the art, and projections of manpower needs of developing nations.

Review of literature on Case Study Methodology

A case study was defined by Walker (1974) as "an examination of an instance in action" used in educational settings to investigate or portray "the idiosyncratic and the particular..." (p. 68). Denny (1978) describes it as an attempt "to reveal 'what is going on' in a given setting". (p. 2). The main purpose of a case study is to enable the researcher to make generalizations from a setting (sample) examined to the large class (population) it purports to represent, to draw generalizations from features of the setting examined to a multiplicity of populations or to make generalizations about only a setting examined (Adelman, Jenkins and Kemmis, 1975).

Isaac and Michael (1977) stated that case studies are employed "to study intensively the background, current status and environmental interactions of a given social unit: an individual, group, institution or community". (p. 20). Characteristics of case studies, they also said, included in-depth investigation of a given social unit which gives the reader a well-organized "feeling of unity, of coverage, of an integrity of wholeness" (Denny, 1978. p. 3).

Sociologists employ a variety of techniques in the case study methods. Cheney-Stern and Evans (1979) listed steps which are commonly included in case study procedures:

- (a) defining the problem
- (b) reviewing research related to the problem
- (c) developing objectives of the study
- (d) selecting the field setting(s)

- (e) making the initial field contacts
- (f) getting quantitative and qualitative data (data on the setting and participants, data from documents, data from interviews and questionnaires)
- (g) coding and analyzing materials
- (h) reporting findings
- (i) developing and validating propositions, and
- (j) drawing conclusions from the study.

Adelman et al., (1975) identified a variety of reporting forms allowed in case studies. These include college forms, film documentary, mixed-media presentation, quasi-journalistic report, oral feedbacks, role play, simulations and the more usual written reports. From the nature and variety of these reporting forms, one is inclined to conclude that case studies do not necessarily have to be written, worded or be of book length to be good - as long as it enables the reader to draw reasonable conclusions about a given setting (Denny, 1978). Denny (1978) listed some non-conventional case studies as examplers that should merit high marks. These included the recent movie "Saturday Night Fever", and the treatment of the meaning of a house in a mobile society by "60-Minutes", the CBS weekly News Magazine.

Cheney-Stern and Evans, (1979) reported a distinguishing of a case study project (the persistent study of a single case) from the multiple case study project (a collection of individual case studies). They also reported the position that multiple case study project required a form of linkage, a manner in which to assess and discuss their differences

and similarities, but that unfortunately, this methodology has been little examined in case study literature. However, the rationale for the multiple case study approach seemed to stem from the idea of arriving at the same meaning by at least three independent sources. Thus, a controversial finding based on several accounts has more credibility than one based on only one account. This validation technique often described by case study literature is called "triangulation" (Center for Instructional Research and Evaluation, 1978). Therefore, corroboration is often desirable where greater generalizability of findings is also desired.

Anonymity of sites and persons, and confidentiality of information provided are among the ethical practices common in case studies. Sites and groups of people are therefore often given fictitious names in case studies. These kinds of practices provide legal protection to case study researchers as well as privacy to individuals and institutions (Cheney-Stern and Evans, 1979). Cheney-Stern and Evans (1979) also stated that case studies are often preceded by clearance procedures. For example, any research study within an agency may have to be approved by the agency before any interviews with agency personnel or subjects may be scheduled, or before any documents may be released.

III. METHODS AND PROCEDURES

This chapter describes the two major research methodologies utilized in this study, namely: a case study methodology and a national survey of program participants.

A case study methodology was utilized in order to obtain an in-depth understanding of what was occurring in the way of program impact upon the students in three different settings. A multiple case study methodology was chosen as a method of describing the programs and related student transaction. Three case studies were conducted with the assumption that findings based on several accounts would have greater credibility and generalizability than those findings based on only one account. Thus, corroboration is usually involved as was the case in this study where greater generalizability of findings was desired.

A stratified random survey of program participants at other locations throughout the United States, was used to further verify or corroborate the findings.

Chapter three describes, for each of the above methodologies, the population, sample, data collected, data sources, and data collection procedures. Data analysis procedures for each research methodology were also described.

Case studies

As was defined earlier in chapter two the use of the multiple case study was intended to provide an understanding of the program's impact upon Nigerian students studying in a different cultural and

educational school system, under an inter-governmental program, for the purpose of acquiring technical occupational skills that would be relevant to related mid-level employment in their native country. Specifically, the case study was aimed at understanding the ways in which the participating students were affected by the Nigerian Manpower Project (NMP) in terms of: (a) probable changes in students' career goals and aspirations, and (b) the major problems that students have encountered within the framework of the NMP. It was not the purpose of the study to evaluate any aspect of the participating institutions themselves, nor the USAID-NMP itself. Rather, the focus was on gaining greater understanding of the participating students' career development patterns and adjustment problems. These data and observations, it was believed, will be helpful to planners of future similar international technical training projects.

Clearance procedures

The USAID, Department of State, Washington, D.C., was contacted for clearance procedures regarding the study of students in the NMP which it administered. The regional Project Director who coordinated the U.S. region in which the Case Study sites were located, responded to the clearance request (Appendix B). One NMP Campus Coordinator who worked closely with the USAID-NMP office, reviewed and revised the research instrument intended for the study. The regional Project Director who was present during the on-site interviewing at two locations, furnished the researcher with relevant documents and information, and was also interviewed regarding his perceptions of the program's

impact upon the students.

Seven of the 47 institutions in the North Central Region that were participating in the NMP, were contacted by letters and later by telephone to determine which would be willing to participate in the study. One institution indicated that it no longer enrolled the NMP students. Another institution declined to participate in the study. Two others did not meet the criteria established for the study. The remaining three institutions contacted (to be identified as Site A, Site B, and Site C in the study), were willing to participate, and also met the criteria established for the study. These institutions that participated in the study were selected on the basis of the following criteria:

- (a) A considerably large number of the NMP students enrolled in these institutions provided adequate sample for the study:

<u>Site</u>	<u>Enrollment</u>
A	24
B	23
C	39

In addition, each of these institutions had at least ten (10) NMP students who had been enrolled in the Associate of Applied Science (AAS) degree program for at least one full academic year. This ensured that at least 30 student participants had had sufficient exposure to the program and the U.S. culture for purposes of the study.

- (b) Limited resources of the researcher; the researcher had limited funds for travel beyond one regional area. Limited funds also restricted the number and length of visits to the study sites.

In order to meet further clearance procedures, the Campus Coordinators in two of the sites and the Student Coordinator who worked closely with the Campus Coordinator at the third site, surveyed the NMP students in their institutions to determine whether or not they were willing to participate in the case studies. These Coordinators reported that the NMP students were willing to participate.

The NMP student population

As of November 1979, when this study was carried out, four (4) Groups of Nigerian students had arrived at and were studying in 164 U.S. institutions:

<u>Group</u>	<u>Number</u>	<u>Date of arrival</u>
I	489	September 1977
II	497	January 1978
III	500	September 1978
IV	500	August 1979
	<hr/>	
	1,986	
	<hr/>	

Group I students were enrolled in (16) vocational and technical fields. Seventy (70) of them were in Accounting programs. By November,

1979, this group of students had completed their two-year programs and were in the process of returning to Nigeria. Six (6) of these in one of the sites were interviewed two days before they returned to Nigeria. These and eight (8) others had completed the student questionnaires one week before they were due to return to Nigeria. None other in this Group participated either in the case study or the national survey.

Group II and Group III together constituted the overall population for this study. Details about the enrollment of students in these two groups, by fields of study, are shown in the Table below:

Fields of study	Enrollment	
	Number	Percent
Building Construction, Civil Engineering, Architecture and Related Fields	273	27.9
Agriculture and Related Fields	218	22.3
Electronics and Related Fields	171	17.4
Health-Related Fields	129	13.2
Automotive Mechanics	78	8.0
Accounting and Business Administration	73	7.4
Other (Piloting, etc)	37	3.8
	979	100.00

Table 3-1
Fields of study and enrollment as of
September 1978

Details of the fields of study in which students in group four were enrolled, were not available at the time of this study. However, students in this group were not eligible to participate in the study as they had been enrolled in the program for only three months when this study was started.

Population and sample

Table 3-1 indicates that as of September of 1978, a total of 979 Nigerian students in Groups II & III, were enrolled in a variety of vocational and technical training programs throughout the U.S. About 10% (or about 97) students were enrolled in four-year college degree programs in U.S. institutions (School Coordinator Handbook, 1979, p. 3). The participating institutions, by September of 1978, had been reduced from 174 institutions at the inception of the Project in September, 1977, to 164 institutions in September of 1978 (USAID-NMP Staff, 1979). Thus a total of 882 Nigerian students in AAS degree programs in vocational and technical fields in 164 participating U.S. institutions, constituted the population for the study.

The sample was drawn from the 22.3% (or 218) of the students in the agriculture and related fields (Table 3-1). This sample was drawn from students in Sites A, B and C located in the north central region of the U.S. These were those Nigerian students on the two-year AAS degree programs who had completed at least one full academic year in their respective agriculture and related programs, e.g., Agricultural Mechanization. In November, 1979 when this criterion was applied, each of these community colleges (Sites A, B, & C) had the following number of eligible students:

<u>Site</u>	<u>Eligible students</u>
A	20
B	15
C	25
	<hr/> 60

Since these students had been in the program for at least one full academic year, it was assumed that they had been sufficiently exposed to the program and the U.S. cultures for purposes of the study.

Data collection procedure

Two major data collection procedures were employed at each of the sites: First, questionnaire instruments were distributed at each site to eligible students, and to instructors and counselors associated with the NMP students. Second, personal interviews were held at two of the sites, with students, instructors and counselors also associated with the NMP students. Every instructor or counselor interviewed also completed a questionnaire instrument, but not all the students who completed questionnaire instruments were interviewed. Questionnaires for and interviews with associated instructors and counselors were specially designed as additional validation techniques.

At the third site, interviews were held over the telephone with students, instructors and counselors.

The following tables describe details of participants in the case studies at the three sites.

Site	Number of students surveyed	Number of students interviewed
A	20	16
B	15	15
c	25	11
	60	42

Table 3-2
Details of
Case Study Participants at
Sites A, B & C.

Site	Instructors		Counselors
	Academic	Vocational-technical	
A	1	2	2
B	4	4	7
C	-	7	1
	5	13	10

Table 3-3
Students' Instructors and Counselors surveyed and
interviewed

Some general numerical and non-numerical supportive data and information were also collected through reviews of relevant documents. Such supportive data and information obtained included data on student enrollment and participating institutions (USAID-NMP Student Roster, undated), data on the distribution of enrollment into fields of study (USAID-NMP Annual Report to the Federal Military Government of Nigeria, 1978), and data on the selection of students in Nigeria (NMP School Coordinator Handbook, 1979). These data were not used for specifics about any of the case study sites. Rather, they were used as either supportive data to the findings of the study, or for further analysis of research findings. Other documents reviewed and utilized in this manner included The Federal Republic of Nigeria National Policy on Education, 1977; The Federal Republic of Nigeria Third National Development Plan (1975 - 1980) Volume I.; and The Federal Republic of Nigeria Third National Development Plan (1975 - 1980) Volume II: Project Summary.

Instrument design

As was noted in the Review of Literature on Case Study Methodology (Chapter II, page 48), interviews, and questionnaires are among the methods of getting quantitative and qualitative data in a case study. In this case study, questionnaire and interview instruments were developed as major sources of collecting quantitative as well as qualitative data. These were developed for students and students' instructors and counselors. They were considered appropriate instruments because

This case study was intended to bring to light those important variables, processes and interactions that would be helpful in implementing similar future projects.

Since multiple study units and a large number of subjects were involved in this study, the use of detailed questionnaire instruments supported by comprehensive in-depth interviews, enabled the researcher to maintain a good degree of consistency in the data collection procedures. It also helped to ensure greater reliability of responses, easier and quicker collection and objective analysis of data.

(a) Student questionnaire instrument

An initial draft of the student questionnaire instrument for the study was reviewed by the Thesis Adviser, and later presented to all members of the dissertation committee for their review, analysis and recommendations. Based on their recommendations, the instrument was revised. Major revisions included a breakdown of the questionnaire items containing multiple ideas into questionnaire items each with a separate idea. Also, some terminology contained in the original draft were clarified to suit the target group's language level.

(b) Instructor/Counselor questionnaire instruments

Two separate instruments were also designed for the counselors and instructors involved with the NMP students at the three sites. The purpose of these instruments was to obtain data that would be used, in part, to cross-validate students' responses. For that reason, the

questionnaire items in these instruments were similar to certain items in the student questionnaire instrument.

Each of the instruments for students, instructors and counselors also requested basic demographic information about the respondents.

Pilot testing

The student questionnaire instrument was pilot-tested on ten African students at the University of Illinois at Champaign-Urbana. Each of these was first briefed on the objectives of the study and the purpose of the instrument. A brief discussion was held with each of them after they had completed the instruments, for feedback on the instrument design. The consensus was that the final version of the student questionnaire instrument was clear and would likely be communicative with the target group.

The questionnaire instruments for the instructors and counselors were also pilot-tested on five (5) American graduate students in guidance and counseling programs at the University of Illinois at Champaign-Urbana. These students were also individually briefed on the objectives of the study in order for them to understand their role-play in the pilot test. The consensus, after they had completed the instruments and interviews, was that the instruments were specific and clear enough to elicit the expected data. Through the pilot studies, the researcher was also able to practice interviewing procedures.

Student questionnaire distribution and completion schedule

Prior to the distribution of the student questionnaires to eligible

students in sites A and B, the Campus Coordinator at each of these sites assembled the students in a classroom where the researcher briefly addressed the students regarding the purpose of the study and consequently, the questionnaire. The purpose of the intended personal interviews with students was also explained by the researcher. At that time, the eligible students at each of the two sites completed their instruments after pertinent instructions regarding the completion of the instruments were given or explained.

In site C, the help of a research intermediary was obtained to distribute student questionnaires to eligible students. In order to maintain a consistent pattern, this intermediary was instructed to follow strictly the distribution and completion schedule used in sites A & B. The eligible students at this site also completed the questionnaires on the spot. The instruments from site C were returned to the researcher via bulk mail.

Student interview schedules

While students were completing their questionnaire instruments at sites A & B, they were provided with personal interview time schedule. Each student was required to indicate when he/she would be willing to appear for personal interview with the researcher. Sixteen (16) students at site A and all the fifteen (15) eligible students at site B agreed to be interviewed the day after completing the instruments. This interval was considered necessary to enable the respondents to digest the nature and intent of the study, and thus to be ready to discuss

the program in greater detail with the researcher during personal interviews. In addition, the interval enabled the researcher to scan briefly the questionnaire responses to determine any relevant response patterns. The findings of this cursory exercise guided the researcher in obtaining during personal interviews, further relevant data such as the "whys and wherefores" for the apparent pattern of student responses. Besides questions regarding the apparent pattern of student questionnaire responses, interviewees were asked other open-ended questions such as: "Sincerely speaking, why did you accept the offer to enroll in the NMP? What do you plan to do as soon as you complete your program and return to Nigeria?". Each interviewee was also invited to give his/her own views on any aspect of the program that was a major concern to him/her. The interviewing procedure used in the first site visited was consistently used during subsequent interviews at the other two sites.

In site C, nineteen (19) students who completed the questionnaires agreed to be interviewed over the telephone. However, only eleven (11) of these could be reached. Eight (8) students who could not be reached were among those students who had completed their programs and were in the process of returning to Nigeria. Six (6) of the eleven interviewed however, were among the students scheduled to return to Nigeria two days after the interviews.

Instructor/Counselor questionnaire distribution and completion schedule

The name "counselor" was broadly used in this study to include any institutional staff member who functioned in a professional or

para-professional counseling situation with the NMP students. Eligible counselors were considered to be those who had functioned in such situations for at least one full year. The Campus Coordinator at each site was considered a counselor for purposes of the study. Those persons serving as counselors at each site were identified by the Campus Coordinator.

Similarly, eligible students' instructors were those academic or vocational and technical instructors identified by the Coordinators as having had substantial instructional responsibilities involving the NMP students, i.e. each served as an instructor for at least one course included in the NMP at the site.

Each of the Coordinators at the sites A, B, & C had previously been briefed through written and telephone communications, about the purpose of the study. These Coordinators volunteered to brief the identified instructors and counselors about the study prior to their completing the instruments and/or their interviews with the researcher.

Instructor/Counselor interview schedule

Because the instructor and counselor questionnaire and interview responses were intended to be used in part, to verify students' responses, interviews with the instructors and counselors were not scheduled until after all students at each site had been interviewed. This enabled the researcher to collect all relevant verifiable data from the students before meeting with instructors and counselors

Prior to interviewing the instructors and counselors, each was provided with an overview of the purpose of the study. Besides attempts to verify certain crucial numerical and non-numerical data,

each instructor interviewed was asked a series of open-ended questions. These questions included: What do you consider to be the central vocational and technical program-related problem encountered by the NMP students in your subject area? What seems to be the major problems you have encountered in your institutional dealings with the NMP students? The academic instructors and students' counselors were asked similar questions. Finally, the instructors and counselors at each site were invited to offer recommendations regarding ways that the program could be improved.

The instructors and counselors at the sites A & B were interviewed personally, while those at the site C were interviewed over the telephone.

Analysis of data

Since the purpose of this study was not to subject the students, the participating institutions, or the NMP itself into any summative evaluation, but to obtain data that would help illuminate the students' career development patterns, and vocational and social adjustment problems, sophisticated statistical analyses were not used in this study. Descriptive statistics were considered more appropriate for this study. Specifically, percentages and/or frequency of responses to each questionnaire or interview item, were determined through grouping and analysis of responses.

Based on the pattern of responses to each questionnaire or interview item, the research questions were examined. Tables showing a comparative pattern of responses on selected questionnaire items

were presented where necessary to present the pertinent data.

No detailed comparative analysis of the findings among the case study sites or between the case studies and the National Survey data was made. In some instances, comparisons were made to show the nature of the responses of students to a variety of social environments.

The principal rationale for using this form of data analysis was to allow the reader the opportunity to draw his or her own observations and conclusions relative to students' career development patterns, and their vocational and social adjustment problems relative to the various vocational-technical programs.

Characteristics of case study sites

Site A.

This community college was located in an agricultural community with a population of 110,000 (U.S. Department of Commerce, 1977). It enrolled a total of 4,700 part-time and full-time students, and offered both terminal AAS degree programs and college-track Associate of Science (AS) degree programs. This institution's catalog indicated that an aim of the institution included preparation of their students to meet the mid-level agricultural, technical and managerial needs of the community it served.

As reported by the Campus Coordinator interviewed at this site, the percentage of African-Origin Americans in this institution and in the community is "very, very small". Foreign students in this institution constituted only 1.9% or (90) students out of the total head count of 4,700. This percentage included the (24) NMP students enrolled in this institution.

The vocational and technical programs in which the NMP students were enrolled at this institution were as follows:

<u>Programs</u>	<u>Enrollment</u>
Agricultural Mechanization	4
Agricultural Production	7
Agricultural Business	8
Food Science	1
Food Services	3
Food Service Management	1
	<hr/>
	24
	<hr/>

Course credits earned by students in these programs were not listed in the 2 year institution's catalog as being transferable to four-year colleges. This institution's catalog indicated that the institution was, however, accredited by the North Central Association of Colleges and Secondary Schools.

Twenty (20) of the (24) NMP students at this institution met the criteria set for the study and responded to the student questionnaire instrument. Sixteen (16) of the (20) students agreed to be interviewed. Different instruments were distributed to one academic instructor, two vocational-technical instructors, the Campus Coordinator and another students' counselor.

There was, at this institution, a full-time international student adviser who was also the NMP Campus Coordinator reporting to the regional director for the USAID-NMP in Washington, D.C. This individual was also reporting to the institution's dean of students.

Site B.

This community college was located in a predominantly farming community, of population 7,800 (U.S. Department of Commerce, 1977). As was stated in the institution's catalog, the mission of this institution included preparing students for middle-level management positions in at least 24 related agricultural fields, and also preparing students for services to rural homes and communities. As was stated in one of the institution's brochures, the total instructional program, the facilities, and the staff of the college are directed toward agriculture. It was also stated that one-third of the course work was devoted to related education courses such as communications, social sciences, mathematics and basic sciences, while two-thirds of the courses were devoted to technical education. Thus, the institution enrolled approximately 1,000 students and offered AAS degree programs in 24 major agricultural fields. Accredited by the North Central Association of Colleges and Secondary Schools, this institution operated a four-quarter year-round calendar.

Besides the 23 NMP students enrolled in this institution (at the time of the study), there were two other international students on campus. According to the Campus Coordinator interviewed, there were not up to 10 African-Origin Americans in this institution and the surrounding community.

The programs in which the NMP students were enrolled at this site were as follows:

<u>Programs</u>	<u>Enrollment</u>
Crop Production	3
Agricultural Business/Management	4
Food Technology	2
Agricultural Mechanization	5
Agricultural Production	5
Food Marketing & Distribution	4
	<hr/>
	23
	<hr/>

Fifteen (15) NMP students were eligible for participation in the study at this institution. All the 15 students who responded to the questionnaire instruments were interviewed. Four academic and four vocational-technical instructors, two professional and five para-professional counselors were eligible for the study. These responded to special questionnaire instruments, and were also interviewed in person. A full-time international student adviser was available to assist all international students. This school official was also the NMP Campus Coordinator, who reported to the USAID-NMP office in Washington, D.C., and to the institution's dean of students.

Site C

This community college was located in a small predominantly farm community with a population of 920 (U.S. Department of Commerce, 1977). A neighboring community about eight miles away had a population of 32,900. A review of literature on this institution indicated that the principal aim of this institution was to help the communities it served

meet their mid-level agricultural, technical and managerial needs. Accredited by the North Central Association of Colleges and Secondary Schools, this institution offered a variety of terminal Associate of Applied Science degree programs and a variety of college-track Associate of Science degree programs.

The student enrollment at this institution was about 3000. The enrollment consisted of: 84% White, 5% Black, 1% Oriental, 2% Mexican-American, and 8% other, which included the 39 NMP students and other international students.

The NMP students at this site were enrolled in one Associate of Applied Science program, namely, Agricultural Mechanization. In this institution, some separate classes were established for the NMP students only, while in other courses, they were mainstreamed into regular classes.

A total of 25 NMP students were eligible for the study at this institution. These individuals responded to the student questionnaire instruments and eleven of them were later interviewed over the telephone. The seven instructors who were eligible for the study at this institution were technical instructors. The eligible students in this study at this institution had not been required to take academic courses. The NMP Campus Coordinator was the only "counselor" surveyed and interviewed. This Coordinator was not the international student adviser at this institution. However, this Coordinator also reported to the dean of students and to the regional Director of the NMP in Washington, D.C. regarding the NMP students.

NATIONAL SURVEY

Introduction

As noted earlier, the NMP students enrolled in a variety of U.S. institutions ranging from technical institutes to area vocational schools to junior and community colleges to four-year college degree institutions. This study however, was limited to students in two-year Associate of Applied Science (AAS) degree programs in U.S. junior and community colleges. A National Survey of NMP students was undertaken primarily to ensure greater generalizability of the findings of the case studies.

Population and sample

As shown in Table 3-1, a total of 979 Nigerian students in Groups II and III were enrolled in a variety of vocational and technical training programs throughout the U.S. Ten percent of these (or 97) students were enrolled in four-year college degree programs, leaving a total of 882 students in two-year Associate of Applied Science degree programs. As shown in Table 3-1 also, 22.3% (or 218) of the students were enrolled in agricultural and related fields. The total number of students in non-agriculture related fields becomes

$$\begin{array}{r}
 882 \\
 - 218 \\
 \hline
 664.
 \end{array}$$

Thus, a total of 664 non-agriculture students in two-year Associate of Applied Science degree programs in U.S. community colleges, constituted

the population for the National Survey. Table 3-4 indicates that a total of 297 out of the 460 questionnaires mailed, were returned. This also indicates a percentage return of 65.56%.

	North Central	North East	South	West	Totals
Institutions participating in the NMP as of September, 1978	47	45	41	31	164
Total number of designated "Junior and Community Colleges"	13	11	12	10	46
Total number of questionnaires mailed to each institution	10	10	10	10	
Total number of questionnaires mailed	130	110	120	100	460
Total number of questionnaires returned	99	63	81	54	297
Percentage of returned questionnaires	76.15%	57.27%	67.50%	54.00%	64.56%

Table 3-4

National Survey Respondents by Regions

Instrument design and pilot testing

The same questionnaire instrument designed and distributed to students in the institutions case studied, was the same one used for the National Survey.

Data collection procedure

This procedure consisted essentially of mailing 10 questionnaires to the Campus Coordinator at each institution selected, for distribution to eligible students. A cover letter (Appendix G) briefly explained the purpose of the survey and requested the campus coordinator to distribute the enclosed questionnaires to students who met the criteria set for the study. Such students were asked to promptly return completed instruments to their Coordinators for bulk returns in the post-paid return envelope provided. This arrangement facilitated speedy returns of instruments for most institutions. However, some Coordinators apparently instructed their students to return their completed instruments individually. This may account for some of the instruments not being returned prior to the deadline.

Non-respondent follow-up memos that indicated an extension of deadline were sent to those institutions that had not returned any of the survey instruments as of the initial deadline. Two institutions responded and indicated that they never received any instrument from the researcher. Two sets of 10 instruments each were sent to these institutions. As a result of the follow-up memos, five institutions returned an additional 28 questionnaires. This brought the total number of questionnaire instruments returned prior to the final deadline, to 279.

No personal or telephone interviews were held with students, instructors or counselors in the National Survey sample. However, extensive comments were made by respondents in the spaces provided in the questionnaire. In addition, some separate mails further expressing individual views were received by the researcher (Appendix I-26).

Data analysis procedure

The data analysis for the National Survey consisted of coding or grouping the responses received. Frequencies, means, and/or percentages were calculated for the various questionnaire items and demographic data. These were compared with the means and percentage responses received from the student questionnaire responses at the case study sites. This comparative analysis was done to determine the extent to which the findings of the National Survey and the case study sites were in agreement or discord.

IV. PRESENTATION AND ANALYSIS OF DATA

Introduction

As was stated earlier, the ultimate purpose of this study and consequently of the nature of the research questions asked, was to obtain data that will be valuable to future planners of projects similar to the NMP, in designing their strategies and formulating their policies. It was not the intention of the study to conduct a summative evaluation nor to draw summative conclusions about the NMP, the participating institutions or the administrative agency.

In order therefore to ensure precision and objectivity of report, the data collected during this study were reported by research questions rather than by research methods. The essential reason for choosing this method of reporting data being that the study involved a variety of research and data collection methods and procedures.

Data collected at each Case Study site relative to each research question were presented and compared with data collected from the National Survey, in response to the same research question. In the presentation of data in this chapter, the means of the consensus of student responses from the three sites (Sites A, B, & C) to specific questionnaire items were computed and reported to represent the consensus on that item. Such a mean consensus was compared and/or contrasted with the raw data collected on a corresponding questionnaire item in the National Survey. Where necessary, Tables showing such a comparative pattern of responses on selected questionnaire items were used to present pertinent data.

Based on the data collected and presented, a brief analysis was made in an attempt to address the relevant research questions.

Overall, pertinent data used to address the following relevant research questions were collected from the following sources:

1. Student questionnaire and interview responses collected from the three sites.
2. National Survey student questionnaire responses,
3. Open-ended informal comments by student respondents at both the Case Study sites and the National Survey,
4. Instructor/Counselor questionnaire and interview responses collected from the three sites,
5. Interview responses from a USAID-NMP staff member,
6. The USAID-NMP Annual Report to the Federal Military Government of Nigeria (1978), and
7. Findings of related research studies.

Where necessary however, specific data used to address specific research question were restated.

Research Question 1: To what extent did students' career goals and aspirations change over time?

Student questionnaire and interview responses in relation to students' career development plans, were the primary data used to address this research question. Additional supportive data were collected during personal interviews with students' instructors and counselors from the three sites.

Table 4-1 indicates that a total of 58 (or 96.66%) of the 60 student respondents from the three sites indicated that their career goals and aspirations have not changed over time. A total of 293 (or 98.65%) of the respondents in the National Survey indicated the same. During personal interviews, 33 of the 42 students interviewed at the three sites explained that their original goals in competing for scholarships and eventually accepting the offer regardless of the conditions, were (1) to come to the U.S., and (2) to pursue a technical career.

Table 4-2 indicates that 52 (or 86.66%) of the 60 student participants from the three sites, and 267 (or 90.57%) of the National Survey respondents, agreed or strongly agreed to the questionnaire regarding the level of satisfaction with their subject areas. At least 73% of respondents at both the three sites and the National Survey indicated that they would however, choose to further pursue their vocational-technical careers in a four-year college degree program before returning to Nigeria (See Table 4-3). A total of 38 (or 90.47%) of the 42 students interviewed at the three sites indicated that their original aspiration as they enrolled in the NMP was to use the opportunity that they had to pursue a four-year college degree in the near future. One of the students interviewed expressly said that "the least I need to feel comfortable in Nigeria now (socially and economically), is a four-year college degree". At least 60% of the open-ended comments made by the National Survey respondents had something

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
My career goals and aspirations have changed since I have been to the United States.	A	-	-	-	-	17	85	3	15
	B	-	-	-	-	13	86	2	13
	C	-	-	2	8	20	80	3	12
	Mean							83	
	NS	-	-	3	1	270	91	23	8

Table 4-1

Student Questionnaire item Response Pattern

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		f	%	f	%	f	%	f	%
I feel satisfied with my vocational-technical subject area because it is what I have always wanted to do.	A	2	10	15	75	3	15	-	-
	B	1	7	11	73	3	20	-	-
	C	5	20	15	60	5	20	-	-
	Mean		12		59				
	NS		30	10	213	72	54	18	-

Table 4-2

Student Questionnaire Item Response Pattern

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
I feel satisfied with my vocational-technical subject area but I would like to continue on to a four-year college degree program before I return to Nigeria.	A	15	75	2	10	3	15	-	-
	B	11	73	2	13	2	13	-	-
	C	18	72	2	8	3	12	-	-
	Mean	73							
NS	222	75	30	10	44	15	-	-	

Table 4-3
Student Questionnaire Item Response Pattern

to say in relation to their pursuing their vocational and technical careers in a four-year college degree program. Appendix I-6 is reflective of these comments.

Table 4-4 indicates that 50 (or 83.33%) of the 60 student participants from the three sites, and 278 (or 93.60%) of the respondents from the National Survey, disagree with the questionnaire item cited. Twenty-five of the 42 students interviewed at the three sites indicated that while they still wanted to become skilled technicians in their various areas, they would also like to "top it up with a (four-year college) degree", as one of them put it. (Also see Appendix I, 6 & 11).

Eight of the 10 students' counselors surveyed at the three sites indicated that students frequently reported that they wanted to continue on to a four-year college degree program rather than return to Nigeria after their two-year associate degree programs. Nine of the 18 instructors interviewed at the three sites also indicated that the Nigerian students in their classes had frequently talked about continuing on to a four-year college degree program.

The Coordinators at the three sites indicated during personal interviews, that because of the nature of the Associate of Applied Science degree programs that the students were enrolled in, the course credits earned in their programs were not usually transferable to four-year college degree programs. These Coordinators also reported that there had been conflicts regarding courses students were required to take and those they wanted to take. Each of these Coordinators seemed to indicate that students occasionally requested to change their areas of study or to transfer to another participating institution.

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
		I prefer having a good technical skill without a four-year college degree to having a four-year college degree without a technical skill.	A	-	-	4	20	14	70
	B	-	-	2	13	12	80	1	7
	C	-	-	4	16	18	72	3	12
	Mean						74		
	NS	-	-	19	6	237	80	41	14

Table 4-4

Student Questionnaire Item Response Pattern

When further interviewed, they appeared to indicate that the reason the students preferred to take non-required courses, and to change their programs or transfer to another institution was to pick up courses that they could later transfer to a four-year institution. One regional Project Staff member was interviewed during the site visits, in relation to this. This staff member seemed to indicate that in very few cases when it was possible, such as when excessive additional cost was not involved, the administration had permitted such a student to change program or transfer to another college. He further indicated that at least 75% of the students who had graduated from the program had, at one time or the other, expressed a desire to, in the future, go on to a four-year college degree program. In two of the three sites, a total of 9 students were known to have changed from one program to another program within the institution.

The students in the sample expressed a high degree of interest in returning to the U.S. for a four-year degree program. Table 4-5 indicates that 53 (or 88.33%) of the 60 student respondents from the three sites, and 267 (or 88.89%) of the respondents in the National Survey, would like to return to the U.S. later for a four-year college degree program.

Table 4-6 indicates that 53 (or 88.33%) of the student respondents at the three sites, and 214 (or 72.05%) of the student respondents in the National Survey, preferred to return to Nigeria to work. Twenty-nine (or 69.04%) of the 42 students interviewed at the three sites seemed to indicate that they would prefer to return to Nigeria as soon

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
I would like to return to the U.S. later for a four-year college degree program.	A	8	40	10	50	2	10	-	-
	B	4	26	11	73	1	7	-	-
	C	6	24	14	56	5	20	-	-
	Mean				60				
	NS	54	18	213	72	30	10	-	-

Table 4-5
Student Questionnaire Item Response Pattern

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
If I had a choice, I would stay in this country and work rather than return to Nigeria to work.	A	-	-	2	10	12	60	6	30
	B	-	-	1	7	12	80	2	13
	C	-	-	4	16	15	60	6	24
	Mean						67		
NS		3	1	80	27	178	60	36	12

Table 4-6
Student Questionnaire Item Response Pattern

as possible so as to meet the regulations imposed on them by their U.S. Visa classification, and make immediate plans to return to the U.S. to complete a four-year college degree program in a related field. None of these students interviewed expressed any interest in meeting his/her obligation to the NMP contract relative to participating in Nigeria's mid-level labor force.

Seven of the students interviewed at the three sites seemed to indicate that they would prefer to stay back in Nigeria to seek admission into institutions of higher education. They further indicated that they were not planning on returning to the U.S. to complete a degree program because of uncertainty of the availability of funds to study in the U.S. as privately sponsored students. Among the reasons advanced by those who indicated that they were planning on returning to the U.S. later for a college degree program were: non-availability of the technical speciality training and experience opportunities in Nigeria; highly competitive admissions to Nigerian universities; uncertainties about transferability of AAS course credits to Nigerian institutions of higher education, and finally, "love" for America.

The response patterns to student questionnaire items cited in Table 4-7 seemed to indicate that unnecessarily changing to another career outside or even within those prescribed by their sponsors would mean loss of credits and time towards reaching their original aspiration level. Twenty-five (or 59.52%) out of the 42 students interviewed at the three sites indicated that they could not afford to withdraw from the ongoing program because they would not be able to sponsor themselves in the U.S. privately.

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
If I had a choice, I would pursue a career outside those specified for me by my sponsors.	A	1	5	3	15	9	45	7	35
	B	2	13	2	13	8	53	3	20
	C	1	4	2	8	10	40	7	28
	Mean						46		
	NS	31	10	54	17	151	50	63	21
If I had a choice, I would change my technical subject area for another specified technical area.	A	1	5	2	20	12	60	7	35
	B	-	-	1	6	12	80	2	13
	C	1	4	3	12	15	60	6	24
	Mean						66		
	NS	3	1	80	26	178	59	36	12

This Table (4-7) continues...

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
If I had a choice, I would withdraw from this special program and pursue my career independently.	A	2	10	4	20	11	55	4	20
	B	1	6	4	26	8	53	2	13
	C	-	-	3	12	13	52	9	36
	Mean						53		
NS		23	7	29	9	172	57	73	24

Table 4-7

Student Questionnaire Items response Pattern

Summary

It would appear, from the analysis of these and related data, that students' initial goals were achieved when they arrived at the U.S. to begin their two-year training period, but there was little or no opportunity for their goals to change. According to one student interviewed in one of the sites, a change in career goal for him would have meant quitting the program and returning to Nigeria. Inquiries were made with one regional Project Staff interviewed for records of such a change of career goal. The nearest data obtained were records of a very small number of students who had disappeared from their institutions and had since then been in the U.S., but not enrolled in the program.

Analysis of related data seemed to indicate that students' aspirations did not change with time either, if considered from the standpoint that students' initial aspiration as revealed during personal interviews with students, was to obtain a four-year college degree before returning to Nigeria. Where this failed, they planned to do so as soon then after as possible. A total of 82% of the respondents from the three sites and the National Survey, who favored this position belonged to the age group (20-25), the age group that appears to be much pressurized by the strong social expectations in Nigeria.

Some evidence of change in students' aspiration level was however observed in six students interviewed in one of the sites. These students indicated that they had intended to complete the two-year program without plans for continued education, but when they discovered that they were making good grades, they raised their aspiration level and thus wished to pursue a four-year college degree.

Another nature of change in aspiration was observed in four (or 9.52%) of the 42 students interviewed at the three sites, and in six open-ended comments made by respondents in the National Survey. These indicated that prior to their enrollment in the program, they had had extensive related technical work experience, but very little formal education. These respondents appeared to be disappointed that the two years that they were putting into the program would have little or nothing to add to the occupational skills they already possessed upon entering the NMP. Appendix I-21 is an example of the comments made by the six students in the National Survey sample. These students, as well as the four students interviewed at the three sites, belonged to an older age group (26 and above). The four students interviewed at the three sites indicated that their initial aspiration was also to upgrade their credentials to a four-year college degree if possible, but after what they had experienced, they appeared to have changed their minds relative to the four-year degree.

Research Question 2

What major factors contributed to changes if any, in students' career goals and aspirations?

Among the primary sources of data for this research question were student questionnaire responses from the Case Study Sites and the National Survey, having to do with students' career development plans. Additional supportive data were collected during personal interviews

with students at the three sites. Open-ended remarks made by students in the National Survey in relation to students' career development plans, was another source. In part, analyzed data in response to Research Question 1 were among the specific data used to respond to Research Question 2.

The analyses of data presented on Table 4-1 and Table 4-2 seemed to indicate that: (1) students' career goals did not change with time. Students' original career goal while they were still in Nigeria was to come to the U.S. to pursue a vocational and technical career. They considered this goal achieved when they arrived in the U.S. and began their training program.

(2) students' educational aspirations also did not change over time since their original aspiration was to obtain a four-year college degree before returning to Nigeria, or to do so as soon then after as possible.

However, further analysis of data in response to Research Question 1 seemed to show that there was some evidence of change in students' aspiration level. Six students in one of the three sites studied raised their aspiration level when, in the course of their programs, they realized that they were making above average grades in their courses. Eleven of the 18 instructors interviewed at the three sites seemed to indicate that an average of 75% of their NMP students had the potential to succeed

in agriculture related four-year college degree programs. It appeared that the sudden realization of personal potentials in these six students and perhaps the awareness of opportunities open to them were among the factors that contributed to change in their level of aspiration.

Other data analyzed in response to Research Question 1 seemed to reveal that four interviewees at the three sites and six national survey respondents changed their minds in relation to their original aspirations. These respondents' original aspiration levels were set at improving upon the occupational skills they already possessed before enrolling in the NMP. This aspiration also included pursuing a four-year college degree program in the U.S. before returning to Nigeria. Since they seemingly could not improve upon the occupational skills they possessed prior to enrolling in the program, these respondents appeared to be discouraged to pursue a four-year college degree program.

Summary

Overall, there appeared to be little or no change in the career goals and aspirations of the program participants. The data seemed to indicate that the career goals and career aspiration levels of a great percentage of respondents from both the sites and the National Survey, did not change over time. However, for the small percentage of students who did express changes in their career goals and aspirations, the following factors appear to be influential in these changes:

- (1) a greater awareness of personal potential and available educational opportunities (higher education), and
- (2) a perceived lack of improvement upon the occupational skills possessed prior to enrollment in the program.

Research Question 3: What was the nature and extent of vocational adjustment problems that students encountered in their programs?

This research question was another major question asked in an attempt to obtain data that would be useful to planners of future similar Projects. It was intended to help in understanding and documenting the nature and extent of the vocational adjustment problems that could be expected when students from one traditional educational system and background were scheduled to train in another different educational system.

As was discussed in the Review of Literature (Chapter II), the educational system out of which the NMP students came, was geared more to the British educational system. Programs offered in the secondary grammar schools in this system were more academically than technically oriented. The emphasis in the programs that the NMP students were enrolled in was on the acquisition of related vocational-technical skills and competencies, hence the awarding of an associate degree of applied science, on completion of the program. Substantial academic course work was not emphasized in the associate of applied science degree programs.

Data were collected from:

- (a) student questionnaire responses from the three case study sites, and from the National Survey;
- (b) questionnaire responses by students' instructors and counselors from the three sites;
- (c) interview responses from students at the three sites;

- (d) interview responses from students' instructors and counselors at the three sites.

Additional data were collected from the informal open-ended remarks made by student respondents in the National Survey, and from the respondents at the case study sites. Documents such as The USAJD-NMP Annual Report to the Federal Military Government of Nigeria, 1976, and the NMP School Coordinator Handbook, 1979, contained pertinent data in relation to this research question.

Analyses of these data revealed three major groupings of students' vocational adjustment problems. Vocational adjustment problems related to perceived lack of adequate supervised occupational experiences were the problems that were most frequently mentioned by case study students during personal interviews. Also, at least 90% of the open-ended remarks from the National Survey participants, had something to say about the supervised occupational experiences that students were provided. On the other hand, the vocational adjustment problems most frequently mentioned by students' instructors and counselors interviewed at the three sites, related to the students' educational background, vocational interests and motivation. Lastly, the documents reviewed in relation to this research question appeared to identify the problems associated with the selection and placement of students in schools and programs, as the major factor that tended to create subsequent vocational adjustment problems for the NMP students.

However, for purposes of coherence, the data in relation to students' vocational adjustment problems, were presented and discussed in the

following order of grouping:

- (1) Selection and placement of students in institutions and programs,
- (2) Entry background and motivation,
- (3) Lack of supervised occupational experiences,
- (4) Placement and followup in Nigeria, of previous program participants, and
- (5) Relevance of training - Technology transfer.

1. Selection and placement of students:

A. Selection of students

In the USAID-NMP Annual Report to the Federal Military Government of Nigeria (1978), it was reported that:

"...Because of the "crash" basis on which the Project was developed, the selection of students was both hasty and inadequate. There was little opportunity for personal interviews or in-depth analysis to determine either the suitability of the students for participation in the Project, or the most appropriate field of study. Students who arrived in January (of 1978) were interviewed only upon their arrival in Washington. Consequently, students experienced a large number of misplacements and subsequent transfers..."

According to the NMP student interviewees who underwent the selection process, the selection process in Nigeria consisted of an English essay written on, "why I would like to go to the U.S. to study". In addition, a standardized English test - the American Language Institute, Georgetown University (ALIGU) Usage Test, was administered to candidates to further determine students' English proficiency (USAID-NMP School Coordinator Handbook, 1979). The USAID-NMP Annual Report to the Federal Military Government of Nigeria, (1978) also revealed that students' academic credentials were reviewed. On the basis of the above selection processes, candidates were given numerical ratings. Those with the highest ratings in rank order, were accepted into the program. The report also indicated that preference was given (presumably in the order in which it is presented below) to students who:

- (1) had completed secondary school at the West African School Certificate (W.A.S.C.) Division III level or above, and who had received good grades in science or the subject central to the desired course of study;
- (2) had job experience in a technical area;
- (3) showed interest in working as mid-level manager upon return to Nigeria; and
- (4) passed the English test.

A regional Project Director interviewed indicated that the same English essay theme and the same standardized English test were given to the four groups of candidates who had been admitted to the program up to

the time of this study. He further stated that no aptitude or vocational interest tests were administered to candidates during any phase of the selection process.

B. Placement of students in programs

As noted earlier, students experienced a large number of misplacements because of inadequate selection process. Thirty-two (or 76%) of the 42 students interviewed at the three sites indicated that the programs in which they later came to enroll were not exactly what they had in mind when they selected a program from among the programs published in the Daily Times newspaper in Nigeria. Students were asked whether the programs in which they were enrolled were the same programs they selected while they were in Nigeria. Twenty of the 32 interviewees indicated that despite the differences between the program titles used in the newspaper advertisement in Nigeria, and what their present programs were called, their on-going programs turned out to be acceptable to them. The remaining 12 of the 32 interviewees, on the other hand, indicated that they did not like the programs with which they had to settle. The USAID-NMP Annual Report (1978) indicated that

transfers from one institution to another totalled 26% (255 out of the 979 students in the program in September of 1978). Most resulted from inadequate matches of the expectations and vocational needs of student with the program offered at an institution.

One regional Project Director interviewed seemed to indicate that it was not possible to match every student's vocational expectations

with programs available either because the programs to meet such needs were not offered by participating institutions, such programs were not listed among the priorities of the Nigerian government, or because prolonged period of study and consequently additional costs beyond the approved budget were involved. He further indicated that a very negligible number of students had to settle with a vocational-technical program which was similar but not identical to the program they had selected in Nigeria.

C. Placement of students in institutions

As the USAID-NMP Annual Report referred to earlier indicated, two instructors in one of the sites visited seemed to agree on an issue of improper placement of students in certain institutions. These instructors felt that students in Crop Production and Food Processing programs, for example, should have been sent to institutions in regions or locations where U.S. crops and foods processed were similar to those found in students' home country. These instructors seemed to reveal that the kinds of crops grown in the region, and about which the NMP students were required to study were not found in tropical regions such as in Nigeria.

A pre-dissertation study that was intended as a guide in formulating a research study on the NMP was conducted in one junior college that enrolled the NMP students. Among the subjects interviewed in this college were 14 NMP students, the Dean of Students and the Campus Coordinator of the NMP. The Dean of Students and the Campus Director both indicated during personal interviews that arrangements to place

the Nigerian students at this institution were made over the telephone, and within four weeks the Nigerian students were scheduled to arrive at the institution. Further, these two college officials indicated that they later realized that they should have demanded more information than they briefly received over the telephone, to enable them to make appropriate decisions. Their comments also revealed that additional time was needed to plan and prepare for such a program. This institution later declined to participate in this study as a Case Study site because, according to one of the officials interviewed, the institution was not proud of its successes so far in its participation in the Project.

Eight instructors interviewed in two of the three sites indicated that there was not adequate information as to what specifically the students were required to learn in their various programs with respect to the needs of their native country, nor was there sufficient information about the nature of the educational system out of which these students came, nor were their educational backgrounds and records shared with the college officials.

Interviews with students revealed that a lack of thorough understanding of the terminology used in program titles as they were published in Nigeria misled some students in the process of choosing their programs. Five students interviewed in two of the sites seemed to indicate that, as one of them put it, "we did not know exactly what Agricultural Production was all about until we found ourselves in the stable washing and feeding livestock". The co-ordinator of the agricultural production division in one of the sites reported that three students in this area

later changed to the agricultural business area which, according to this official, students seemed to prefer because it took them away from what they considered the chores of a dirt farmer. Six students interviewed in one other site also appeared to indicate that they did not know what Agricultural Mechanization was all about until they realized that they had to "mess" with greasy tools and machinery. They also remarked that they never thought that they were coming to the United States to be "mechanics".

2. Entry background and motivation

An analysis of the demographic information on student participants in the case studies and the National Survey indicated that 263 (or 73%) of the total respondents attended only secondary grammar schools, 72 (or 20%) attended secondary technical schools, and 22 (or 6%) attended other schools including teacher training and commercial schools. Nine of the 22 students who attended other schools had attended agricultural schools, or had had work experience related to agriculture prior to enrollment in the program.

Eleven of the 15 technical subject instructors surveyed at the three sites disagreed that their students were not adequately prepared for their vocational-technical courses. In the personal interviews that followed, what they appeared to be saying was that the students had little or no problem learning the concepts (theories) presented. However, they indicated that what seemed to be their major problem was the application of the concepts learned. While disagreeing that a two-year program was too short for students to gain the level of skills and experiences needed to function in the field, these instructors were undecided as to whether a two-year program was adequate or too short for the NMP

students to gain the level of skills and experiences needed to function in the field in their home country. The instructors further indicated that they lacked sufficient information or knowledge about the agricultural systems and practices in Nigeria, to make that judgement. Rather, what they appeared to indicate was that students had the potentials to learn the necessary concepts and principles, but needed to develop the relevant job skills in their fields. These instructors seemed to agree that these students however, needed: (1) to be motivated to be in agricultural fields, and (2) appropriate opportunities to develop and use on-the-job skills. Each of these instructors interviewed seemed to wonder how these students were guided to select agricultural fields.

The eleven agriculture related instructors interviewed at the three sites seemed to indicate that at least 90% of the American students in the agricultural programs had lived on the farm most of their lives, and thus had had considerable degree of experiences in the application of the concepts taught in classes. At one site, because of the limited agricultural experiences of the NMP students, the American students in the agriculture programs petitioned the school administration for special sections of the beginning courses. It appeared that this led to the establishment of special classes for the NMP students. The rationale for this arrangement, according to the Campus Coordinator and four agricultural instructors interviewed at the site included: that the NMP students were slow in catching up, and that their presence in the classes tended to slow down the American

students. Another reason for the segregation was in consideration of the relevance of the training. According to these officials interviewed, these special classes for the NMP students were intended to focus on those practices, techniques and relationships peculiar or relevant to Nigeria's agricultural system. This was seemingly a well meant step voluntarily taken by this institution to accommodate the NMP students; otherwise, the agricultural programs at this and similar institutions appeared to be designed strictly for local consumption. Six instructors were interviewed at the two other sites in the study regarding this arrangement. They indicated that special legislation, additional instructional staff, facilities and/or financial resources would be needed to adequately handle international agricultural programs in this manner on a regular basis.

This special arrangement at this one site seemed to illustrate that the NMP students had different and perhaps inadequate backgrounds to be mainstreamed with American students, both of which cases demanded some special attention from at least one of the institutions participating in the Project.

When interviewed, six students who attended these special classes at this site seemed to agree that they did not favor the arrangement. They further indicated that they felt down-rated and feared that they were not getting all the training they felt they ought to be getting. They explained that the arrangement had made them more conscious of their handicap, and had also weakened their motivation and affected

their application to study. These students further argued that one of the ways they could have made up for their apparently deficient backgrounds in their agricultural programs would have been to work closely with the American students who had had extensive backgrounds in the field. These NMP students did not appear to see the risk probably perceived by the American students and the institution in their integration into regular classes. They seemed to see it more as a form of discrimination against them.

3. Lack of supervised occupational experiences

Supervised Occupational Experiences (SOE) provided the NMP students who had completed, or were about to complete their course work, an opportunity to apply what they had learned in an on-the-job situation. Each student interviewed at each site had at least one comment regarding the SOE. Also, at least 90% of the open-ended comments made by student participants in the National Survey had something to do with the SOE. Thirty-four students interviewed at the three sites, and 85% of the remarks made by the participants in the National Survey seemed to indicate that students were not satisfied with the nature and extent of the SOE that they were provided. Appendix I-15 appeared to be reflective of the opinions of the students interviewed and comments obtained via the National Survey. On this issue, the student interviewees seemed to argue that because they were not continuing on to a four-year college degree program before returning to Nigeria, they felt it was important to have an adequate and meaningful practical on-the-job experiences before returning to Nigeria (Appendix K-1).

From the student and staff interviews at the three sites, it would appear that the agricultural businessmen in the rural localities were reluctant to accept the NMP students for their SOE for a number of reasons. The three Campus Coordinators and eight agriculture related instructors interviewed at the three sites seemed to agree that the local businessmen were doubtful that these students had acquired enough basic agricultural experiences or knowledge to function in a productive capacity on the farm while in training. They also indicated that potential employers expressed some concerns regarding the work attitudes of the students. These interviewees also indicated that the local farmers were concerned about the safe and proper handling of their expensive equipment, and thus were afraid or reluctant to let the students use them. As was also reported in Skinner's study (1979) regarding the problems associated with students' SOE, it would appear that these kinds of business liability considerations that the local employers had to make were among the major factors that tended to restrict the ability of the campus coordinators to secure agriculture related placements for students' SOE. One of the instructors in one of the sites in a locality of population of less than 1000 who was interviewed over the telephone regarding students' SOE, did not seem to mince words as he indicated that the farmers in this community had probably never had a Black work for them before - for there were hardly any Blacks in the community. Nor had these local farmers, the interviewee further indicated, had many or any cross-cultural contacts. This interviewee expressly said:

Farmers in a small community like this one are very conservative, as racial barriers exist....it is unfortunate but that's the way it is, and there is not much you can do about it....we have tried to explain to them that this is a special situation.... and to some extent, they have been very understanding and cooperative.

At each site, there was one instructor whose responsibility entailed securing and coordinating the students' SOE. Each of the SOE coordinators interviewed seemed to indicate that when a student was placed on the SOE, it was that student's responsibility to hold the position. In other words, it was not incumbent on the employer to keep the student for the specified duration of the SOE (three-month maximum), if the student did not meet the employer's performance expectations. Since the inception of the program, a total of 11 students in the three sites were reported to have lost their SOE's prior to completion. The three SOE coordinators interviewed cited four reasons reported by the local SOE employers for dismissing the students:

- (a) Low performance ability tended to be frequently mentioned by farmers as the reason for dismissing a student from the practical experience employment. One of the employers indicated to one of the SOE coordinators that he could not afford to field a worker who needed close supervision and remedial instruction during the peak of the production season when these students were sent over to him.
- (b) Work attitude: According to the SOE coordinators, employers reported some disinterest on the part of students relative

to what they were asked to do. This attitude seemed to make employers also wonder whether these students wanted to be farmers. This view was also expressed by each instructor of an on-the-farm agricultural subject in two of the three sites.

- (c) Attitude to time: Nine instructors interviewed at the three sites indicated that the NMP students initially had a poor sense of time. In one of the sites, one instructor who had had international (African) experience, said that the students sometimes had the "African time"* attitude to scheduled programs at this site. The employers reported similar attitudes towards time to the SOE coordinators. One of the coordinators interviewed reported that, when necessary, the USAID provided funds for transportation of students on the selected SOE. These services were frequently provided during production seasons.
- (d) Language problems: Two SOE coordinators interviewed seemed to agree that although the employers did not consider English language speech to be a major problem, each employer that dismissed a student employee mentioned the English language speech as an initial problem. Each of the instructors interviewed at the three sites seemed to agree that they and the students alike had initial problems understanding each other. They all seemed to indicate however, that they quickly adjusted to each other's language patterns.

*African time is an expression sometimes used to refer to a tendency for some Africans to attend scheduled events half an hour or more later.

The SOE coordinators interviewed in the three sites, and the regional Project Director during scheduled group meetings with the NMP at two of the sites, seemed to indicate that when all efforts to secure appropriate SOE's for students failed, some indirectly related practical experience was arranged on campuses in the form of summer projects. In one of the sites, it was reported that of the 13 students who were completing the required 90 hours of SOE, only three of them were doing so in agriculture related placements. One student was doing his internship as a railroad worker.

Besides the above discussed agricultural skills, attitudinal and race related problems in securing SOE for the NMP students, the USAID-NMP Annual Report (1978), identified other problems in securing SOE for students:

But we (USAID) are having difficulty (securing SOE for students) because of insurance, immigration and labor laws, or because of the lack of practical training options in their (technical) areas..

Student participants in the National Survey who were enrolled in non-agricultural programs did not seem to have as many problems in securing SOE as their counterparts in the agricultural areas. Analysis of the National Survey students' open-ended informal remarks seemed to indicate that at least 80% of the remarks identified the duration of the SOE as their major problem. They seemed to argue that because of the nature and advancements in their fields, the durations of the Project (two-year programs) and the SOE were rather short (Appendix I, 23 and 7). Nearly all of the National Survey open-ended comments had

something to say to the effect that if they had had the opportunity to stay in the program longer, they would have more opportunity to gradually acquire adequate practical experience. The pattern of student responses shown in Table 4-8 appeared to illustrate the feelings of these students regarding the durations of the Project and the SOE.

As noted earlier, 11 of the 15 agriculture related instructors in the three sites disagreed that two-year program was too short for the students to gain the level of knowledge and skills needed for their fields. They all seemed to suggest that the NMP students needed more related and relevant practical training to enable them to develop the level of skills needed to effectively function in these technical fields in Nigeria.

It would appear that students' difficulties in obtaining meaningful and adequate SOE was another reason why students preferred to return to Nigeria to work. Six agriculture students interviewed at the three sites seemed to indicate that if they were in the U.S. to seek employment in their fields, they were doubtful that they would secure good jobs that would enable them to sponsor themselves in a four-year college degree program. They seemed to indicate that they would prefer to return to Nigeria first and conclude plans to come back to the U.S. and pursue their careers.

4. Placement in Nigeria

A total of 18 students interviewed at the three sites indicated that they now realized that on their return to Nigeria, they would become "free agents". These interviewees seemed to suggest that the notion

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
A two-year program is too short for me to gain the level of competence I need in my subject area.	A	7	35	11	55	2	10	-	-
	B	5	33	7	46	1	6	-	-
	C	9	36	13	52	3	12	-	-
	Mean		34		51				
NS		35	12	199	67	53	18	10	3
After two years in my program, I will become skilled and competent enough to take up a job in Nigeria in my subject area.	A	-	-	-	-	16	80	4	20
	B	-	-	-	-	12	80	3	20
	C	-	-	-	-	21	84	4	16
	Mean						81		
NS		-	-	16	5	258	86	23	8

Table 4-8

Student Questionnaire Items Response Pattern

they had when they were coming to the U.S. was that, on their return to Nigeria, the government of Nigeria would absorb them into various departments and ministries. A regional Project Director who was interviewed on this issue indicated that, to his knowledge, the Government of Nigeria did not have any definite plan to provide job placements for the NMP students on their return to Nigeria. During one of the site visits, one student who was identified as the spokesperson for the NMP students at this site, was interviewed on this issue. This interviewee expressly said:

...If the Nigerian governments were genuinely interested in the graduates of this Project, they would have made definite plans to provide job placements for us on our return to Nigeria. Also, they would have provided attractive monetary inducement for us, otherwise, no one is going to live with an associate degree in Nigeria...

Further, the 18 students who were interviewed appeared to say that they could not help thinking or assuming that the Nigerian government did not care about what they had come to the U.S. to study, otherwise, it would not turn them loose on their return to Nigeria. These students further argued that if the government did not recognize or appreciate their level and quality of training, the government should let them make individual plans to make themselves more salable through continued personal career development beyond what the students considered, the little understood and socially underrated mid-level technical

manpower. Each of these students interviewed seemed to indicate that he or she did not feel encouraged to return to Nigeria and stop with an associate degree because, according to reports they had received from former NMP students who had returned to Nigeria, the salary scale on which these NMP graduates were placed in Nigeria was not attractive enough for them to stop with an associate degree (Appendix I-25).

It appeared that students' notion of the apparent disregard or disinterest in the graduates of the NMP, by the sponsoring government, discouraged them to remain at the mid-level technical manpower level in Nigeria.

5. Relevance of training

Eight (or 72.73%) of the 11 instructors interviewed at two of the three sites indicated that they did not receive sufficient information about the students' backgrounds and/or about the agricultural technology and systems of Nigeria. These instructors stressed that they needed some pertinent information that would have helped them in adjusting the content of the curriculum to meet the needs of the NMP students.

The students themselves appeared to be little informed as 47 (or 78%) of the 60 students surveyed at the three sites, and 193 (or 65%) of the 297 participants in the National Survey, indicated that prior to their enrollment in the NMP, they had not studied nor used the major materials and equipment they were using in their programs. The eight instructors and fifteen students that were interviewed at the three sites indicated that they did not know which, if any, of the materials and equipment

they used in their programs would be available in Nigeria, nor what specific techniques and practices were currently used in Nigeria in the various agricultural areas. Each of the instructors interviewed indicated that, under these circumstances of very limited information, it would be difficult to make any meaningful adjustments in the curriculum in order to be of benefit to the NMP students.

Except for one of the sites at which some adjustments were made, in part, for relevance of training, by establishing some special classes for the NMP students, it would appear that the students in other two sites were treated with the same curriculum content designed and intended for local consumption. It was supposedly left to the students to transfer the concepts learned to their local conditions. The instructors interviewed seemed to doubt that the NMP students, with their limited background and experiences would be able to effectively transfer relevant concepts to their native conditions, especially as the scope of the AAS degree programs did not examine much of the academic base that many considered essential in making such transfers.

Research Question 4: What was the nature and extent of academic adjustment problems that students encountered?

Responses to students' and instructors' questionnaire items relating to students' academic adjustment problems, and a report on students' "Academic Performance" contained in the USAID-NMP Annual Report (1978), were among the specific data used to address this research question. Interviews with students and instructors were other supportive data sources.

Three Campus Coordinators interviewed at the three sites seemed to indicate that the nature and scope of the Associate of Applied Science (AAS) degree programs that the NMP students were enrolled in did not involve substantial academic course work. They further explained that the AAS programs in which these students were enrolled were not designed for college-bound students. A community college catalog reviewed described the AAS programs as those programs designed "to prepare students to enter challenging specialized careers after two years of preparation or less".

However, Campus Coordinators at two of the sites, indicated that basic academic courses considered relevant to students' programs were required for the NMP students. These courses included one quarter each of English language, mathematics and basic agricultural sciences such as Animal Science.

The pattern of responses to the questionnaire items listed on Table 4-9 appeared to illustrate that the students believed that they did not have major academic problems. Each of the five academic instructors surveyed at the two sites agreed that while it would not be said that the NMP students were not adequately prepared for the academic subjects, they had initial problems adjusting to the standards of their academic programs. On further interviews, each of these instructors appeared to indicate that these problems could be attributed to students' newness in a different educational system and academic environment. Each of these instructors also seemed to indicate that their students had problems adjusting to the rate of instruction and rate of examinations in their institutions. These instructors appeared to

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree		
		#	%	#	%	#	%	#	%	
		<hr/>								
A: It has been difficult for me to adjust to the standard of academic subjects in my college.	A	-	-	5	25	12	60	3	15	
	B	1	6	2	13	11	73	1	6	
	C	-	-	-	-	-	-	-	-	
	Mean							66		
	NS	19	6	29	10	197	66	52	17	
<hr/>										
B: It has been difficult for me to adjust to the rate of instruction in academic subjects.	A	2	10	16	80	2	10	-	-	
	B	2	13	11	73	2	13	-	-	
	C	-	-	-	-	-	-	-	-	
	Mean							76		
	NS	40	13	124	72	29	10	14	4	

This Table (4-9) continues..

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
		<hr/>							
C: I have had difficulty adjusting to the rate of examinations in my college	A	1	5	16	80	3	15	-	-
	B	4	26	9	60	2	13	-	-
	C	-	-	2	8	18	72	5	20
	Mean			49					
	NS	15	5	255	86	27	9	-	-
<hr/>									
D: I have had difficulty adjusting to the methods of examinations in my college.	A	-	-	2	10	17	85	1	5
	B	-	-	2	13	10	66	3	20
	C	-	-	1	4	15	60	4	16
	Mean					70			
	NS	11	4	28	9	232	78	26	8

This Table (4-9) continues..

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
		E: My instructors and Fellow (American) students understand my English speech without serious problems.	A	-	-	1	5	17	85
	B	-	-	2	13	11	73	2	13
	C	-	-	2	8	19	76	4	16
	Mean						78		
	NS	95	32	129	43	58	19	15	5

Table 4-9
Student Questionnaire Items Response Pattern

attribute these initial adjustment problems to students' initial involvement in and adjustment to a different school system. They all also seemed to indicate that the initial poor understanding of students' English speech, and vice versa, was probably a major factor that seemed to contribute to students' initial academic adjustment problems.

Students' responses shown on Table 4-9, Questionnaire statement (E), appeared to support this apparent language problem of students, as 55 (or 91%) of the students surveyed at the three sites disagreed or strongly disagreed with the questionnaire statement. But 224 (or 75%) of the National Survey participants agreed or strongly agreed that their instructors and fellow American students had no serious problems understanding their English speech. Each student interviewed at each of the three sites also indicated that they too had initial problems understanding their instructors and fellow American students.

Twenty-eight (or 80%) of the 35 student participants from sites A and B, and 213 (or 71%) of the National Survey participants agreed with the five instructors surveyed in indicating that they, the students, had problems adjusting to the rate of instruction in their academic subjects. However, the academic instructors, as well as 50 (or 83%) of the student respondents from the three sites and 258 (or 87%) of the National Survey participants indicated that the students did not seem to have much problems adjusting to the methods of examinations in their institutions.

It appeared that the student participants in the case studies had greater initial language (communication) problems than the participants in the National Survey. Also, it appeared that the student participants

at both the case studies and the National Survey did not have major problems adjusting to the method of examinations in their institutions.

The report entitled "Academic Performance" contained in the USAID-NMP Annual Report (1978) indicated that, of the total grade returns between September 1977 and February 1978, 87% of the Group I students had satisfactory performance, while the early returns between March 1978 and September 1978 showed a 94% satisfactory Group I performance, and a 97% Group II satisfactory performance. These data seemed to reveal that as students adjusted to the earlier mentioned initial problems, their performances improved. The Annual Report also seemed to indicate that a negligible number of students had records of below average performances. It reported that less than half a percentage (.5%) were terminated from the program.

It appeared that the nature and extent of the initial academic problems of the NMP students were the problems that could be expected when transitions from one schools system to a different school system occurred.

Research Question 5: What was the nature and extent of social adjustment problems that students encountered?

Among the specific data utilized to address this research question included the data presented in Table 4-10. Also responses to counselor questionnaire items relating to perceived students' social adjustment problems, were other data that were used to address this research

question. Additional data were also collected through interviews with students and counselors who participated in the case studies at the sites.

An analysis of the characteristics of the case study sites seemed to indicate that the participating students lived in rural agricultural communities that did not seem to have many Blacks or Africans. Thus, the NMP students at these sites appeared to be among the few Blacks and/or the only Africans in the community.

Seven of the 10 students' counselors surveyed at the three sites indicated that students frequently reported that they were discriminated against because they were Africans. This appeared to support the mean percentage response from the three sites to questionnaire statement (A) in Table 4-10. While it was not possible, nor was there any intention to substantiate these allegations, it was considered important to know whether the students felt that way. As one of the instructors interviewed over the telephone was reported as indicating that small rural community dwellers tended to be conservative, it appeared possible that the NMP students in such rural communities could be spot-lighted as strangers and perhaps treated with caution and skepticism. Each of the students interviewed at the three sites seemed to indicate that there were aspects of social adjustment problems that tended to touch the NMP students as a group. These seemed to include problems associated with business matters in the community, housing and money. They further seemed to indicate that other aspects such as interpersonal social relationships with other American students on the campuses, were matters of individual differences.

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		f	%	f	%	f	%	f	%
A. I sometimes feel discriminated against because I am an African.	A	11	55	2	10	7	35	-	-
	B	8	53	3	20	4	26	-	-
	C	16	64	3	12	6	24	-	-
	Mean	57							
NS	11	4	94	31	181	61	11	4	
B. American students and people in my community are friendly and helpful, and accept me.	A	-	-	2	10	15	75	3	15
	B	-	-	3	20	9	60	3	20
	C	-	-	2	8	18	72	5	20
	Mean					69			
NS	23	8	192	64	82	27	-	-	

This Table (4-10) continues..

Questionnaire statement	Site	Strongly Agree		Agree		Disagree		Strongly Disagree	
		#	%	#	%	#	%	#	%
C. Living arrangement and domestic needs are no problems to me.	A	2	10	6	30	12	60	-	-
	B	-	-	4	26	11	73	-	-
	C	2	8	6	24	17	68	-	-
	Mean						67		
NS		103	34	155	52	39	13		

Table 4-10

Student Questionnaire Items Response Pattern

A regional Project Director reported that during a general meeting with the NMP students in one of the rural sites, he learned that the local community businessmen had unanimously declined to accept further personal checks from the NMP students. This circumstance was due apparently to the first group of the NMP students who seemed to have established a poor check issuing record.

In one of the three sites, it was reported by six students interviewed that 4 American students moved out of the dormitory rooms because 4 NMP students were assigned in some of the rooms as roommates. According to the students interviewed, it was alleged that one of the NMP students assigned in one of the rooms at this institution, was a "homosexual" (Appendix K-2). One of the counselors at this institution seemed to confirm that American students who were assigned rooms with the NMP students moved out of their rooms. It was also reported that the NMP students later moved out of the rooms, and the American students moved back in. Six other students interviewed at one of the sites seemed to indicate that the decisions of the local employers to accept or not accept the NMP students for their SOE seemed to be influenced in part by their previous experiences with former SOE students.

It appeared that these kinds of seemingly unavoidable generalizations made by various members or groups of these rural communities tended to create common social adjustment problems for the NMP students in those rural communities. As revealed during the interviews with the NMP students at each site, the NMP students did not seem to be surprised about these apparent social stigmas. They seemed to indicate that they were forewarned about these kinds of social problems while they were

still in Nigeria. More than 75% of the students interviewed at the three sites wished they had been placed in a larger city where they believed similar culture or cross-cultural contacts appeared to have been established more readily. These kinds of perceived students' wishes and feelings apparently led a Project Director who was interviewed to express an interest in seeing this study expanded to include a study of the social adjustment problems of the NMP students in a predominantly Black institution and community versus their social adjustment problems in a predominantly White institution and community. This expansion could not be made because of limited financial resources available to the researcher.

The pattern of responses to questionnaire statement (E) in Table 4-9 appeared to indicate that the language (communication) problems that the NMP students seemed to encounter appeared to have a direct relationship to the degree to which the institution and the surrounding community dwellers had interacted with international, especially African visitors. It appeared that the city students and city dwellers whose ears had been "trained" for foreigners' English accents had less problems understanding such foreign accents, than the rural dwellers who had much less cross-cultural contacts.

Each student interviewed at the three sites had something to say about their financial problems. Since the NMP students were unable legally to take up unauthorized paid employment during the period of study, the students interviewed seemed to indicate that they depended almost entirely on their monthly stipends from the USAID office in Washington, D.C. Eleven of the 42 students interviewed from the three sites said that on at least two occasions when their monthly stipends were about one week late to arrive from Washington, D.C., they encountered serious problems meeting

their financial commitments. The students interviewed at the three sites were, however, divided on the sufficiency of the monthly stipends. While 15 students interviewed seemed to indicate that it depended on individual living standards and spending habits, 27 other students seemed to indicate that the monthly stipend of \$352.00 was not adequate in light of the rising cost of living in the U.S. One of the graduate returnees to Nigeria was reported to have sold his \$900.00 tool box to an American student for only \$100.00 because this returnee could not afford the money to air-freight the much needed tools to Nigeria. Some other returnees, it was also reported, simply abandoned their tool boxes and returned to Nigeria. These tool boxes were paid for by the Nigerian government.

Forty-three percent of the student remarks in the National Survey had something to say about their financial problems (Appendix I, 4 and 16). The consensus among these remarks seemed to be that the monthly stipends were not sufficient to keep pace with the inflation in the country.

Some of the social problems expressed by students that were interviewed appeared to relate to the rules and regulations that were imposed by the institutions, USAID, Immigration and Naturalization Services, and the Nigerian government. Six students interviewed on this issue appeared to indicate apprehension about a large number of regulations. Their feelings regarding specific regulations were expressed by comments such as: "Why do we have to tell the Campus Coordinator where exactly we are going when we leave town? Why must any students who gets married to an American girl be dismissed from

the program and sent back to Nigeria?" The students appeared to indicate that these kinds of rules and regulations (see Appendix J) made them feel as though they were either little children or prisoners. One of the Campus Coordinators interviewed reported that one of the most serious problems encountered with the NMP students was getting them to deal with these rules and regulations, as part and parcel of the society they were in. This official seemed to indicate that some students had been very uncooperative on certain occasions because these students felt that such rules and regulations were not necessary.

Research Question 6: To what extent did students perceive that they could have been better prepared for their vocational and technical subject areas?

The final research question focused on how students perceived that they could have been prepared for their subject areas. This question was posed in an attempt to obtain, from program participants, data that could be used in part, in advising future participants in, and planners of future similar Projects.

The following consensus seemed to emerge from analysis of collected data:

(a) Career education and occupational information

A mean of 83% of the respondents from the three sites, and 88% of the participants in the National Survey indicated that they did not receive any professional guidance or occupational information prior to

their enrollment in their programs. Nineteen students interviewed at the three sites further commented that Nigerian youngsters did not frequently rely on career guidance or occupational information in deciding on a field of study. Essentially, they indicated that, because of the tight competition in admissions to institutions of higher education in Nigeria, the field of study that most students often entered were those fields that were available for admission, and for which they qualified. This may or may not be the field that one really wanted to pursue. One of the students interviewed on this issue expressly said, "My father wanted me to do Business Administration, but because of the stiff competition in Nigeria, I could not get admission into any Nigerian university". This student was enrolled in an Agricultural Mechanization program. Another interviewee also remarked: "Many Nigerian students grab at any available opportunity to go further in education, no matter in what field..".

Clearly, these students appeared to be saying that personal interests and relevant aptitudes were not always the major criteria for the selection of a field of study for most Nigerian students seeking admissions to Nigerian institutions of higher education. The students believed that regardless of the field in which they obtained their college degrees, they would be certain to obtain jobs, or at least enjoy the status seemingly accorded university graduates by the society. One of the students interviewed clearly said:

I don't care whether the degree is in dry-cleaning or in basket-making, or whether I got it from downtown (Mahomet), as long as it is a degree..., all I need is the opportunity to get it...

This viewpoint seemed to account for the large percentage of students from literary secondary school backgrounds who had competed and were selected for the technical training programs. The majority of these students from secondary schools apparently needed the opportunity to receive higher education. The NMP seemed to be a good one, and to this majority of students, it did not seem to matter very much what field they entered as long as it was a field they could handle in terms of meeting graduation requirements.

(b) Technical background and occupational experience

Seventy-two (or 20.16%) of the 357 students surveyed indicated that they had attended technical schools. A total of 243 (or 68.06%) of them had no work experience whatsoever prior to their enrollment in their programs. Out of the 114 (or 32%) who had work experience, only 32 (or 9%) had work experience related to what they were studying in the NMP.

Only 10 (or 16.66%) of the 60 students in the case studies indicated that they had attended technical schools. Of the 19 students who had work experience, only four of them had related work experience. None of the participants in the case studies indicated having attended an agricultural school. Seventeen of the 42 participants in the case studies however indicated that they had taken agricultural science courses in their secondary grammar school programs, or some business courses in their secondary commercial school programs. Two students in the Food Services program in one of the sites indicated that they had taken home economics courses in their Teacher Training schools.

The small percentage (22.68%) or 81 students who had attended technical or agricultural schools, and the small percentage (9%) or 32 students who had had related work experiences appeared to account for the large percentage (68.06%) or 243 of the 357 respondents who agreed that they had not been adequately prepared for their vocational-technical subject areas. Twenty-two students interviewed at the three sites seemed to indicate that they could have adjusted better to their programs if they had had technical or agricultural backgrounds prior to their enrollment in the program. Twelve students who had had technical or agricultural work experience prior to their entering the program also seemed to support this position. When these were interviewed, they appeared to indicate that such previous experiences were helpful to them in better adjusting to their programs.

Eight instructional staff who had realized that the NMP students in agricultural areas lacked the necessary backgrounds, suggested that future students without adequate or necessary backgrounds should be sent over earlier for necessary remedial instruction. Another suggested alternative would be to allow students to stay a little longer in the program than the specified period, and use the additional portion of the program to provide needy students with necessary experiential backgrounds.

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY:

The purpose of this study was to assess the impact of the Nigerian Manpower Project (NMP) on the career development plans and vocational, academic and social adjustment of participating students in selected U.S. junior and community colleges. The two major areas on which the study focused were assessments of (a) the nature and extent of changes in students' career goals and aspirations since their enrollment in the NMP, and (b) the nature and extent of the vocational, academic and social adjustment problems that students encountered in their programs.

It was believed that research findings in respect of these two major areas of emphasis would be useful to future planners of similar internationally-administered projects in designing their program strategies and formulating their policies. The findings of the study, in respect of these two major areas of emphasis, also would provide relevant information for the NMP for further development of the Project.

Two research methodologies were utilized to gather in-depth information regarding the impact of the NMP on students in selected community colleges. These methodologies consisted of: (1) a multiple case study approach, and (2) a National Survey of eligible students in other participating junior and community colleges located in the four program regions established by the U.S. Agency for International Development (USAID) which administered the Project in the U.S.

Data were collected through multiple data collection methods. These included questionnaires that were completed by 60 student participants in case studies and 297 students in the National Survey. Other data collection procedures included questionnaires completed by related 18 instructional and 10 administrative staff at the three case study sites. Interviews were also held with 70% of the students who participated in the programs at the case study sites, with 18 instructional and 10 administrative staff members in the case study sites. These interviews with staff members were conducted in order to obtain additional non-numerical supportive data. Data contained in documents such as the USAID-NMP Annual Report to the Federal Military Government of Nigeria (1978), the Federal Republic of Nigeria, National Policy on Education, (1977), and The USAID-NMP School Coordinator Handbook, (1979), were also reviewed.

Data were analyzed by utilizing the research questions asked in the study and cross-validated in part by utilizing data from the National Survey.

Three community colleges in the north central states were utilized as the case study sites. These were labelled Community College Sites A, B, and C. These colleges possessed some basic similarities namely, in the rural and agricultural nature of their locations, the nature of the programs enrolled in by the NMP students, and the number of NMP students enrolled at each of these institutions. Data collected from each institution were analyzed by institution. Comparative summative analyses across the case study sites were not made. Rather, comparison of data from each of the three case study sites and the National Survey was the key analysis strategy employed.

A National Survey of eligible students in 35 junior and community colleges located in the four U.S. program regions, were conducted. Students in the institutions surveyed were not enrolled in agriculture-related programs as were their counterparts in the case studies. Nor were the majority of these institutions in the National Survey located in rural agricultural communities like those in the case study sites were.

The fields of study enrolled in by students in the National Survey included Building Construction, Civil Engineering, Architecture and Related Fields; Electronics and Related Fields; Health Related Fields and Automotive and Mechanics (Table 3-1). The purpose of this survey was to cross-validate in part, data and information obtained from the case study sites. The conduct of the National Survey made it possible to expand the generalization of certain findings beyond the three case study sites. A total of 297 (or 64%) of the 460 student questionnaires distributed to the participating 46 institutions were returned. This number of respondents (297) constituted 33.67% of the total number of 882 eligible students enrolled in the NMP during the 1979 - 80 academic year.

CONCLUSIONS:

Since analyses of collected data were made by research questions rather than by methods, the conclusions in this study were also presented by research questions.

Research question 1: To what extent did students' career goals and aspirations change over time?

(1) The pattern of responses shown in Table 4-3 page 80, indicated that a majority of the respondents would prefer to pursue further their careers in four-year college degree programs before returning to Nigeria. Also, 90% of the students interviewed at the three case study sites indicated that this was their original aspiration as they enrolled in the NMP. Twenty-five of the 42 students interviewed at the three sites regarding the pattern of responses shown on Table 4-4 page 82, indicated that while they still wanted to become technicians in their various fields, they were also interested in earning a four-year college degree. During further interviews, these students seemed to indicate that a four-year college degree was the minimal qualification that they needed for their personal social and economic well being in Nigeria. Data presented in Table 4-6 page 85, indicated that a majority of the students surveyed plan to return to the U.S. later to pursue four-year college degree programs.

These data appeared to reveal that the NMP students did not want to stop with half of an education which they perceived as the Associate

of Applied Science degree or its equivalent providing. Their original aspiration while they were in Nigeria and prior to entering the program appeared to be to use the opportunity as a step ladder to pursue higher education to at least a four-year college degree level. That career aspiration for those students interviewed and surveyed did not appear to have changed over time.

These students were sent to the U.S. to acquire a variety of vocational and technical and managerial training in an attempt to reduce the acute shortage of mid-level technical and managerial manpower in Nigeria (USAID-NMP School Coordinator Handbook, 1979). If a greater majority of them did not return to and remain in Nigeria's mid-level technical workforce, it would appear that the critical shortage in Nigeria of mid-level technical manpower would continue to exist.

(2) During personal interviews, 33 (or 78%) of 42 students interviewed at the three sites indicated that their original goal in competing for scholarships and eventually accepting the offer regardless of the conditions, were: (1) to come to the U.S., and (2) to pursue a technical career. Eleven of these students seemed to indicate that a change in their career goals would have meant quitting the program and returning to Nigeria. Analysis of the demographic information on student participants in the case studies and the National Survey indicated that 263 (or 73.66%) of the 357 students surveyed at both the case study sites and through the National Survey, attended secondary grammar schools. Only 72 (or 20%) attended vocational and technical schools. One might have expected that majority of students in these technical training

programs would have been students from vocational and technical education backgrounds.

As was indicated by 80% of the students interviewed at the three sites, and also by 87% of the informal comments made by students in the National Survey, it appeared that the central goal of the students in competing for participation in the NMP was to avail themselves of an opportunity to receive higher education which the Nigerian society, according to one USAID reporter (USAID-NMP School Coordinator Handbook, 1979), had come to believe in with passion. Thus, for those students who were selected and have been enrolled in the U.S. NMP, this goal was achieved when they arrived at the U.S. to begin their two-year training programs. There was, therefore, little or no capacity for their career goals to change.

Analyzed data revealed that 50 (or 83.33%) of the 60 case study students, and 252 (or 84.84%) of the National Survey respondents, did express the desire to continue on to four-year college programs. None of the 42 students interviewed at the three sites, as well as none of the remarks from the National Survey respondents, expressed any serious concerns in relation to the shortage of mid-level technical manpower in Nigeria, for which they were being trained. During personal interviews on this issue, each of the 42 students appeared to express dissatisfaction with the level of pay provided to holders of associate degrees (Ordinary National Diploma) in Nigeria. The students further indicated that according to reports they had received from former NMP students who had returned to Nigeria, the salary scale on which these NMP graduates were placed upon their return to Nigeria was not attractive

enough for them to stop with an associate degree.

Eighteen (or 42.86%) of the 42 students interviewed at the three sites indicated that they became further discouraged when they learned that on their return to Nigeria, they would become "free agents". According to these 18 interviewees, their understanding of this appeared to indicate to them that their sponsors did not appreciate the training that they were receiving.

The preceding data appeared to indicate that the NMP students did not see the expected salary scale as sufficient monetary incentive to return and participate in Nigeria's mid-level technical workforce.

Research question 3: What was the nature and extent of vocational adjustment problems that students encountered?

(1) As was reported in the Annual Report to the Federal Military Government of Nigeria (1978), the screening and selection of the NMP students were both hasty and inadequate. The report further indicated that this resulted in a large number of misplacements and subsequent transfers of students. The selection process in Nigeria consisted of an English essay writing, The American Language Institute, Georgetown University (ALIGU) Usage Test, and a review of students' credentials. The Annual Report further indicated that when it was possible, prospective students were interviewed to determine either their suitability for participation in the Project, or the most appropriate field of study. According to one NMP selection official, no aptitude or vocational interest tests were administered to candidates during any phase of the selection process.

As was stated earlier, 73% (or 263) of the 357 respondents had attended secondary grammar schools; 72 (or 20%) had attended vocational and technical schools. Twenty-two (or 6.16%) had attended other schools such as Teacher Training Schools. Among these 22 students, only 9 students had indicated that they had attended some kind of agricultural training schools, and/or had had work experience in agriculture prior to enrollment in the NMP.

Eleven of the 13 agriculture-related instructors interviewed at the three sites indicated that students seemed to lack the motivation to be in agricultural fields. These instructors further indicated that students seemed to prefer the off-the-farm agricultural programs such as Agricultural Business Management, to what they considered the chores of a dirt farmer which they associated with the Agricultural Production area, or the "messy" agricultural mechanics area. Six students interviewed in one of the sites remarked that they never thought that they were coming to the U.S. to be "mechanics".

It appeared that owing largely to the "hasty and inadequate" nature of the screening and selection processes, students were selected for the programs with inappropriate or insufficient backgrounds and/or motivation related to agriculture. Consequently, lack of the adequate agriculture related backgrounds and poor motivation to pursue agriculture related fields appeared to be the major factors that created subsequent vocational adjustment problems such as misplacements, transfers and difficulties in securing meaningful supervised occupational experiences within the program.

(2) As was reported in the Annual Report, 26% (or 255) of the 979 students were transferred from one institution to another mostly because of inadequate matches between students' expectations and interests and the vocational-technical programs available at participating institutions. One regional Project Director interviewed indicated that it was not possible to meet every student's expectations and vocational needs either because the programs to meet such needs were not offered by participating institutions, such programs were not listed among the priorities of the Nigerian government, or because prolonged period of of study and consequently additional costs beyond the approved budget were involved.

Thirty-two (or 75%) of the 42 students interviewed at the three sites indicated that the programs in which they later came to enroll were not exactly what they had in mind when they selected a program from among the programs listed in the Nigerian Daily Times. As was reported earlier, six students enrolled in Agricultural Mechanization program said that they never thought that they were coming to the U.S. to be "mechanics". As was also stated earlier, at least 80% of the respondents in both the case study sites and the National Survey indicated that they did not receive any professional career education or occupational information prior to their enrollment in the NMP.

It would appear that a large percentage of the students from the case study sites in the agriculture-related program areas did not receive adequate information about the agricultural programs before they selected them, or before they were placed in them.

(3) As was reported earlier, two instructors in one of the case study sites felt that the students in Crop Production and Food Processing programs for example, should have been assigned to community colleges in regions of the U.S. where crops grown and foods processed were similar to those found in students' native country.

Eight instructors interviewed at two of the sites indicated that adequate information was not provided regarding what specifically the Nigerian students were required to know in the various programs with respect to the technical needs of their native country. These instructors also indicated that the programs at their institutions were, to a large extent designed for local consumption based on the employment patterns of the local communities. Skinner (1979) reported that in one of the participating institutions studied, the instructional staff were not informed about the arrival of the NMP students until these instructors saw the names of the NMP students in their class rosters. Two college officials interviewed during a pre-dissertation study intended as a guide in formulating this study, indicated that the college administration later realized that additional information and time were needed to plan and prepare for such programs. This institution later declined to participate in this study as a case study site because, according to one of the officials interviewed, the institution was not proud of its success to date in its participation in the Project. When one regional Project Director was interviewed regarding a drastic drop in the number of participating U.S. institutions, the response appeared to indicate that the institutions later discovered that they

"couldn't handle the Nigerian students". The response further seemed to indicate that the institutions were not able to handle the Nigerian students because they lacked sufficient information about them, the economics of their native country and the specifics about the Project to deal with the students effectively.

As Skinner (1979) indicated in a study of The Impact of the NMP on Selected Community Colleges, it appeared that insufficient information and poor communication of same, regarding: (1) students' expectations and vocational needs, (2) students' educational and social background, and (3) specifics about Nigeria's needs in the various programs, all created difficulties for the institutions in advising, instructing and even generally dealing with the NMP students.

Secondly, owing to the "crash" basis on which the Project was developed and implemented, it appeared that there was insufficient time available to the planners and administrators of the Project to identify those programs offered at various institutions that would better match the expectations and vocational needs of the students and also the Nigerian manpower needs.

These two major problems appeared to create subsequent vocational adjustment problems for students such as misplacements and transfers.

(4) As was reported earlier, 11 (or 84%) of the 13 agriculture instructors that were interviewed at the three sites indicated that the Nigerian students in agriculture related programs had inadequate backgrounds in their agriculture areas. They further indicated that students seemed to prefer off-the-farm agriculture programs to on-the-farm

programs. For example, at one of the sites, they indicated that students in agricultural production, were asking to be allowed to transfer to agricultural business program. These instructors indicated that they doubted that these students had the right motivation to be in agricultural fields. They also expressed concerns regarding how the students were guided to choose agricultural programs. The demographic information indicated that none of the student participants at the case study sites had attended agricultural schools. Of the 19 students who had some work experiences, only four had had work experience related to agriculture prior to enrollment in the program.

The Supervised Occupational Experience (SOE) program component at each site was intended to provide students with practical on-the-job skills and experiences in their various programs. Each SOE Coordinator interviewed at each site seemed to indicate that the local farmers were reluctant to accept the NMP students because: (1) they doubted that these students had acquired adequate skills to function in a productive capacity while in the SOE, and (2) they were concerned about the safe and proper handling of their expensive farm machinery. One of these SOE coordinators reported that the local farmers who previously had accepted the NMP students for their SOE later expressed some dissatisfaction over students' level of skills and attitude toward work. Each of SOE Coordinators indicated that lack of relevant backgrounds and skills was the major reason why students had difficulties obtaining agriculture related SOE placements. A substantial percentage of the students, they further indicated, were involved in SOE's that were only indirectly related to the training program. This occurred in

part, because all had to earn the required 90 hours of practical training. In one of the sites, it was reported that only three of the 13 students placed on their SOE had obtained (or received) agriculture related job placements. One of the agriculture students was reported to be earning his required hours as a railroad worker.

A total of 14 students who had completed their SOE's were interviewed. Each of these had something to say about the inadequacy or inappropriateness of the SOE that they received. Also, 85% of the informal remarks made by the National Survey respondents had something to say to the same effect.

It would appear, from the preceding data that the students in agricultural programs at the three sites possessed only limited agricultural backgrounds, attitudes and experiences prior to their enrollment in the programs. This appeared to account for their apparent inability to apply learned concepts as well as the U.S. students seemed to do. It appeared also that the students were not able, within the two year period, to acquire the level of skills and experiences needed for productive employment by the local farmers. These insufficient or inadequate backgrounds and skills appeared to be among the reasons why there were difficulties in securing agriculture related on-the-job training for the students.

It appeared also that both the students in the case studies and those in the National Survey were not satisfied with the nature and/or extent of the practical training that they were provided.

Research question 4: What was the nature and extent of academic adjustment problems that students encountered?

Three Campus Coordinators interviewed at the three sites seemed to indicate that the nature and scope of the Associate of Applied Science (AAS) degree programs that the NMP students were enrolled in did not involve substantial academic course work. However, the Coordinators at two of the sites seemed to indicate that basic academic courses considered relevant to students' programs were required for the NMP students. These preparatory courses included one quarter each of English language, mathematics and basic agricultural sciences such as Animal Science.

A total of 263 (or 73.66%) of the 357 students surveyed at both the case study sites and the National Survey had attended secondary grammar schools. Forty-two (or 70.00%) out of the 60 students surveyed at the three sites had attended secondary grammar schools. The NMP students came from an educational system whose secondary grammar school programs were almost exclusively academically and general education oriented.

Each of the five academic instructors surveyed and interviewed at two of the three sites seemed to indicate that the students were sufficiently prepared for the basic academic subjects. They, however, indicated that students seemed to have had initial problems adjusting to the standards of academic subjects, e.g., the rate of instruction and the rate of examinations in academic subjects in their institutions. These instructors appeared to attribute these initial adjustment problems to students' initial involvement in and adjustment to a different

school system and academic environment. They all also appeared to agree that the initial poor understanding of students' English speech, and vice versa, was probably a major factor that seemed to contribute to their initial academic adjustment problems.

Each of the 13 non-academic subject instructors interviewed at the three sites indicated that students had no problems comprehending the concepts (theories) presented. They appeared to indicate that students' problems were in the application of the learned concepts. Students were said to be slow in applying the principles learned. The instructors appeared to attribute this problem to students' deficient agriculture-related backgrounds.

The pattern of student responses to questionnaire items in Table 4-9 appeared to illustrate that students in the National Survey also believed that they did not have major academic problems. Analysis of the demographic data on students in the National Survey indicated that 221 (or 74.41%) of the 297 students surveyed had attended secondary grammar schools, 62 (or 20.87%) had attended technical schools, and 14 (or 4.71%) had attended other schools such as secondary commercial schools.

Considering the nature of the previous educational system and background of the NMP students, it appeared that the students had some initial minor problems but did not have major problems adjusting to the academic subjects that were required in the program. The initial academic adjustment problems that the students encountered appeared to be due, in part, to their dramatic involvement in a different school system and educational environment.

Previously presented data indicated that the NMP students planned to continue on to four-year college degree programs in the near future, either in the U.S. or in Nigeria. It was also reported that students had wanted to take courses for subsequent transfers to four-year college degree programs. It could be argued that if students did not possess the potential to succeed in academic subjects, they would not be planning to pursue four-year college degree programs. Eleven of the 18 instructors interviewed at the three sites indicated that an average of 75% of the NMP students appeared to possess the potential to succeed in agriculture related four-year college degree programs.

It would appear from the preceding data that owing to the nature of the academic backgrounds that the NMP students had, they were likely to succeed in academically oriented related programs in four-year colleges.

Research question 5: What was the nature and extent of social adjustment problems that students encountered?

(1) Student participants at the three case study sites were enrolled in institutions that were situated in comparatively small, rural agricultural communities. According to the Coordinators interviewed, cross-cultural contacts did not seem to have been sufficiently established in these rural communities. Coordinators at two of the three sites appeared to indicate that the NMP students were probably the first groups of Africans that had either been enrolled at the institution or had lived in the community.

As was stated earlier, the National Survey respondents were not in agricultural programs. Thus, generally speaking, their institutions were not located in rural farm communities as were those of the case study participants. A review of the USAID-NMP Roster of students and institutions seemed to indicate that 65% of the institutions in the National Survey were located in or near average to large (17,200 - 490,000 population) metropolitan, industrial communities.

Seven of the ten counselors surveyed at the three sites indicated that students frequently reported that they were discriminated against because they were Africans. The pattern of student responses to questionnaire items in Table 4-10 appeared to indicate that student respondents in the National Survey seemed to encounter fewer social adjustment problems. The data appeared to indicate that the National Survey respondents did not feel discriminated against as frequently as did the case study site program participants. It appeared that American students and community members were more friendly and helpful to the National Survey respondents than they appeared to be to the students at the case study sites. Similarly, living arrangements and domestic needs did not appear to be major problems to the National Survey respondents. On the other hand, the students in the case study sites appeared to encounter more problems related to housing and domestic needs.

When compared to the National Survey respondents, it could be said that the students at the case study sites appeared:

- (a) to feel more discriminated against,
- (b) to be less readily accepted by the natives,
- (c) to have more housing and domestic problems, and
- (d) to have greater initial language (communication) problems.

Research question 6: To what extent did students perceive that they could have been better prepared for their vocational and technical subject areas?

(1) Analysis of the demographic information on students indicated that only 72 (or 20.16%) of the 357 students who participated in the study attended secondary vocational and technical schools. Of the 357 students, 242 (or 68%) had no work experience whatsoever prior to enrollment in the program. Of the 114 (or 32%) who possessed work experience, only 32 (or 9%) had had work experience related to what they were studying in the NMP. Forty-two (or 70.00%) of the 60 respondents at the case study sites indicated that they were not adequately prepared for their subject areas. Also, 201 (or 67.67%) of the 297 students in the National Survey, indicated that they were not adequately prepared for their technical subject areas. On the other hand, the 72 (or 20.16%) of the 357 participants who attended vocational and technical schools indicated that they felt they were adequately prepared for their vocational and technical subject areas. When the 13 students' technical instructors indicated that students

were slow in applying learned concepts, what they appeared to indicate was that students lacked necessary or adequate backgrounds. Twenty-two students (or 52%) of the 42 students interviewed at the three sites seemed to indicate that they could have adjusted better to their programs if they had had related technical or agricultural backgrounds prior to their enrollment in the programs.

It would appear from the overall data that students felt that they could have adjusted better to their various vocational and technical programs if they had had related vocational and technical backgrounds and work experiences prior to their enrollment in the programs.

Summary Conclusions

There were five major research questions within the study which generated a number of major conclusions. From the analyses of the data collected at the study sites and via the National Survey, the following are summaries of the major conclusions:

1. The NMP students who were involved in the study did not want to stop with half of an education which they perceived as the Associate of Applied Science degree or its equivalent providing. Their original aspiration while they were in Nigeria and prior to entering the program appeared to be to use the opportunity as a step ladder to pursue higher education to at least, a four-year college degree level. That career aspiration for those students interviewed and surveyed did not appear to have changed over time.
2. The high degree of concern expressed by student participants in both the case studies and the National Survey regarding their career development plans, appeared to support the allegation that the Nigerian society believed in higher education with passion. The NMP students who were interviewed indicated that they received reports from former NMP students regarding the salary scale on which the NMP graduates were placed upon their return to Nigeria.

The NMP students involved in this study did not see the expected salary scale as sufficient monetary incentive to return and participate in Nigeria's mid-level technical workforce.

3. It appeared that owing largely to the "hasty and inadequate" nature of the screening and selection processes, students were selected for the programs with inappropriate or insufficient backgrounds and/or motivation related to agriculture. Consequently,

lack of adequate agriculture related backgrounds and poor motivation to pursue agriculture related programs appeared to be the two major factors that created subsequent vocational adjustment problems such as misplacements, transfers and difficulties in securing meaningful supervised occupational experiences within the program.

4. It appeared that a large percentage of the students from the case study sites in the agriculture-related program areas did not receive adequate information about the agricultural programs before they selected them, or before they were placed in them.
5. It appeared that insufficient information and poor communication of information, regarding: (1) students' expectations and vocational needs, (2) students' educational and social background, and (3) specifics about Nigeria's technical and occupational needs in the various programs, all created difficulties for the institutions in advising and instructing the NMP students. Skinner (1979) in a study of The Impact of the NMP on selected Community Colleges, reported similar findings regarding insufficient pertinent information and poor communication of same about the NMP students.
6. Owing to the "crash" basis on which the Project was developed and implemented, it appeared that there was insufficient time available to the planners and administrators of the Project to identify those programs offered at various institutions that would better match the expectations and vocational needs of the students and also the Nigerian manpower needs.
7. It would appear, from analyzed data that the students in agriculture related programs at the three sites possessed only limited agricultural backgrounds and experiences prior to their enrollment in the programs. This appeared to account for their apparent inability to apply learned concepts as well as the U.S. students seemed to do.

8. It appeared also that the students were not able, within the two-year period, to acquire the level of skills and experiences needed for productive employment by the local farmers. These insufficient or inappropriate backgrounds and skills appeared to be among the reasons why there were difficulties in securing agriculture related on-the-job training for the students.
9. It appeared also that both the students in the case studies and those in the National Survey were not satisfied with the nature and/or extent of the practical training (supervised occupational experience) that they were provided.
10. Considering the nature of the previous educational system and background of the NMP students, it appeared that the students had some initial minor problems, but did not have major problems, adjusting to the academic subjects that were required in their programs. The initial academic adjustment problems that the students encountered appeared to be due, in part, to their dramatic involvement in a different school system and educational environment.
11. When compared to the National Survey respondents, it could be said that the students at the case study sites appeared:
 - (a) to feel more discriminated against,
 - (b) to be less readily accepted by the natives,
 - (c) to have more housing and domestic problems, and
 - (d) to have had greater initial language (communication) problems.
12. It would appear from the overall data that students felt that they could have adjusted to their various vocational and technical programs with fewer problems if they had had related vocational and technical backgrounds and work experiences prior to their enrollment in the programs.

Observations regarding the study methodology employed

The Case Study approach was an effective method of studying the impact of the NMP on the selected Project participants involved in this study. This approach was particularly useful considering the multiple groups of subjects that were involved in the study, namely: student program participants, associated institutional staff members (counselors and instructors), and USAID-NMP Staff members. Also considering the multiple study sites that were involved, the case study approach was considered the more appropriate methodology to use. The use of carefully designed questionnaires and interviews made it possible to obtain pertinent data and information relative to the research questions in a shorter period of time at the sites.

The National Survey was useful for verifying certain crucial data collected from the case studies. The conduct of the National Survey also made it possible to generalize certain findings beyond the three case study sites.

However, the researcher would do a few things differently if the study were to be replicated.

Assuming the cooperation of the administrating agency and the participating institutions, and also assuming that there would be sufficient funds available, the researcher would rather spend considerably more time, at least two weeks at each case study site to obtain deeper insights and to make closer observations. The researcher would, for example, expand the groups of subjects to be interviewed to include selected members of the local communities and selected American

students at each case study site to determine how these groups feel about the NMP students in their community and institution. Also, the local farmers and agricultural businessmen who accepted the NMP students for their SOE would be interviewed to obtain first-hand information or feedback regarding students' SOE under their supervision.

Also, instead of, or in addition to a National Survey, the researcher would conduct additional case studies each involving a slightly different sample. This would enable the researcher assess the impact of the Project on a variety of participants, or participants in a variety of programs or social environments. The variety of participants to be studied would include for example, participants by ethnic groups, and participants by the highest educational qualification possessed prior to enrollment in the program. These samples would necessarily be studied by field surveys.

Participants in a variety of programs or social environments would include for example, students in two-year associate degree programs, students in four-year college degree programs, and students in one-year preparatory Certificate programs. Others would include students in rural agricultural communities versus students in large, metropolitan industrial cities, and finally students in predominantly White institutions and communities versus students in predominantly Black institutions and communities. These groups of studies would be individual case studies. However, data analyses procedures for both these and those described in relation to a variety of participants, would be by methods instead of by research questions. Research hypotheses would be utilized rather than research questions.

RECOMMENDATIONS

This study sought to provide a more complete understanding of the nature and extent of changes in students' career goals and aspirations during their participation in a technical training program. It also sought to provide an understanding of the nature and extent of students' vocational, academic and social adjustment problems.

The primary purpose of the study was to provide data for planners of similar future projects involving international technical education. A secondary objective was to provide information regarding the Nigerian Manpower Project.

Thus, the case study methodology and the National Survey allowed the researcher to investigate important issues, the analyses and finding of which have led to certain recommendations, and have uncovered some other crucial issues which might be isolated and studied more intensively in future research.

In international training projects such as the NMP, there is usually a basic intent or tendency to borrow, adopt or transfer* technologies. The appropriateness of such adoption or transfer will largely depend on the extent to which careful analysis has been made in relation to certain prevailing crucial social, economic and cultural issues confronting the adopters. In other words, it would be important to identify the basic conditions essential to the appropriateness of the adoption or transfer as well as those essential to its achievement (Todaro, 1977). Otherwise, such adoption or transfer is likely to be

* Transfer is narrowly used here to mean the intended or unintended exposition to technological innovations which result from international technical aid, and which the recipient nation is expected to adopt.

ill-suited to the adopters' situations.

Todaro (1977) believes for example that in most developing nations, new agricultural technologies and innovations in farm practices are preconditions for sustained improvements in levels of output and productivity. He identified two major sources of technological innovations which could increase farm yields. "Unfortunately", he stated, "they have very different implications for the Third World agricultural development". He further stated that

in the rural areas of most developing nations where land parcels are small, capital is scarce and labor is abundant, the introduction of heavily... "mechanized" agriculture to replace human labor ... is not only often ill-suited to the physical environment, but more important, often has the effect of creating more rural unemployment without necessarily lowering per unit cost of food production (p. 225).

He further indicated that such adoption or transfer could therefore be "anti-developmental" since it might tend to exacerbate the already serious problem of rural poverty and unemployment.

It would therefore appear to become imperative for any government desiring to transfer or adopt alien technologies to ensure that the essential conditions conducive to such transfers or adoption, exist. Thus, it must ensure that such transfer or adoption is not only appropriate but also achievable.

However, whether the technology being adopted or transferred is appropriate or achievable, invariably there will still be some degree

of adaptation of the adopted technology to the native conditions of the recipient nation. This is especially so for such adopters as belong to the Third World group of Nations who tend to be dependent on the technologically advanced nations for such adoption and/or technical aid. Such adaptation will become necessary for important reasons such as differences in cultural, social and/or climatic conditions (Todaro, 1977).

In view of this therefore, nations planning international technical manpower development, as well as other nations providing or administering the technical training, should aim at facilitating capacity transfers. By this is meant the development of native manpower with high potentials to identify and transfer appropriate technologies or practices. This will have different implications for both the nation planning international technical manpower training as well as for the nation providing the training whether as an aid or as a contractual responsibility.

For nations planning international technical training with a view to adopting foreign technologies, it would be necessary first to expose such prospective program participants to the current or prevailing practices in the various fields which urgently need development or innovation, based on immediate or projected needs. This will enable such trainees to be more likely to identify or recognize those aspects of the international practices, values and relationships that could be usefully adopted. For these trainees, so much emphasis should not be placed on learning and assimilating those foreign practices, values and relationships as should be placed on developing the ability to make intelligent association between related foreign practices and

the native conditions and practices. Such intelligent association would be indispensable in identifying not only appropriate but also achievable technologies and practices.

Similarly, the nation or agency providing or administering the technical training should aim at developing in the trainees the ability to associate prevailing practices or technologies to their native conditions. Also, trainees should be encouraged to develop the capacity to intelligently adapt aspects of the foreign practices to their native conditions. It should therefore not be required of such trainees to devote too much time learning about practices that would be clearly irrelevant or ill-suited to their native conditions.

To achieve this special purpose training therefore, pertinent background information regarding the native conditions of the sponsoring nation and information about the potential participants in such international training should be made available to the institutions participating in the training project, and the agencies administering the Project. Also, the clearly stated goals and objectives of the planners should be furnished to prospective participants and participating educational institutions. This information is vital for these institutions to decide whether or not they would be able and willing to participate effectively in the Project. If they decide to participate, such information would be useful in carefully planning and preparing for the specific technical training programs to be provided.

Both the international agencies and the institutions that would participate in the Project should take sufficient time (four to ten months) to plan and prepare for their participation. Such planning

should involve staff members of the administering agency, representatives of the sponsoring country and related institutional staff, such as the Dean of Instruction, instructors and the international student advisers. This will require that each prospective institution be site-visited by both the agency representatives and representatives of the sponsoring nation. Such site visits and joint planning will be helpful in determining the extent to which the institution will effectively participate in the training Project. For example, such joint planning during site visits would help to determine the extent to which the programs offered at the institution were likely to meet the vocational and technical needs of the prospective student participants, as well as those of the sponsoring nation. Also, the extent to which meaningful supervised occupational experiences were likely to be provided to students as part of the training could be determined at such joint planning and site visits.

Since it would appear to be economically undesirable to operate international technical training in this manner at numerous institutions, it might be advisable to identify a few related and viable institutions able and willing to take such responsibilities and have a large number of trainees sent over for the said capacity training. This would tend to facilitate adequate concentration of resources and efforts both by the sponsoring nation and the participating institution, to ensure the development of the intended capacities in the student participants.

Another likely advantage of this arrangement would be a possible reduction in the social and cultural adjustment problems of the participants in a new and different environment. The enrollment of a large

number of international students in one institution would to a great extent, provide the students the opportunity to exercise some of their native cultural patterns, than if a smaller number of students were enrolled. In either case, when a decision to embark on an internationally administered training has been made, further study should be made to determine the extent of cultural similarities between the prospective students' native culture and the culture in which they would be living. Adequate considerations of potential social and economic adjustment problems of the participants in a different culture, should therefore be made. It would be advisable also to have on such institutions, representatives of the sponsoring nation to act as liaisons and counselors of the student participants. Such liaison officers should be appreciably knowledgeable about the current related practices in the sponsor's native country as well as about the current related international practices. He or she should be a resource person readily available to participating students and related institutional staff such as the Dean of Instruction and instructors, for relevant information regarding the sponsor's native conditions. Such representatives should also be members of committees to conduct research and/or evaluation on the training project as needed.

For a four-year project for example, formative research and/or evaluation study(ies) should be conducted semi-annually (or annually, depending on the size of the Project), until the end of the second year of the Project. The information that such formative studies should provide should relate to: (1) the suitability of the student participants for the programs, (2) the extent to which the participating institutions

are achieving stated objectives, and (3) the social adjustment problems of the student participants. While the individual institutions could and in fact should be encouraged to conduct their own internal evaluation studies, a central committee comprised of representatives of the sponsoring nation, the administering agency and participating institutions, should be charged with the responsibility to conduct research and/or evaluation studies on the Project. The findings of such studies would be shared with the government of the sponsoring nation, the Director of the administering agency, and the related participating institutional staff members such as the Dean of Instruction and instructors of students' programs.

When a nation has embarked on an elaborate international manpower training scheme, it would be expected to have a correspondingly elaborate plan to effectively utilize the trained manpower. The effective utilization of the Project's products will depend on such factors as (1) the nature and extent of the need that called for such an elaborate international training scheme, (2) the quality of the plan established by the sponsoring nation to absorb the graduates of the Project in predetermined areas where shortages existed, (3) the characteristics of the program participants and (4) the social and economic considerations confronting the participants.

If the participants were recruited by the sponsoring government into needed fields with little or no regard to participants' individual interests and needs, the government would then be obligated to employ them upon graduation. If that were the case, there ought to have been predetermined sectors of the labor market where shortages appear to be most acute, and where therefore such graduates could be employed. It would

therefore not be to the advantage of the government nor to the student graduates for the graduates to be turned loose as "free agents".

If on the other hand the government offered training in needed fields, and the participants were allowed to choose among these fields, the government should at least provide aid in finding job placements for the graduates, or provide low interest loans to graduates if self-employment is desired.

The characteristics of the program participants are other important factors that will determine the extent to which they would be effectively utilized upon graduation. Depending on the nature and extent of the training provided, the age bracket of the participating students could be influential to the nature and level of their career goals and aspirations. The prevailing social expectations and economic conditions could also influence the nature and level of the career goals and aspirations of program participants. Those involved in the student selection process should therefore give adequate consideration to such variables that are likely to influence changes in career goals and aspirations during or shortly after the training, as such erratic changes would tend to reduce the possibility of meeting predetermined manpower needs in the various fields - within the plan period.

Ideally, in order to effectively utilize the completers of the technical education programs, there should be definite plans by the sponsoring government to make available job placement services. The provision of placement assistance should take into consideration attractive income incentives and related benefits if the sponsoring government hopes

to retain the program graduates in the jobs for which they were trained. These attractive income incentives and benefits would be necessary if the sponsoring government wished to emphasize technical education (or any other needed field) and to encourage its young people to explore it. Also in situations where there appears to be an imbalance between the society's inclination to general academic higher education and its inclination to technical education, the government could use such income incentives and benefits to encourage more enrollment in vocational and technical education programs in the country.

Realistically, the sponsoring government would benefit much more from such international training scheme if it recruited most of the program participants from among the existing qualified personnel in the various sectors where developments are desired. Under this arrangement, such up-graded personnel would be required to return to their existing positions as innovators, or become involved in the in-service training of the others in the sectors. This would tend to increase the returns of the program costs as such graduates would be developing those jobs for which they received additional training - assuming that the training received is of good quality. Alternatively, the sponsoring government is likely to benefit equally well if it identified those private entrepreneurs who need such additional training as a means of enlarging their business in levels of output and productivity. With such additional training and experiences and perhaps available capital for expansion, such entrepreneurs could contribute significantly towards the growth of the nations' economy.

Suggestions for further study

A wide range of studies could be conducted in relation to internationally administered technical education projects. This study on the Nigerian Manpower Project was one of such studies. Analysis of data and consequently, the research findings in this study uncovered some other crucial issues which could be isolated and studied more intensively in future research. Suggestions for further study in relation to the Nigerian Manpower Project include:

- (1) A follow-up study should be completed of the NMP students two years after completion of the program to determine the nature and extent of their employment in Nigeria.
- (2) A follow-up study of the NMP students should be conducted two years after completion of the program to assess the nature and direction of their career goals and aspirations.
- (3) A study should be carried out on the impact of the NMP graduates on Nigeria's technical labor force. This study would aim at determining the extent to which the NMP has reduced the identified shortages of mid-level technical manpower in Nigeria's workforce. It would also attempt to compare the fiscal cost of the total Project with quantifiable Project benefits.
- (4) A comparative study of internationally administered versus locally administered technical manpower training should be conducted. This would be a study in relation to technology transfer. It would be necessary to study, for example, the extent to which the NMP graduates in Agricultural

Mechanization, for example, could effectively utilize
learned U.S. agricultural technology in their native
country.

LIST OF REFERENCES

- Achebe, Christie C. Vocational Aspirations of Secondary School students in East Central State of Nigeria. Unpublished M. Ed. Thesis. Department of Education, University of Nigeria, 1972.
- Adelman, C., Jenkins, D., & Kemmis, S. Rethinking case study: Notes from the second Cambridge conference. Cambridge: Churchill College. Mimeo dated December, 1975.
- Allen, G.R. The graduate students' guide to theses and dissertations: a practical manual for writing and research. San Francisco: Jossey - Bass Publishers, 1976.
- Ashby, Eric, et al. Investment in Education in Nigeria: A comprehensive report of Nigeria's Educational needs up to 1980 based on projections of high-level manpower requirements. Lagos: Government Printer, 1960.
- Brolin, D.E. Vocational Preparation of Retrained Citizens. Ohio: Charles, E. Merrill Publishing Company, 1976.
- Bureau of Cultural Affairs. Assessment of Intercultural Experiences of Asian Visitors to the United States: an evaluation study. State Department: National Training Laboratories, Washington, D.C., 1966.
- Burns, D.G. African Education: An introductory survey of education in commonwealth countries. London: Oxford University Press, 1965.
- Buros, O.K. (Ed.) Personality Test and Reviews: "College Characteristics Index". New Jersey: The Gryphon Press, 1974.
- Buros, O.K. (Ed.) Tests in Print II: an index of tests, test reviews and literature on specific tests. New Jersey: The Gryphon Press, 1974.
- Center of Instructional Research and Curriculum Evaluation and Committee on culture and Cognition. Case studies in science education, Booklet O. University of Illinois at Urbana-Champaign, January, 1978.
- Cheney-Stern, M.R. and Evans, R.N. Development of Procedures for Assessing Impact of Vocational Education Research and Development on Vocational Education (PROJECT IMPACT). University of Illinois at Urbana-Champaign, 1979.
- Clark, H.I., and Ozawa, M. The Foreign Student in the United States. School of Social Work, University of Wisconsin, 1970.
- Colonial Report on Education No. 630. Edited in Southern Nigeria. H.M.S.O. 1908.

- Cross, P.A. *The Junior College Student: a research description*. New Jersey: Educational Testing Services, 1968.
- Cowan, G.L., O'Connell, J., and Scanlon, D.G. (Eds.) *Education and Nation-Building in Africa*. London: Frederick A. Praeger Publishers, 1965.
- Denny, T. *Story Telling and Educational Understanding*. Evaluation Center, College of Education, Western Michigan University, Kalamazoo, Michigan, 1978, Paper #12, p. 1-22.
- Educational Ordinance (1887) for the Colony of Lagos and Protectorate, Her Majesty's Stationery Office (H.M.S.O.) Lagos, 1887.*
- Evans, R.N., and Herr, E.L. *Foundations of Vocational Education*, Columbus: Charles E. Merrill Publishing Company, 1978.
- Eze, T.I. *A Follow-up study of the (1961 - 74) Graduates in Agricultural Education, Home-Economics Education and Industrial-Technical Education of the University of Nigeria, Nsukka*. Unpublished thesis, University of Nigeria, 1975.
- Fafunwa, B.A. *New Perspectives in African Education*. MacMillan Publishing Company, Lagos, 1964.
- Federal Ministry of Nigeria, *Investment in Education*. (Lagos, 1960), #7.
- Herr, E.L. *Decision-making and vocational development*. Boston: Houghton Mifflin, 1970.
- Investment in Education: The Report of the Commission on Post-School Certificate and Higher Education in Africa*. (Lagos: The Government Printer, 1960).
- Isaac, S., and Michael, W.B. *Handbook in research and evaluation - for education and the behavioral sciences*. California: Edits Publishers, 1977.
- Kenneke, et al. *Planning and Organizing Career Curricula: articulated education*. New York: Howard W. Sams & Co., Inc., 1973.
- Kitchen, H. (ed.) *The Educated African: a country-by-country survey of educational developments in Africa*. London: Frederick, A. Praeger Publishers, 1962.
- Ministry of Agriculture and Natural Resources: *Western Nigeria. Land Settlement Scheme*. 1960.

- Ministry of Education: Eastern Nigeria. Vocational Education in the Eastern Nigeria. (Official Document No. 13, 1962).
- Mooney, R.L. Manual to accompany The Problem Check List, College Form. The Bureau of Educational Research, Ohio State University, 1942.
- Nduka, O. Western Education and the Nigerian Cultural Background. Oxford University Press, Ibadan, 1964.
- NIGERIA. Federal Republic of Nigeria, National Policy on Education. Lagos: Federal Ministry of Information, Printing Division, 1977. pp. 16 - 22.
- NIGERIA. Federal Republic of Nigeria, Third National Development Plan, (1975 - 1980). Lagos: Ministry of Economic Development, 1975, pp. 247 - 255.
- NIGERIA. Ten-Year Development Plan (1941 - 1950). Lagos: Ministry of Information, Printing Division, 1941.
- Office of the Superintendent of Public Instruction. State of Illinois. The School Code of Illinois with additional acts affecting schools. St. Paul, Minnesota: West Publishing Company, 1974.
- Okordudu, M.E. The Nigerian Teacher. Vol. II No. 6. 1956.
- Phelps, L.J., and Stokes. Report on Education in Africa. London: Oxford University Press, 1962.
- Sewell, W.H., and Ovensticin, A.M. Community residence and occupational choice. American Journal of Sociology, 1965, 70, 551 - 563.
- Super, D.E. The Structure of Work Values in relation of Status, Achievement, Interest and Adjustments. Journal of Applied Psychology, 1962, 46, 231 - 239.
- Taiwo, C.O. Prevocational and pretechnical education in schools. West African Journal of Education. Vol XVIII, No. 2. Institute of Education, University of Ibadan, Nigeria, 1974.
- Todaro, M.P. Economic development in the Third World. An introduction to problems and policies in global perspectives. London: Longmans Publishers, 1977.
- UNITED NATIONS Documents. Economic Commission of Africa. Conference of African States on the Development of Education in Africa: Final Report. Addis Ababa: May, 1961.
- UNITED NATIONS Economic Commission of Africa. Conference of African States on the Development of Education in Africa: Final Report. Addis Ababa: May, 1961.

- UNITED STATES Agency for International Development (USAID). Annual Report to the Federal Military Government of Nigeria. Nigerian Manpower Project, 1977 - 1978.
- UNITED STATES Agency for International Development - Nigerian Manpower Project. School Coordinator Handbook. 1979.
- UNITED STATES Agency for International Development - Nigerian Manpower Project. Student Roster, (1978).
- UNITED STATES Department of Commerce and Census Bureau, Washington, D.C., 1977.
- Walker, R. The conduct of educational case study: Ethics, theory and procedures. In Cheney-Stern and Evans. Development of procedures for assessing impact of vocational education research and development on vocational education (PROJECT IMPACT), University of Illinois at Urbana-Champaign, 1979.
- Wax, R.H. Doing field work: warnings and advice. University of Chicago Press, 1971.
- Wentling, T.L., and Lawson, T.W. Evaluating Occupational Education and Training Programs. Boston: Allyn & Bacon, Inc., 1978.
- Zacaria, J. Theories of occupational choice and vocational development. Boston: Houghton Mifflin, 1970.

APPENDIX A:

Nigeria/U.S. Agreement, 1977 *

* contained in the Nigerian Manpower Project-School Coordinator Handbook, 1979.

(Articles I-VI of the) AGREEMENT ON THE PLACEMENT
OF NIGERIAN STUDENTS IN UNITED STATES HIGHER EDUCA-
TIONAL INSTITUTIONS BETWEEN THE FEDERAL MILITARY
GOVERNMENT OF THE FEDERAL REPUBLIC OF NIGERIA AND
THE GOVERNMENT OF THE UNITED STATES OF AMERICA

THIS AGREEMENT made this 16th day of August 1977 BETWEEN the Federal Military Government of the Federal Republic of Nigeria (hereinafter referred to as the "FMG") on the one part and the Government of the United States of America on the other part.

WHEREAS the FMG acting through the Federal Ministry of Education (hereinafter referred to as the "FME") desires to obtain technical training assistance in order to meet Nigeria's technical manpower requirements:

AND WHEREAS the Government of the United States of America acting through the Agency for International Development (hereinafter referred to as "AID") is prepared to assist in providing technical training on an actual cost (non-profit) basis.

NOW IT IS HEREBY AGREED AS FOLLOWS:

ARTICLE I

The FMG shall send and the Government of the United States of America shall receive and place qualified Nigerian students for training in various technical fields in United States institutions beginning with approximately 300 students in September of 1977.

ARTICLE II

AID will provide professional and administrative services to Nigerian students to receive technical training at training institutions in the United States, as detailed in Annex A of this Agreement. Among the services to be furnished, AID will:

- (a) assist the FME in selecting Nigerian students to receive training;
- (b) select appropriate institutions in the United States for training the students;
- (c) process appropriate documentation and make arrangements for the placement of selected students in the selected United States institutions, including issuance of visas;
- (d) provide administrative support to students while in the United States.

ARTICLE III

The FME will advertise for candidates for various training programs and will carry out the initial screening in order to arrive at a list of qualified candidates from which final selections can be made jointly by the FME and AID.

ARTICLE IV

The FME will be responsible for providing travel for the participants to and from the United States and for making all pre-departure arrangements including providing passports, preparing visa applications, and ensuring that each student has a physical examination report, including x-rays and international immunization record, and arranging a pre-departure orientation.

ARTICLE V

Individual student training programs under this Agreement will be approved by the FNG and implemented through implementation documents issued by AID.

ARTICLE VI

The FNG will pay all costs for services performed and expenses incurred under this Agreement including the actual direct costs for each participant training activity plus AID's indirect costs in administering the program.

ANNEX A
SERVICES TO BE FURNISHED

- Assistance in selection of students to receive training including interviewing, testing and credential review.
- Selection of appropriate institutions in U.S. for training students.
- Planning and placement of students in American institutions including processing of appropriate documentation.
- Reception of students at U.S. ports of entry.
- Orientation for students upon their arrival in U.S.
- Arrangement of travel and lodging during orientation and travel to training institutions.
- Preparatory training programs as necessary (e.g., course in English technical terms and math, etc.)
- Educational enrichment programs such as special academic and/or technical workshops, mid-winter seminars, home visitations, etc.
- Monitoring of students' educational progress and social adjustment including counseling individual students.
- Issuing periodic and special reports on students' progress at least twice a year.
- Issuing of students' monthly maintenance cheques.
- Disbursing of funds to cover program costs including unforeseen contingencies.
- Compiling and maintaining accounting records.
- Providing quarterly accounting reports.
- Exit interview and concluding seminar.

APPENDIX B:

Clearance letter from USAID-NMP
Staff.

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20548

March 30, 1979

Charles Ejike Igboegwu
Industrial Education Division
Dept. of Vocational & Technical
Education
College of Education
357 Education Building
University of Illinois,
Urbana, IL 61801

Dear Charles:

We are interested in your proposal to study The Impact of the Nigerian Manpower Project on Nigerian Students in Selected U.S. Community and Junior Colleges in the North Central States.

You may proceed on the following conditions:

1. There is no cost to the Nigerian Manpower Project.
2. You get express permission of the schools and students involved.
3. The Nigerian Manpower Project must review and approve the methodology and instruments for research.

We hope that this study will provide an insight into the adaptation of our students to the U.S. and that, through this, we will be able to understand and deal with their problems more effectively.

Sincerely,



C. Strahl
Project Officer
North Central States
RDP/AID

cc: Ron Heisner

APPENDIX C:

Skinner's Dissertation Abstract
The Impact of the NMP on Selected Community
Colleges

by

Patricia Ann Skinner, Ph.D.
The Ohio State University, 1979

THE IMPACT OF THE NIGERIAN MANPOWER PROJECT
ON SELECTED COMMUNITY COLLEGES

By

Patricia Ann Skinner, Ph.D.

The Ohio State University, 1979

Professor Lonnie Wagstaff; Adviser

The purpose of this study was to determine the impact of the Nigerian Manpower Project (NMP) on selected community colleges within an open systems framework. The Nigerian Manpower Project, which began in 1977, was a project administered by the Agency for International Development, funded by the Nigerian government, where Nigerian students were receiving technical training in United States educational institutions.

The organizations studied were viewed as systems, with cycles of events where inputs were received, transformed, and outputs were transported into the environment. The source of input specifically focused on was the Nigerian Manpower Project, including the students and rules and regulations supplied by the Nigerian and U.S. governments. The throughput processes included the technology required to transform the students, and the outputs were the technically trained students.

The case study methodology was utilized to gather in-depth information regarding the impact of the NMP on community colleges. Data were gathered through a questionnaire which was part of the pilot

study, through interviews with key participants of the NMP, and from documents. Data were analyzed utilizing the systems framework and research questions generated in the study.

The units of study were three community colleges in a midwestern state, labeled Community College A, Community College B, and Community College C. These three community colleges were different in size, population served, and the nature of the communities. Data from each institution were analyzed by institution, followed by a comparison of the important findings from the three institutions.

The conclusions consisted of identification of institutional issues related to three specific areas: assumptions, planning, and impact.

Assumption Issues

1. Important determinants for the perceived success of the NMP at all three colleges were:
 - a. their prior involvement in international education,
 - b. their ability to meet educational needs of the NMP students through previously established curricula, and
 - c. their ability to be flexible and adaptable, as evidenced by their utilization of various coping strategies to deal with the impact of the NMP.

Pre-planning/Planning Issues

1. With the exception of one community college, there was inadequate planning for the institutions' involvement in the NMP.
2. Key participants in the NMP should have been informed about the Project prior to its inception so they could plan strategies to meet the special needs of the students.
3. Colleges involved in the NMP needed to be prepared to cope with some negativism and resistance toward international students by certain personnel in their organizations.

4. There was little formal recognition of a change in institutional mission--this issue needed to be addressed.
5. There was a relationship between program size and development of written policies and procedures--the larger programs had more extensive written policies and procedures.

Impact--Institutional and Community Issues

1. The NMP had varying degrees of impact on the community colleges in terms of time requirements of personnel and caused expansions and/or changes in services rendered at all colleges.
2. There was a relationship between the extent of changes made and the size of the institution--the smaller institution made fewer changes than the larger colleges.
3. There were differences in coping strategies which could be related to the diverse nature of the institutions.
4. Personnel at all colleges recognized some of the unique characteristics of the NMP students and were attempting to meet their needs through a variety of strategies.
5. There was little evidence of a negative impact of the NMP on the communities at any of the colleges; to the contrary, the monetary impact was obviously a positive benefit for the communities.

APPENDIX D.

Student Questionnaire
Instrument.

STUDENT QUESTIONNAIRE

180

Fellow Nigerian Student:

The main purpose of this instrument is to determine the changes that may have occurred in your career goals and aspirations since you have been on the Nigerian Technical Manpower Development Project, and to identify any special problems that you may have encountered during your enrollment in the program.

This questionnaire is NOT intended to assess your academic, vocational or social skills and competencies, or those of your teachers. Nor is it intended to evaluate your college or the U.S.A.I.D. Nigerian Manpower Project. Rather, it is intended to determine better ways and means of dealing with future students like you in future programs similar to yours.

IMPORTANT

In order to insure the anonymity of the information provided here, extra care has been taken to make sure that you do not identify yourself anywhere in this instrument. It will therefore be highly appreciated if you will respond to each item as honestly and accurately as possible.

Thank you very much for your time.

Sincerely,

Charles E. Igboegwu
Charles Ejike Igboegwu
Nigerian Doctoral Student
Industrial Education Division
Department of Vocational-Technical Education
University of Illinois
Urbana Illinois 61801

SECTION A:

Directions: Kindly provide the information requested in this section by checking the appropriate boxes or as required.

1. My age is between:
 16 - 19, 20 - 25, 26 and above.

2. My educational background prior to enrollment in my present program:
 secondary grammar school
 secondary technical school
 secondary commercial school
 post-secondary education

3. My work experience prior to enrollment in present program:
 no work experience
 work experience not related to my technical subject area
 work experience related to my technical subject area

4. My vocational-technical subject area is
(specify please) _____

5. The name of my Community/Junior College

(this information is only for coding purposes; anonymity of schools surveyed will be maintained in the report of study)

6. How many semesters or quarters have spent on the program?
 3, 4, 5, 6 and above

7. Rate your overall grade average at the end of the
3rd. semester or quarter: A. B. C. D.
4th. semester or quarter: A. B. C. D.
5th. semester or quarter: A. B. C. D.
6th. semester or quarter: A. B. C. D.

SECTION B:

Directions: Several statements are listed in this section along with a four-step scale of response choices:

Strongly agree (S.A.), Agree (A), Disagree (D) and Strongly disagree (S.D.).

Please respond to each statement by circling the rating scale you believe most accurately represents your position on the statement. Before returning your completed questionnaire please check the form again to make sure that you have circled one response choice for each of the statements.

STATEMENT	Strongly agree	Agree	Disagree	Strongly Disagree
1. I feel satisfied with my vocational-technical subject area because it is what I have always wanted to do.	S.A.	A.	D.	S.D.
2. I feel satisfied with my vocational-technical subject area but I would like to continue on to a four-year College degree program before I return to Nigeria.	S.A.	A.	D.	S.D.
3. I am looking forward to returning to Nigeria as soon as I complete my Associate Degree program.	S.A.	A.	D.	S.D.
4. I would like to return to the U.S. later for a four-year College degree.	S.A.	A.	D.	S.D.
5. My career goals and aspirations have changed since I have been to the U.S.	S.A.	A.	D.	S.D.
6. If I had a choice I would pursue a career outside those specified for me by my sponsors.	S.A.	A.	D.	S.D.
7. If I had a choice, I would change my technical subject area for another specified technical area	S.A.	A.	D.	S.D.
8. It would be difficult for me to change to another specified subject area.	S.A.	A.	D.	S.D.
9. A two-year program is too short for me to gain the level of skills and experiences I need in my area.	S.A.	A.	D.	S.D.

- | | | | | |
|---|------|----|----|------|
| 10. A two-year program is too short for me to gain the level of skills and experiences I need in my area. | S.A. | A. | D. | S.D. |
| 11. After two years in my program, I will become skilled and competent enough to take up a job in Nigeria in my subject areas.. | S.A. | A. | D. | S.D. |
| 12. I am not undecided about what career or technical subject area I really want to pursue. | S.A. | A. | D. | S.D. |
| 13. If I had a choice, I would withdraw from this special program and pursue my career independently. | S.A. | A. | D. | S.D. |
| 14. It has been difficult for me to adjust to the standard of academic subjects in my college. | S.A. | A. | D. | S.D. |
| 15. It has been difficult for me to adjust to the rate of instruction in academic subjects. | S.A. | A. | D. | S.D. |
| 16. It has been difficult for me to adjust to the standard of vocational-technical subjects in my College. | S.A. | A. | D. | S.D. |
| 17. It has been difficult for me to adjust to the rate of instructional in vocational-technical subjects. | S.A. | A. | D. | S.D. |
| 18. The materials and equipment that I am using in my subject area are similar to those that I will use in Nigeria. | S.A. | A. | D. | S.D. |
| 19. I sometimes feel discriminated against because I am a foreign student. | S.A. | A. | D. | S.D. |
| 20. I sometimes feel discriminated against because I am an African student. | S.A. | A. | D. | S.D. |
| 21. Before I came to the U.S., I had used the materials and equipment that we now use in my subject area. | S.A. | A. | D. | S.D. |
| 22. Before I came to the U.S., I had studied about the materials and equipment that we now use in my subject area. | S.A. | A. | D. | S.D. |

- | | | | | | |
|-----|--|------|----|----|------|
| 23. | If I had a choice, I would stay in this country and work rather than return to Nigeria to work. | S.A. | A. | D. | S.D. |
| 24. | I love to work with my hands, with tools and equipment. | S.A. | A. | D. | S.D. |
| 25. | I do not mind being called a technician | S.A. | A. | D. | S.D. |
| 26. | I prefer having a <u>good</u> technical skill without a four-year college degree to have a four-year college degree without a technical skill. | S.A. | A. | D. | S.D. |
| 27. | I received adequate professional vocational counselling and occupational information while in Nigeria. | S.A. | A. | D. | S.D. |
| 28. | Most of what I studied in my subject area will be readily applicable in Nigeria. | S.A. | A. | D. | S.D. |
| 29. | I have difficulty adjusting to the methods of examinations in my College. | S.A. | A. | D. | S.D. |
| 30. | I have difficulty adjusting to the rate of examinations in my College. | S.A. | A. | D. | S.D. |
| 31. | My instructors and fellow (American) students understand my English speech without serious problems. | S.A. | A. | D. | S.D. |
| 32. | American students and people in my community are friendly and helpful, and accept me. | S.A. | A. | D. | S.D. |
| 33. | Living arrangement and domestic needs are no problems to me. | S.A. | A. | D. | S.D. |
| 34. | I feel satisfied that I am accomplishing something in this program. | S.A. | A. | D. | S.D. |

END

You may use the remaining space below (and over if needed) to provide any additional information that you consider to be relevant to the study. Again, THANK YOU for your time. I hope that this study will yield results that will be beneficial to you and to other Nigerians.

APPENDIX E:

**Instructor/Counselor Questionnaire
Instruments**

Questionnaire on the perceptions of Counselors and
Instructors in selected Community Colleges regarding the U.S.A.I.D.
Nigerian students' special problems in
their programs

PURPOSE: The main purpose of this questionnaire is to have you:

the instructor identify any special vocational or academic problems of the Nigerian Manpower Project students that you may have observed while they were enrolled in your classes.

the counselor identify any special career, social or general problems of the Nigerian Manpower Project students that you may have observed during your counselling with them.

Since the students are required to respond to basically the same questions asked in this instrument, your responses will be used as part of the data for cross-validation of their responses.

IMPORTANT

This questionnaire is NOT intended to assess the academic, vocational or social skills and competencies of your students, or those of your instructors and counselors. Nor is it intended to evaluate your college or the U.S.A.I.D. Nigerian Manpower Project. Rather it is intended to determine better ways and means of dealing with your present and/or future Nigerian students and other students in future programs similar to the U.S.A.I.D. Project.

Strict anonymity of your responses will be maintained. Therefore, it will be highly appreciated if you will respond to each item as honestly and accurately as possible.

Thank you for your cooperation.

Sincerely,

Charles E. Igboegwu

Charles Ejike Igboegwu,
Industrial Education Division
Department of Vocational-Technical Education
University of Illinois
Urbana, Illinois 61801

Section A:

Please provide the information requested in this section as required.

1. My professional specialty _____ 2. Highest qualification _____
3. My area of instruction: ()academic ()vocational-technical.
4. Years of teaching experience in present area of instruction _____

Section B:

Instructions: A four-step scale: Strongly agree (S.A), Agree (A), Disagree (D), Strongly disagree (S.D) is given after each statement. Please respond to each statement by circling the rating scale you believe most accurately represents your position on the statement. Please be sure to circle one response choice for each of the statements. You may comment on each statement and/or your response choice in the comments space next to each statement.

STATEMENT	Strongly Agree	Agree	Disagree	Strongly Disagree	COMMENTS
1. It appeared that the Nigerian students who registered in my ()academic, ()technical courses (please check one), were not adequately prepared for them	S.A.	A.	D.	S.D.	
2. Based on their backgrounds, a two-year program is too short for the Nigerian students to gain the level of skills and experiences they need to function in the field in their subject areas.	S.A.	A.	D.	S.D.	
3. The Nigerian students have had problems adjusting to our (your college's) standards in academic subjects.	S.A.	A.	D.	S.D.	

- | | | | | | |
|-----|--|------|----|----|------|
| 4. | The Nigerian students have had problems adjusting to our standards in vocational and technical subjects. | S.A. | A. | D. | S.D. |
| 5. | The Nigerian students have had problems adjusting to our rate of instruction in academic subjects | S.A. | A. | D. | S.D. |
| 6. | The Nigerian students have had problems adjusting to our rate of instruction in vocational-technical subjects. | S.A. | A. | D. | S.D. |
| 7. | The Nigerian students have had problems adjusting to the methods of examination in our college. | S.A. | A. | D. | S.D. |
| 8. | The Nigerian students have had problems adjusting to the rate of examinations in our college. | S.A. | A. | D. | S.D. |
| 9. | The Nigerian students have had problems understanding my English language. | S.A. | A. | D. | S.D. |
| 10. | The Nigerian students have had problems speaking the English language. | S.A. | A. | D. | S.D. |

Questionnaire on the perceptions of Counselors and
Instructors in selected Community Colleges regarding the U.S.A.I.D.
Nigerian students' special problems in
their programs

PURPOSE: The main purpose of this questionnaire is to have you:

the instructor identify any special vocational or academic problems of the Nigerian Manpower Project students that you may have observed while they were enrolled in your classes

✓ the counselor identify any special career, social or general problems of the Nigerian Manpower Project students that you may have observed during your counselling with them.

Since the students are required to respond to basically the same questions asked in this instrument, your responses will be used as part of the data for cross-validation of their responses.

IMPORTANT

This questionnaire is NOT intended to assess the academic, vocational or social skills and competencies of your students, or those of your instructors and counselors. Nor is it intended to evaluate your college or the U.S.A.I.D. Nigerian Manpower Project. Rather it is intended to determine better ways and means of dealing with your present and/or future Nigerian students and other students in future programs similar to the U.S.A.I.D. Project.

Strict anonymity of your responses will be maintained. Therefore, it will be highly appreciated if you will respond to each item as honestly and accurately as possible.

Thank you for your cooperation.

Sincerely,

Charles E. Igbogu
Charles E. Igbogu,
Nigerian Doctoral Student
Industrial Education Division
Department of Vocational-Technical Education
University of Illinois
Urbana, Illinois 61801

Section A:

Please provide the information requested in this section as required.

1. My professional specialty _____
2. Highest qualification obtained _____
3. Position held in College _____
4. Years of experience in counselling _____
5. Years of experience in counselling with foreign students _____

Section B:

Instructions: Three modifiers () frequently
() occasionally
() not

are listed with each statement. Please check one modifier that you believe most accurately completes and represents your position on the statement. Besides checking one modifier in each statement, you may comment on the statement and/or your response choice. Use the comments space next to each statement.

1. Students have () frequently COMMENTS:
() occasionally
() not
reported that they want to change their subject area of study.

2. Students have () frequently COMMENTS:
() occasionally
() not
reported that they want to continue on to a four-year college degree program rather than return to Nigeria after their two-year associate degree program.

3. Students have () frequently COMMENTS:
() occasionally
() not
reported that they want to change to another participating community college.

4. Students have frequently
 occasionally
 not
 reported that living arrangements
 and domestic needs are problems to
 them. COMMENTS:
5. Students have frequently
 occasionally
 not
 reported that American students and
 people in their community do not
 accept them, and are unfriendly. COMMENTS:
6. Students have frequently
 occasionally
 not
 reported that they have sometimes
 been discriminated against because
 they are foreign students. COMMENTS:
7. Students have frequently
 occasionally
 not
 reported that they have sometimes
 been discriminated against because
 they are African students. COMMENTS:

APPENDIX G:

Cover Letter to
Campus Coordinators, National Survey
Institutions.

University of Illinois at Urbana-Champaign

College of Education
 Department of Vocational
 and Technical Education
 OFFICE OF VOCATIONAL EDUCATION RESEARCH

346 Education Building
 Urbana, Illinois 61801
 (317) 233-0403

November 14, 1979

Campus Director
 U.S.A.I.D. Nigerian Manpower
 Project

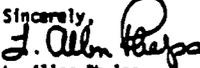
Dear Sir/Madam:

This letter will introduce in absentia, Mr. Charles Ejika Igboegwu, a Nigerian graduate student who is currently completing his doctoral research at the University of Illinois under my direction. This dissertation which Charles has undertaken focuses upon "The Impact of the U.S.A.I.D. Nigeria: Manpower Project on Nigerian Students in Selected U.S. Junior and Community Colleges". This study will contribute significant new insights into a new and developing international program. We are enthusiastic about the study and anticipate learning a great deal about international technical education training programs.

One aspect of the study involves nation-wide survey of students in selected Junior and Community Colleges participating in the Project. Your College was picked in a random selection of colleges that fit the criteria that have been established for the study. So, kindly administer the enclosed questionnaires to the Nigerian students who have been enrolled in the two-year associate degree programs in your college, and who have completed or almost completed one academic year in the program. If you have more of such students than the number of instruments enclosed, please select the respondents by random sampling.

It will be highly appreciated if you will ensure that the selected students promptly respond to the instruments and return them to you. It would be appreciated if you would return them in a bulk. It is very important that all the completed instruments are returned to Charles by December 15, 1979. A postage-paid return envelope for the completed questionnaire is enclosed for your convenience.

Please be assured that the results of the study will be shared with you and selected faculty - if you so desire. Your cooperation in this will be greatly appreciated. If you have any additional questions or concerns, please do not hesitate to contact me.

Sincerely,

 L. Allen Phelps
 Assistant Professor

LAP:kb
 Enclosures

APPENDIX H:

National Survey Non-respondents
Follow-up Memo

University of Illinois at Urbana-Champaign

College of Education
Department of Vocational
and Technical Education
OFFICE OF VOCATIONAL EDUCATION RESEARCH

348 Education Building
Urbana, Illinois 61801
(312) 233-6000

January 1, 1980

Campus Director,
U.S.A.I.D. Nigerian Manpower
Project.

RE: U.S.A.I.D. Nigerian Manpower Project Student Survey

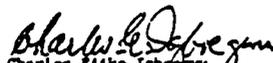
This memo comes as a follow-up of the survey instruments sent to you mid November 1979, with a request to have you distribute the instruments to participating Nigerian students in your College.

I have been anxiously expecting all the completed student questionnaires from your College. If the completed instruments are already in the mail, please disregard this memo and thank you for your co-operation. Otherwise, please see that all completed questionnaires are returned to me before the 18th of January, 1980.

If there are no Nigerian students in the Program in your College, kindly indicate so and return unused instruments to me.

Thank you again for your cooperation.

Sincerely,


Charles Ejike Igboegwu,
Nigerian Doctoral Student

APPENDIX I:

Informal Remarks from National
Survey Respondents

A total of 206 reflective informal remarks were received from National Survey respondents in 26 out of the 35 institutions that returned 297 questionnaires. Each informal remark (reproduced word-for-word) in this Appendix is reflective of the remarks from one institution. In most cases, each of these remarks is also reflective of several other remarks from several other institutions.

- (1) "I think it will not be good enough to go back to Nigeria without any practical experience. Because the purpose of this program is to have skilled people, i.e. people who are good both practically and theoretically to work in the manufacturing industries in Nigeria. If we should go back immediately after the completion of the course without any working experience, I don't think Nigeria will be profitable in this program as it has been expected.
- For this, I advise if arrangement could be made to have at least 6 months practical experience."

- (2) "I would like to mention that industrial experience is a necessity if the objective of the program is to be accomplished. Besides, there is no difference between a diploma certificate (ordinary) holder in Nigeria and an Associate degree holder in U.S.A., say in Mechanical engineering, because basically the course compendium is the same".

- (3) "The two years recommended for this program is too short and inappropriate. One cannot achieve that much and so many things that are very important and essential for the accomplishment of things are left undone which can drastically reduce the yields of this program.

Most students are sent to what I consider wrong place and no chance of making one's choice as to where to go on transfer. Thanks".

- (4) "One of the major problems I'm going to provide here is financial problems, which I'm quite sure those who sent us down here know exactly what is going on here regarding inflation and high cost of living, despite all the knowledge about these problems, they still believe we can really survive on 35? dollars a month. Almost half of the money goes for accomodation, and another 10% goes for utilities, and the rest which is very inadequately shared between food and transporation".
- (5) "I strongly wanted to have some experience in my field before going back, as I would not like to return to Nigeria empty handed without knowing anything related to my field or major, thanks".
- (6) "In this program I would like the Federal Govern-ment to change the program into a 4 year program because Nigeria is going to be capitalist country sooner or later and I think people with Bachelor's degree will be regarded or even be among the middle class in Nigeria. Everybody knows Education is competitive in Nigeria. At least if one has B.S. in Nigeria they are regarded as something among the society. Associate Degree is just half bread or better than none".

I-(7) "I highly recommend the idea of the entire programme, but where I am opposing the programme is that I don't think that the AID adequately briefed Nigerian Government about the whole thing, concerning two years programme in American community/junior colleges. The idea, I am suspecting that our Government has is that the two years is adequate for the programme and once the students spend it, the students will be able to work adequately without problems. That might be true in some of the curriculums and untrue in others. The organizers and planners of this programme refused to visualize the American system of Education and that of Nigeria are not similar in any way.

An American student could graduate with AAS and secure a good job and still go to school in pursuit of his/her degree but in Nigeria there are no such opportunity. Like in my program, which is Medical Technology, two year programme is just an introduction in the field, after the two years, the student does not actually know the basic theory and principle involved since everything is in a hurry. Some of the students here take the same curriculum for three to four years for getting the Associate degree.

What I am actually saying here is, that getting AAS and going to Nigeria with it is like having half an education in the field of Medical Technology.

In Nigeria, not only the fact that one travels to the U.S. to study, but when one goes back home much will be expected from him.

Why is it that a chance shouldn't be given to the students who can actually get their B.Sc. or B.A. under the same specified period with the same amount of dollar. I think this would be potential profit to the Government of the students.

Most of the students particularly those in Medical Technology, Electronics, Computer Science, Agriculture and other fields of high technologies which are actually lacking in Nigeria, would appreciate it very much if the Nigeria Government will consider extending the training up to B.Sc. level. Some of us have only about 30 credit hours remaining for the B.Sc., we think that it is going to be a waste going home and back again in order to qualify.

Nigeria needs teachers, personally I am willing to teach any where in Nigeria after graduation. There are so many innovations in the field of medical Technology which we are suppose to know, but we can not be taught this unless we are up to the B.Sc. level. These innovation I'm willing to teach to thers back home.

In summary, the programme is very encouraging at least, it has given so manu unqualified candidates for Nigeria University to study in the U.S., I have helped Nigeria to produce so many half educated candidates in the name of AAS.

It will be very beneficial to the Nigeria Government, society, community and the students if the Government will look into some of the curriculum and give it good thought of extending them to 4 year college degree".

I-8 "I strongly recommend that students be sent to colleges where there are adequate learning facilities. There have been many students who have studied or are still studying in colleges where learning facilities are grossly inadequate. These students will not get the best results out of this program.

I would also rather see the program as a four-year program rather than two".

I-9 "The area of studies proved to be more interesting as the study time progresses and shows that the two-year period will make students in this field 'half-baked'. It will be very important for the Government to consider students in this field for further studies either in the U.S.A. or at home (Nigeria)".

I-10 "Anybody could strongly agree that three quarters of the participants in this programme are from secondary grammar schools who had spent most of their time in study of theoretical principles and applications of the technical subjects. One should at this time realize that a life span of two years technical programme would not make much difference, let alone making them skilled or competent in their areas of specialization. I wished and wished again that this programme allowed most people to spend five years here, I mean four years academic background and one year work experience in their field. Although it will take quite a bit of time and money but I looked at it as the most efficient way Nigeria could acquire the zenith technical knowhow she needed".

I-11 "As much as I would love to have good technical skills in 2 years than to go to college for 4 years without good skills it would not be applicable in Nigeria. When we do get back home after two years we would not be given credit for our good technical skills instead hospitals would be more interested in the kind of degree we have.

That is why I do not feel satisfied that I am accomplishing something in this program. I would feel more satisfied if I could finish up in a 4 year college and become a Medical Laboratory Technologist".

I-12 "Thank you for your concern, and see to these:

- (1) How long will it take Nigeria to accept technicians - financially and technically?
- (2) What future or advancements are there which leave the technician just as valuable as a four year or more degree holder?".

I-13 "I would like the Nigerian government to give a greater percentage in the field of agriculture than any other field in this program. Secondly, they should not restrict returning students to come back again to complete their studies. Almost every student in this program is ambitious to go back to work for the government, but we are at the same time very anxious to come back to have the minimum BSC for our future living.

In addition, our government should not let anyone in this program sit down in the office. Everyone should be at the field.

The government should see that students are sent to colleges where work experience is compulsory".

I-14 "Dear Comrade,

Thanks a lot for this useful questionnaire you provided. This is a token that will make the Nigerian Government know the minds of their sons and daughters they sent over here to suffer. In view of the past and present situations I have and others too have encountered ever since we came here, things generally are not promising a better future and career in all circumstances. Out of the two years I'm scheduled to spend in this country. I have spent already a year, which I can not boast of anything I have achieved so far. All have been something of a chequered career. Out of all the courses I have done so far, though I may be making A's and B's but not withstanding all have gone without an importance reference of beneficiary to the Nigerian Government. What's the hope of an electrician, if the remaining 2 months you still don't know yet, a positive wire or a negative partner, or an architect which cannot even identify a house member. Nigeria should be aware, business is business. A.I.D. needs some aid, enough of wasting money in things that will not yield dividends. U.S.A. is no good for this program".

I-15 "From my observation, students who completed the two-year program and have not got the opportunity to put what they have learned in practice before going back to Nigeria are unfortunate. The most important thing is to have the practical experience, otherwise the purpose of the program is defeated.

Practical work should be encouraged at least for 3 months and it should be pertaining to the field of studies. The authority handling this program don't seem to care much about that and Nigerian will be wasting her resources if the set goal is not achieved. For example, I have known some students who came to sudty Food Tech. but at the end, I find most of them working at Jack in the Box and Kentucky Fried Chicken serving customers. I don't think that is right. I interviewed them and they told me that they couldn't find a suitable job anywhere and A.I.D. promised to help but nothing has been done. So these students were working only for the dollar and not for any practical experience. Most of these courses, no matter what fields are offered in Nigerian Polytechnics, and if a student in this program should finish the course and be allowed to go back without any practical work experience, then we better stop sending students and use the money to build more Polytechnics. I am however, not against how the officials here are handling the program, but certain shortcomings which are clearly stated in the contract and which should be given special attention should not be overlooked.

Please note that I have 7 years work experience before coming to U.S. for studies".

I-16 "My only comment is that though the Federal Government has done something better in the right direction, they have the right to know all the schools in which Nigerian students are sent to. This is because some junior colleges here are worse than some of our secondary schools academically, technically and otherwise. There are growing

reports of this, as a result some students resort to changing schools ever now and then. Nigerian Government deserves the right to obtain equivalent value of education on the amount they spent: AID alone simply do the postings through some camouflage catalogues they have.

Also I think the Government should limit the number of students and provide enough funds for those who are here already. There are instances which allowance paid will not cater for both rent and food for a month not to talk of buying clothes. Situations like this always force some students to look for a job which is illegal. The ultimate result of which may be contravening the immigration law. The set allowance for the AID program is at least \$500 per month but Nigerian government keeps ties with its traditional \$352.00 per month for years, without taking the rate of inflation into consideration".

I-17 "In as much as the Nigerian government would like every person to be a technician, the problem lies in the fact that half education is bad. Some people are trying to make Nigeria what it should be. I will be grateful if the Nigerian government will consider people's ability and decide to increase people's stay here for more than two years, not on the grounds of getting university degree but a 4 year college degree in the same field. To make him be a full technologist, able to think and work at the same time.

The government should consider those who have or are completing their two year degree and assess their ability to make sure that the people who can continue in the four year college does. It would be at the best interest of Nigeria to have technologists, incorporated with technicians, and not only technicians because the problem comes 'Who will lead the way'".

I-18 "Thank you for this kind of gesture. I have long been looking forward to this kind of questionnaire. I must confess that my life style and study ability have changed. I have never put so many long hours in the classroom in my life as I have done now. The only problem is that my school is situated in a very small community. There are no industries or where one can easily put the training in practical way. One of my objectives of being a mechanic is to work with my hands, tools and equipment, especially now that I am in the U.S.A. So, I would like to say also that the two year program is too short to grasp experience. That no matter how clever one is, the two years will not be enough to achieve the aim of the program. The four year college will be better for any technicians, for so many reasons. One, we should know, that we have few University at home offering technical subjects. Now, I am taking Automative Mechanic Technology, this will earn me AAS, a degree equivalent to Nigerian Ordinary National Diploma (OND). This is offered only in Polytechnics. There is no need of having two OND certificates! There is no University of higher colleges in Nigeria which has mechanic technology. The only place and chance for any aspirant in U.S.A. now is, to read right here,

U.S.A. to have the higher certificate in mechanic. America has the tools and equipment to work and learn with. If I am asked to leave now, the only achievement is the AAS certificate and small experience. I want to pursue the mechanic trade to the point of going home to teach other fellow mechanic trainees. And I would suggest that AID should not rush us home without on the job training. We are here to learn with our heads and hands, not only to sit in the class room reading big books. I feel my government will be satisfied if we can come home with wealth of experience in the hands and head rather than saying that the book says we do it this way or that way. It's strongly agree and believe that with your suggestion and opinion to AID the length of months in the field could be increased. Please allow those students who would like to read further on Mechanic in 4 year college to continue. I would like to continue. The government will save more on me if I continue the 4 year college now after the two year program instead of asking me to come back later".

I-19 "To my experience to the schedule of this two year program, we are rushing over subjects to make up time without gaining much. If not the expense, I would have advised my government to play cool, to let us get the stuff required of us then come home unskilled. Like in Auto Mechanic class, we spend all day in shop fingering on dead engines, transmissions and discussing the auto history. Though we run scopes on students cars, I think it would be beneficial if we would be allowed to have at least six months industrial training

where we could try and be sure of our skills before going back. A mechanic working on dead engines everyday will not be sure of his skill until he puts one on the road. Like Automatic transmission which about 85% of us have not worked on before, needs several practices. It is claimed in the project that we have done and known it but WE DID NOT UNDERSTAND IT. Inspection and coupling of dead automatic transmissions does not make skill. If the program will be extended to four years I think it will be better. I am not after the degree certificate but the more practical know how. I would be glad to go back tonight if the program wanted me to or after my career, but I would be sorry for my government if it did not meet their goal. I know how much it cost herefor my career, and would not want to disappoint her".

I-20 "I would like to suggest that Nigeria should not bend on sending us home immediately after the two years without acquiring any experience. If the Nigerian government wants a satisfactory achievement on this program, it should allow us to have enough work experience before returning home.

Also I would like to suggest that Nigeria should allow us, the Automobile Mechanics, to have a four year college degree in Automobile Technology because Automobile Technology is not offered in any of the Nigerian Universities. Having a four year college degree does not make one to be unskilled, rather it broadens ones technical know how. With the four year college degree I believe that I can still work with my hands".

I-21 "I thought I am going to learn something more advanced in auto mechanics. But as far as I am concerned, I am only repeating what I have known 9 years ago and what I have taught people few years back as an instructor and trouble shooter.

So next time I want to go more deeper in automobile field and not just BASIC KNOWLEDGE. Thank you."

I-22 "It is inadequate to have semi-education. That is the two-year program is rather too short: that the expected skill which the Federal Government wants us to have will be hardly achieved, due to the short time.

I will advise the F.G.N. to please try and extend the Vocational Program to a four year college which I think would be at an advantage for both the Government and the citizens of Nigeria.

What Nigeria needs now is Vocational. And it will be strongly equivocal if the students expected to teach or work in the firm are incompetent enough to handle the professions".

I-23 "I really appreciate the efforts of the Government in sponsoring in this program.

With the two-year program course in the field of Auto-Mechanic, it is TOO SHORT for me to gain the level of skills and technical education in which would be of advantage to me and to WORK and TEACH my other fellow Nigerians. I shall be very grateful if this program could be extended to a four year vocation college in which could give students a FULL VOCATIONAL EDUCATION".

I-24 "I think, the fact that the Nigerian Government urgently needs mid-level technical manpower necessitated the forced return on completion of two years vocational training.

Otherwise it wouldn't have been sensible to institute such an order which has so strangled the aspirations of ambitious young men starving for knowledge and improvement.

I would personally have stayed back to continue on my own".

I-25 "As far as I am concerned, nobody would like to stay and keep him/her self under a low standard degree, while his/her mates are on or pursuing higher degrees. To me, that is why most students in the two-year program like transferring into a 4-year program. Therefore, I will strongly appreciate it if the Nigerian Govt. could allow us to continue our education after obtaining our Associate degrees. Nowadays, everyone is trying to reach to top; nobody wants to remain at a limited standard. After all, we all trying to develop Nigeria to the best of our ability. Men! For a work to be well done, skilled people with higher degrees are needed. Thanks".

I-26 "Dear Researcher,

I am glad to check the questionnaire you sent out.

Among the comments I would like to add is for another or closer/detailed evaluation of this program "The Manpower Project".

Another is that, the program is an investment for the country in terms of human resources in education which is the key to the country's development in all fields.

As such, students should be sent to the right school to avoid repetition - which is a waste of time to the student, a waste of time and money to the whole nation. If students are sent to the right school the country will benefit more, and the student will face more challenging work.

There should be a way to check as to whether the schools to which the students are sent have the courses they are there for, and they do receive appropriate training.

Thank you.

Yours sincerely."

APPENDIX J:

**Selected USAID Rules and Regulations
for the NMF Students**

NIGERIAN MANPOWER TRAINING PROJECT
DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

Conditions of Training

I. Name of Participant (Mr., Mrs., Miss) (Last, First, Middle) 2. I.D. Number

I agree that if I am accepted to receive technical training under the Federal Military Government of Nigeria's program for technical manpower training, I will adhere to the program arranged as requested by my government, devote my time and attention to my studies and/or practical training, and conform to all regulations and procedures for the duration of the training program. I agree that I will not seek extension of the period of my program, but will return to my country without delay upon completion of my training and will endeavor to utilize the training acquired under the program for the benefit of my country.

Furthermore, I thoroughly understand the following policies of the Federal Military Government of Nigeria:

- I. Dependents - Dependent relatives are discouraged from accompanying or joining a participant while he is in training to avoid hampering or deterring accomplishment of training objectives. Possible increased problems of adjustment and added burdens will thus be avoided.
- II. Termination of Training Program Before Normal Duration - The right is reserved to terminate the training program of those participants who:
- A. Fail in their academic or other studies.
 - B. Fail to carry classroom work that the training institute feels is commensurate with their ability.
 - C. Fail to show sufficient interest in or to pursue effectively the practical training phases of their programs.
 - D. Have severe health problems.
 - E. Conduct themselves in a manner prejudicial to the program or to the law of the country of training.
 - F. Marry during the training without securing prior A.I.D. approval.

It is further understood that return visits to Nigeria will not be permitted during the training period.

Signed:

(SIGNATURE OF PARTICIPANT)

(SIGNATURE OF AID OFFICIAL)

Date _____

(TITLE)

AUTOMOBILE OWNERSHIP FORM

Upon purchase of an automobile the participant is required to complete this form and send it to: Agency for International Development, Nigeria Task Force, Washington, D.C. 20523 within 30 days of the purchase date. Failure to comply with this request will be reason for withdrawal from the program and return to Nigeria.

Type of Auto: _____

Date of Purchase: _____

Purchase Price: _____

Insurance Carrier: _____

Policy Number: _____

License Number: _____

Tag Number: _____

Registration Number: _____

SIGNED:

Student's Name

I.D. Number

Date

NIGERIAN MANPOWER PROJECT

OPERATION OF AUTOMOBILES OR OTHER MOTOR VEHICLES

- I, _____ understand that:
- A. Ownership and operation of a motor vehicle imposes legal responsibilities. Maintenance and upkeep are costly and often interfere with or disrupts the achievement of a training program. Therefore, A.I.D. does not encourage operation of automobiles or other motor vehicles by participants in the Nigerian Middle-Level Technical Training Program.
 - B. In exceptional circumstances when driving is essential to the success of a particular program of study, and I operate a motor vehicle, I am personally responsible for:
 1. Determining and complying with all state and local law, ordinances and requirements; and, where applicable, restrictions and requirements of the training facility.
 2. Obtaining all necessary personal, liability, and accident insurance coverage and licenses to meet state and local requirements for the operation of motor vehicles.
 3. All financial expenses involved in ownership or rental, as well as the operating expenses of a motor vehicle.
 - C. It will be to my advantage to obtain the maximum personal liability insurance coverage available to cover claims against me should I ever be involved in an automobile accident.
- II. I also understand and will be guided by the following conditions:
- A. A.I.D. assumes no responsibility for expenses involved in a participant owning or operating a motor vehicle or for expenses involving litigation related to or resulting from participant ownership or operation of a motor vehicle.
 - B. Where the operation of a motor vehicle has an adverse affect which may be cause for termination of a participant's training program, the case is referred to the Advisory Panel, for consideration.
 - C. The United States Government cannot provide any assistance or protection to a participant accused of violating city, county or state laws regarding motor vehicle acquisition, operation and disposition. This applies to arrest and detention, as well as registration, tags, fines, taxes, legal fees, and lawsuits.
 - D. If I purchase an automobile, I will complete information on the attached form and will send it to the Agency for International Development (Nigerian Manpower Project) Washington, D.C. 20522, within 30 days of the purchase date. Failure to provide this information is cause for withdrawal from the program and return to Nigeria.

SIGNATURE'S Name and Signature

Identification Number

Date

STATEMENT OF INTENT TO PURCHASE AN AUTOMOBILE

Date: _____

I, _____ am currently enrolled at
(Name & ID Number)_____
(School Name & Location)

In that my residence is situated some distance from the campus and not convenient to either public transportation or available school transportation, it is necessary to acquire an automobile for my participation in all schedule classes.

I have (a) a bona fide operator's license issued by the state of _____, (b) will purchase the necessary insurance coverage required by the state and, if applicable, also by the school, and (c) have the financial ability to purchase and maintain the vehicle in safe operating condition.

Signature: _____

I have reviewed the purchase of a motor vehicle with this student and am satisfied that all of the requirements of Chapter III, Section 6 of the Student Handbook have been met.

Signature: _____

Date: _____ School: _____

APPENDIX K:

NMP Students' Petition to the USAID*

* reproduced with the permission of the students (unidentified)

Mr. Strahl
 US State Dept AID/OIT
 Washington, D.C. 20523

We, the Nigerian Students of _____ Community College wish to inform you of some of the problems confronting us in this College.

Although, the Nigerian Manpower Programs might be a success in other parts of the United States, but to us it's a total waste; for the following reasons:

We are never oppurtuned to have the job experience since our arrival a year ago. We asked for this opportunity last Spring but to no avail; so also was last Summer. In fact, we do not believe that this is what we should be asking for since it's meant to be foremost in our program.

We suppose to go for the job experience this Fall. However, other students in our class have gone for the job except the Nigerian students. This will be the third time we have been deprived of this opportunity.

Instead of finding us a job, they keep on telling us that we do not have the experience. Then here comes the questions; what is experience, how do we acquire it and when? We believe that we can never have the job experience except by doing it; we can only learn by learning.

It will not be of our interest to leave this country until our mission here is completed, at least to have the basic experience of Mechanized farming.

If to achieve this we have to leave for another College, we are ready. We sign a contract with out government for a minimum of 24 months or at most 30. We've spent only 12 months. Therefore it is never too late to work out something for us.

We are concerned and wish something done today!

fourteen students signed
 this petition.

The Nigerian Manpower Project
 Office of Reimbursable Dev. Programs
 Agency for International Development
 Washington D.C. 20523

Attention: Mr. Carol Strahl
 Dr. Sam Black
 Ms. Ethel Brooks

APPLICATION FOR TRANSFER

After spending a year of frustration, stress, a year of isolation, I come with conclusion of not staying anymore in _____. I am suggesting for my interest and yours to transfer me or send me back to Nigeria. I come out with the following reasons:

1. There is too much of social Discrimination which I have not been exposed to before.
2. The town people have created some name after isolating us from the society. Homosexual as example.
3. The practical aspect of my course has been demanded by my country is not much as expected.
4. Most Nigerians including myself don't get their right grade in their courses due to comparison of American students.

In conjunction with the above four reasons my grade started decreasing, getting sick most of the time. If ill, now is the right time to get away from here.

If your AID authorities are not willing to grant my transfer, I would be grateful to go back to Nigeria. I'm therefore anxiously awaiting which ever decision you might come up with. In real sense I can not stay in _____ as from winter quarter.

Yours Sincerely,

VITA

Charles Ejike Igboegwu was born in Lagos, Nigeria, October 19, 1947. He received his first College education at the University of Nigeria, Nsukka (1970-1973) where he obtained his National Certificate of Education (NCE) in Industrial-Technical Education.

In the spring of 1974 he enrolled at Eastern Illinois University, Charleston, Illinois, where he completed his BS with two majors: Technology Education and Industrial Technology in the spring of 1975 and summer of 1976 respectively. He also completed his MS in Technology Education at Eastern in the spring of 1976. During his graduate studies at Eastern Illinois University he worked as a graduate assistant-assisting and substituting for the Electronics and Graphic Arts instructors.

In the Fall of 1976 he enrolled in the Department of Vocational and Technical Education at the University of Illinois at Urbana-Champaign for a Ph.D. program with emphasis in Industrial Technology Education. During his doctoral program he worked as a teaching assistant in graduate and undergraduate courses for two years. He also was a research assistant to Dr. L. Allen Phelps (fall, 1979).

Currently (fall, 1980) he is an instructor in Drafting Technology and Basic Electricity/electronics at Hammond Area Technical-Vocational High School, Hammond, Indiana.