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THE ACADEMIC EXPERIENCE OF AFRICAN GRADUATE STUDENTS AT
MICHIGAN STATE UNIVERSITY

Michigan State University

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THE ACADEMIC EXPERIENCE OF
AFRICAN GRADUATE STUDENTS
AT MICHIGAN STATE UNIVERSITY

By

Hamdesa Tusso

A DISSERTATION

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ABSTRACT

THE ACADEMIC EXPERIENCE OF AFRICAN GRADUATE STUDENTS AT MICHIGAN STATE UNIVERSITY

By

Hamdesa Tusso

The purpose of this study was threefold: (1) to develop a profile of African graduate students at a large mid-western public university; (2) to examine their educational experiences while they were pursuing graduate studies at Michigan State University. Seven dimensions of their experience were selected for investigation: (a) the development of individualized academic programs; (b) the processes involved in acquiring knowledge (i.e., pedagogical modes); (c) evaluation; (d) research; (e) critical factors (i.e., access to relevant data/literature, family obligations, parity or disparity between previous and current education); (f) human interaction in academic-related matters; and (g) the anticipated usefulness of current education on re-entering one's own society; and (3) to determine the effect of two sets of variables, namely academic level (i.e., master's and doctoral) and area of specialization (i.e., social sciences, physical sciences, and life sciences) on the students' educational experiences as reflected in their responses to selected rank order questions.

Design

Two instruments were used to gather the data--a questionnaire to obtain biographical data, and a structured interview schedule for the main inquiry.

Approximately half of the 96 African graduate students at MSU participated in the study. Field work was done in the summer, fall, and winter of 1978.

The profile data and data obtained through the interviews (closed-ended questions) were card-punched; then the frequencies and percentages were computed. The quantitative data were analyzed by using a mean score and a two-way Analysis of Variance (ANOVA)--nested model. The data collected through open-ended interview questions were tallied manually and organized into major patterns of focal themes.

Findings

Since this was an in-depth study of the educational process of the participants, it is impossible to adequately describe the findings. Thus, only salient points will be mentioned.

The advisor and the graduate student played key roles in the development of the individualized academic programs. The advisor was the main source for providing information relative to the programs, and his/her suggestions, in combination with those of the student, were the basis for the final program plans. The majority of the students reported having participated adequately in this process.

The majority rated each of the pedagogical approaches they had had at MSU as "effective," which was a qualified level of rating.

In the area of academic evaluation, two formats emerged as major areas of concern--quizzes and objective questions. The concern expressed encompassed both encountered difficulties and philosophical persuasions.

Although the majority indicated that they were able to write term papers on issues related to Africa, lack of relevant data/literature, goal conflicts between given courses, and the Africans' interest and the professors' backgrounds did affect this aspect of their training.

The dynamics which interplay in the process of selecting and executing thesis/dissertation projects are complex because several actors are involved and their goals often conflict. However, the study shows that where imaginative initiatives and cooperation were employed, remarkable accommodations to the African students' interests occurred.

The quality of interaction between the Africans and advisors in academic-related matters was high, but it was more moderate with other professors. In general there was a relationship between the professors' international experience and the quality of the interaction with Africans. There were substantial differences in the participants' interactions with their fellow graduate students

(Americans, Internationals, and other Africans) in academic-related matters.

The knowledge gained from the four categories of courses was regarded as "generally useful" for future work, but that knowledge gained from the catetory where students were able to select the courses received more praise.

Dependent on level and curriculum, some differences in educational experience were evident.

DEDICATION

To my father, Tusó Ula, "Babba," and my mother, Sinbo Dule, "Dette," who were my first teachers. My father instilled in me the value of hard work and independent thinking. He took me by the hand and sent me to school when such a practice was not common in his community, and accommodated me as I progressed in my "new world," as he used to call it.

He sensed changes in the wind, some of which posed profound threats to the order of his "world," yet he encouraged us--his children--to explore these changes and to adapt to them, at a time when others were rebelling against them. My mother, in addition to doing all those boundless good things which all good mothers do for their children, provided moral support at critical stages when, later on, the road in her son's "new world" became a lot rougher further on. I owe to both of them a heartfelt debt of gratitude.

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The road that leads to the conclusion of a dissertation, and indeed, to the conclusion of graduate training itself, is narrow, often long, and at times tortuous. One cannot successfully come to the end of this road without owing a great deal to many individuals.

For a student from another land, and a nonsponsored one at that, whose parents and relatives cannot afford to support him financially, there are added layers of debts. While it is not convenient to register an expression of gratitude by name to all the persons who contributed to the completion of this dissertation and the program, a number deserve mention.

I owe special thanks to the members of my committee--Drs. Richard Featherstone, Walter Johnson, John Hanson, and John Useem.

Professor Featherstone, my academic advisor, provided much appreciated guidance through my doctoral program. His concerns for my success and general welfare went beyond his academic duties. He showed deep interest, sensitivity, and care, particularly after the news of the disappearance of my younger brother, Furi.

Professor Johnson showed interest in me from the day I met him at Andrews University, where he arranged to interview me for admission to the Ph.D. program at Michigan State while he was on the campus for lectures. Although he had a full load in terms of doctoral

advisees, he kindly assumed the task of guiding the dissertation when Professor Featherstone went on sabbatical, and remained the director of the study until its completion. He spent many hours with me, providing critiques and suggestions at different phases of the project. His exemplary life of total dedication to human service, both in his scholarly endeavors and his daily activities, has been a source of inspiration for me in my professional socialization.

Professor Hanson belongs to a special breed of Africanists, who rank very high in African scholarship, but whose views are also galvanized by the human conditions in Africa. He kindly helped me with literature, including some selections from his personal library on African education, particularly during my first year at MSU. His thorough critiques, and editing of the first draft of the dissertation were useful in strengthening the internal consistency of the document.

Professor John Useem of the Sociology Department, who introduced me to sociology and "coached" me into an appreciation of the use of sociological concepts in analyzing my social environment, both locally and interculturally, deserves special recognition. My interactions with him, both in taking his courses and on an individual level, added an important dimension to my graduate training and intellectual development. As an authority on cross-cultural education, he provided counsel and critiques which were extremely helpful, particularly at the developmental stage of this research.

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There were other individuals who made contributions toward my expenses during the first year who should be mentioned here. Mr. Don Sprung of Don Sprung Chevrolet Co., Berrien Springs, Michigan; Ms. Mary Magnusson of Sweden; Dr. Samuele Bacchiocchi of Andrews University; and Chaplain and Mrs. Glen Bowens of Berrien Springs, Michigan. The Bowen's financial support provided a mainstay for my educational expenses for another three years.

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CHAPTER I

INTRODUCTION TO THE PROBLEM

Throughout the centuries of human civilization, people have crossed the boundaries of their own community, nation, and culture in pursuit of knowledge.¹ History records this phenomenon in Ancient Greece as early as the Second Century.² The University of Taxila (or Takshasila) in India attracted students from Asia Minor and other areas as early as around 600 B.C.³ In ancient times, some institutions characteristic of cosmopolitan population existed in Persia, Arabia, Moslem, Spain, Africa, and China.⁴

After the fall of Greece, the Romans kept the educative process alive and managed to attract students from other countries to their centers of learning.⁵ Following the tragic medieval era when intellectual and esthetic ideals were scorned, the flow of international students was nearly halted, the Twelfth Century

¹Cora DuBois, Foreign Students and Higher Education in the United States (Washington, D.C.: 1956), p. 1.

²Edward C. Cieslak, The Foreign Student in American Colleges (Detroit: 1955), p. 1.

³William C. Brickman, "Historical Framework of International Student Interchange," Exchange (Winter 1968): 28.

⁴Ibid.

⁵Cieslak, op. cit., p. 2.

ushered in the rise of modern universities such as those at Salerno, Bologna, Paris, Montpellier and Oxford.⁶

International movements such as the Renaissance, Reformation, Counter-Reformation, and the Scientific Revolution contributed greatly to the prominence of European universities. With colonial expansion and the accompanying economic gains and prestige, Europe commanded the lead in attracting foreigners to its schools until World War I.

The United States "was considered culturally a debtor nation" before World War I.⁷ Before graduate schools were established in the United States, ambitious American scholars went to European universities, particularly Germany, to receive an education of high status.⁸ But students from other lands came to the United States even though Americans still traveled to Europe in search of better education.⁹ (As noted later on, there were foreign students in American schools even before the United States achieved independence.)

When the United States emerged as a political and economic power with the accompanying prestige in the Twentieth Century, European universities ceased to be sole centers of higher learning for

⁶Ibid., p. 3.

⁷Ibid., p. 6. See also Isaac L. Kandel, United States Activities in International Cultural Relations, American Council on Education Studies, Series I, No. 23, September 1945 (Washington, D.C.: American Council on Education, 1945), p. ii.

⁸See John S. Brubacher and Willis Rudy, Higher Education in Transition (New York: Harper and Row, 1976); Emma W. Schulken, "A History of Foreign Students in American Higher Education" (Ph.D. dissertation, Florida State University, 1968), pp. 1-25.

⁹Schulken, *ibid.*, p. 25.

international students. Furthermore, the Americans channeled considerable funds into scientific technology and applied research. Their ingenuity immensely improved the quality of the institutions and made possible the development of unparalleled technical research facilities, particularly for science. All of these factors contributed to making the United States an alternative center of attraction for numerous foreign students.¹⁰

However, activities of promoting and caring for the welfare of foreign students in the United States and American students studying abroad, as will be noted later in Chapter II, fell largely in the hands of private organizations until World War II.¹¹ With the European countries and Japan economically crippled by the devastating effects of the war, the United States was compelled to play a leadership role in international affairs, including the field of educational exchange.¹² Acceptance of this new leadership is evidenced by the role the United States played in establishing the United Nations and by the barrage of legislative actions aimed at enhancing and fostering the enterprise of international education and cultural

¹⁰Cieslak, op. cit., p. 9.

¹¹Emma W. Schulken presents an excellent exposition on the emergence of philanthropic organizations and their effects on the foreign student exchange movement in American higher education in Chapter III of her Ph.D. dissertation. See pages 83-123.

¹²DuBois, op. cit., pp. 3-10; Schulken, op. cit., pp. 149-52.

exchange through government-sponsored programs during the years immediately following the post-war period.¹³

These factors, namely, American economic boom and military superiority in the Western democratic society; dramatic advances in science and technology; unequalled opportunities provided for advanced studies and research in the schools; multiplicity of institutions of higher learning; and intensive involvement by the federal government in international education and cultural exchange have led to an unprecedented and significant rise in the flow of foreign students to American campuses since World War II.

The increase in international student enrollment in American colleges and universities is shown in Table 1.1. The figures are conservative because the Institute of International Education, which publishes Open Door, collects data only from institutions with high foreign student enrollment in this country. However, the data are useful for purposes of estimation.

The emergence of the United States as a powerful nation coincided with the decolonization and independence which swept the globe after World War II. The rise in the number of newly independent states is reflected in the following: On the eve of World War I, 63 countries had statehood status (on the eve of World War II,

¹³DuBois stated that from 1946 to 1953, Congress enacted 13 legislations for programs related to educational exchange activities, p. 20.

TABLE 1.1--Number of foreign students by major geographical origins

Year	Africa	Europe	Asia	Latin America	North America
1935*	83	1,332	2,842	659	1,260
1945*	88	1,806	2,227	3,340	2,160
1950*	945	5,863	8,662	5,402	5,738
1955**	1,231	5,502	15,864	8,474	5,042
1960**	1,959	6,362	24,285	9,428	5,761
1965**	6,855	10,108	40,617	13,657	9,338
1970**	7,607	18,524	54,311	24,991	13,415
1974**	12,937	15,539	75,453	30,276	
1975**	18,400	13,740	82,370	26,270	8,630
1976**	25,290	14,400	97,130	29,820	9,720
1977**	25,860	16,700	108,510	37,240	11,420

SOURCE: The data for the years marked with * obtained from Unofficial Ambassadors, 1953. The data for the years marked with ** obtained from Open Door issues of the respective years.

71 countries had statehood status; and, in 1964, the number of independent states with sovereignty had grown to 122).¹⁴

Since a majority of the societies of Africa, Asia, and Latin America had been tied to their respective mother country on superordinate and subordinate bases, regrouping and rallying among world nations are inevitable in the aftermath of decolonization. Student exchange operations were part of this readjustment to meet demands under new circumstances. As Table 1.1 indicates, the dramatic growth in the flow of foreign students to the States is from three developing regions: Africa, 25 percent; Asia, 50 percent; and Latin America, 25 percent.¹⁵ Note the dramatic increase of students from Africa to the American colleges and universities throughout the centuries. It is also important to note that people of African descent have been in America since 1619 when the first ship carrying African slaves landed on this side of the Atlantic Ocean.¹⁶ But the pilgrimage to the United States for the pursuit of education by Africans commenced more than 200 years ago when America was still a British colony.¹⁷

¹⁴Status of the World's Nations, Geographic Bulletin No. 2, Bureau of Intelligence and Research, U.S. Department of State (Washington, D.C., 1964), p. 1.

¹⁵Open Door, 1968. Report on International Exchange (New York: Institute of International Education, 1968).

¹⁶Winthrop D. Jordan, The White Man's Burden: Historical Origins of Racism in the United States (New York: Oxford University Press, 1974), pp. 26-54.

¹⁷Horace Mann Bond, "The Negro Private and the Church-Related Colleges: Origin and Development," Journal of Negro Education, Yearbook XXIX 3 (Summer 1960): 221.

While few African students appeared in American schools before the Eighteenth Century, there was a dramatic increase of 176 percent from 1,027 students in 1950-1951¹⁸ to 2,831 in 1960-61.¹⁹ Since then, the number of African students in the United States has increased progressively each academic year.²⁰

Research on Foreign Students

A great deal of interest has been exhibited in international students studying in American academic institutions during the last three decades. Such interest has been demonstrated by the prolific literature that has been published regarding various aspects of foreign students.

Systematic research using social sciences, theories, and methods regarding foreign students in the United States commenced in the 1940s.²¹ To be sure, there were numerous administrative and historical studies of varied quality undertaken prior to the 1940s, but these severely lacked systematic attributes.²² Meaningful and

¹⁸Education for One World, I.I.E., 1951, p. 15.

¹⁹A section will be given to an historical analysis of the flow of African students to the United States in Chapter II of this study in the final production.

²⁰An analysis of the extent and pattern of increases in enrollment by African students in American colleges and universities will be presented in Chapter II.

²¹Barbara J. Walton, Foreign Student Exchange in Perspective: Research on Foreign Students in the United States, Department of State Publication (Washington, D.C., 1967), p. 1.

²²Ibid., p. 1.

scholastic studies on foreign students began when nongovernmental agencies such as UNESCO, Hazen Foundation, Rockefeller Foundation, Ford Foundation, and Carnegie Corporation offered financial sponsorship for scientific research in cross-cultural education.²³

Such elaborate financial support and growing interest in cross-cultural education by American scholars have increased writing on this subject, some impressionistic and others empirical, especially on students from other lands.

Overton, upon reviewing literature on international education exchange up to 1967, reported that there were some 200 items on foreign students alone.²⁴ A literature review by Cormack on educational exchange and foreign students and American students in the United States for the period 1948-1962 reported 48 items.²⁵ Cussler in a literature review on foreign students and American students living abroad between 1954-1962 found 77 items.²⁶ Walton's review focussed on literature about foreign students and analyzed 200 items written

²³Ibid., p. 2.

²⁴William Overton, "Can the Developing Nations Afford American Higher Education?" College and University (Summer 1967): 428.

²⁵Margaret L. Cormack, "An Evaluation of Research on Educational Exchange," prepared for the Bureau of Educational and Cultural Affairs, Department of State, August 1962. (Mimeographed.)

²⁶Margaret T. Cussler, Review of Selected Studies Affecting International Educational and Cultural Affairs (College Park, Md.: University of Maryland, 1962).

between 1946 and 1967.²⁷ The most extensive literature review to date in both its analysis and scope was conducted by Spaulding and his associates for works done in the field between 1967 and 1976. Their review covered 450 items on the subject.²⁸

There is some evidence that research on foreign students has recently been extended to include the academic dimensions of the foreign students' experience, but the areas which have consistently attracted researchers are the nonacademic ones, such as psychosocial adjustment, attitudinal change and foreign student relationships with host country students.

Although African students have attended American academic institutions for about two centuries, there is little extensive research regarding their experience while studying in the United States.²⁹ Most systematic and analytic research has focused on European and Asian students.³⁰

The first major study on African students in the United States appears to have been a survey conducted by the Phelps-Stokes Fund in

²⁷Walton, op. cit.

²⁸Seth Spaulding et al., The World's Students in the United States: A Review and Evaluation of Research on Foreign Students (New York: Praeger Publishers, 1976).

²⁹Walton, op cit., p. 41; Cormack, op. cit., p. 428; Overton, op. cit., p. 429; Saulding et al., op. cit., p. v.

³⁰Cussler, op cit., p. 29; Francis O. A. Okediji, "Strangers and Social Adjustment on College Campuses: A Study of African Students in Two Mid-Western Universities" (Ph.D. dissertation, Indiana University, 1964).

1949.³¹ The purpose of the survey was to identify pressing problems encountered by African students and recommend solutions for them. Five years later Ruth C. Sloan, a team member who participated in the Phelps-Stokes survey, published an article entitled, "African Students in the United States" to evaluate the extent to which those needs and problems had been met.³²

The next comprehensive survey on African students in American higher education was conducted by the Institute for International Education through the International Center of the University of Michigan. The principal findings of this survey were published in a mimeograph.³³ A detailed analysis of that survey was not available until Russell G. Hanson, a member of the team from the International Center, wrote his Ph.D. dissertation using the same data.³⁴

Since the mid-1960s, a few dissertations on African students in the United States have appeared. Typical of the vast literature in the field, most of these studies focus on nonacademic areas. Some touch on issues related to academic concerns while studying African

³¹Phelps-Stokes Fund, A Survey of African Students Studying in the United States (New York: Phelps-Stokes Fund, 1949).

³²Ruth C. Sloan, "African Students in the United States," I.I.E. News Bulletin 29 (March 1954): 38-40.

³³James M. Davis et al., I.E.E. Survey of the African Student: His Achievement and His Problems (New York: I.I.E., 1961). Joseph Veroff published an article entitled, "African Students in the United States," The Journal of Social Issues 15 (July 1963): 48-60.

³⁴Russell G. Hanson, "Factors Associated with Academic Achievement of African Students Enrolled in Higher Educational Institutions in the United States" (Ph.D. dissertation, The University of Michigan, 1972).

students or global students selected for an investigation. However, this too common approach of allocating energy and space to so many aspects of the foreign students' experience does not enable sufficient analysis of problems related to the academic realm.

Other researchers tend to compare academic achievement by foreign students with those by host country students. Most comparisons are based on how foreign students adjust to American academic programs. This approach inevitably, though implicitly, focuses on problems from the perspective of the host country or its institutions, rather than from that of the foreign students.

Lumping all foreign students into one study is another common mode of selecting the research population for international students. Available research suggests "that while certain difficulties are common to all foreign students, persons from substantially different backgrounds tend to have special types and intensities of academic problems."³⁵

When reviewing literature on African students in the United States, one must consider the governmental structures which have been in operation during specific historical periods. The African students who traveled to the United States to pursue their education during the years prior to the 1960s came from societies controlled by colonial powers.³⁶ Even during the period of colonial rule, there is

³⁵Spaulding et al., op. cit., p. 51.

³⁶The exceptions (in Black Africa) were Ethiopia, Liberia, and Ghana. Others, such as Nigeria, were promised independence by the late 1950s.

evidence that Africans who made pilgrimages to American schools envisioned strikingly different roles for themselves upon return to their respective societies, depending on the given period. For example, Ralston suggests that those Africans who come to the United States during the years prior to World War II anticipated returning to work under the colonial rule, while those who arrived after the above period saw their roles as those of nationalists who should prepare themselves to topple the colonial governments and occupy places of leadership in their respective societies.³⁷ On the other hand, those who came from contemporary African face different sets of circumstances in their respective countries. In most cases, the colonial rulers have been driven out by the students who returned in the 1950s and 1960s, and those who played major roles in the decolonization and consequently "enthroned themselves in the higher places of power,"³⁸ have subsequently either permanently entrenched themselves in the seats of authority as life-presidents, or have been dethroned by a

³⁷R. D. Ralston, "A Second Middle Passage: African Student Sojourns in the United States During the Colonial Period and Their Influence Upon the Character of African Leadership" (Ph.D. dissertation, University of California, Los Angeles, 1972), pp. 111-139.

³⁸See Amos O. Odenyo, "Africans and Afro-Americans on Campus: A Study of Some of the Relationships Between Two Minority Sub-Communities" (Ph.D. dissertation, University of Minnesota, 1970), p. 40.

different type of "corp"--mostly by those who were processed through military training, rather than through university education abroad.³⁹ Thus the African students who are currently coming to United States campuses for further training cannot realistically expect their future fortunes to encompass rising to the pinnacles of power in their respective countries upon returning to them, and it is reasonable to suggest that the members of this sociological generation envisage their lots in terms of professionalism and careerism in those fields stipulated by the occupants of the seats of power as "priorities for development" in their respective countries.⁴⁰ Therefore, this factor should suggest the need for more study on African students engaged in current academic enterprise.

Another factor of consideration is that studies are done on particular nationalities in certain institutions. The ecological variations among institutions militate against those findings having universal applicability to all schools. The thrust of this investigation, therefore, is to analyze the situation with respect to academic-related matters as experienced by a designated group from a specific geographical category--Sub-Sahara Africa, at a large Midwest university.

³⁹See W. F. Gutteridge, The Military in African Politics (London: Methuen and Co., Ltd., 1969), pp. 60-125; Ali A. Mazrui, Political Values and the Educated Class in Africa (Berkeley: University of California Press, 1978), pp. 15, 16, 197-201; and Dennis Austin, Politics in Africa (Hanover, N. H.: University Press of New England, 1978), pp. 9-23.

⁴⁰See A. O. Odenyo, *op cit.*, pp. 40-42.

Purpose of the Study

In the proposed study the academic experience of graduate students from Sub-Sahara Africa will be examined. There will be no attempt to investigate grades received by the subjects or how they fare with host students and other international students. Instead, an attempt will be made to analyze their experience in each component of their particular academic program before degrees are bestowed by the university as a recognition of a student's acquisition of skills and knowledge in his/her respective field of academic pursuit.

The subject's academic experience will be specifically explored in the following sub-areas with the aid of relevant research questions:

- I. The procedures followed in the development of academic requirements for each student.
 - A. Who plays what role in course selection and in planning supplementary curriculum?
 - B. What considerations are taken when courses are selected for the student's degree program?
 - C. What problems do the students encounter in their educational process?
 - D. What strategies do the subjects employ in approaching course work and supplementary curriculum and how do they surmount problems which arise in the process?

- E. How do African graduate students perceive their experience in planning and developing academic course work and supplementary curriculum?
- II. The process of acquiring knowledge in the classroom setting through varied methods of dissemination.⁴¹
 - A. Methods of Teaching
 - 1. Lecture and Seminar
 - 2. Film Presentation
 - 3. Class Report
 - 4. Others--Specify
 - a. How does the student rate each of these modes of disseminating knowledge?
 - b. Which factors contribute to their success in acquiring knowledge through each of these methods?
 - c. What problems does the student encounter in acquiring knowledge through each of these methods?
 - 5. Class participation
 - a. What is the level and frequency of his/her participation in class or discussion?

⁴¹Inquiry of the students' experience in acquiring knowledge will be limited to the classroom. However, this does not suggest that learning occurs only in the classroom setting or that it is the only useful learning gained by students. On the contrary, learning is an ongoing phenomenon, occurring in all places at all times. The decision to limit the inquiry to structured academic activities is primarily and solely to minimize complexities which could rise by expanding the scope of the study to nonformal education experiences.

- b. Which factors prevent the student's full participation in class discussion?
- c. Which factors facilitate his/her maximum participation?

III. Evaluation--quizzes, mid-term and term examinations, and other major examinations such as comprehensives or preliminary examinations.

A. The form of evaluation

- 1. What experience did the student have with these evaluation ingredients (negative/positive)?
- 2. Which factors contribute to either negative or positive experiences with these forms of evaluation?

B. The format of evaluation--subjective or objective tests (etc.)

- 1. Does the format matter in the student's achievement?
- 2. What factors contribute to the difference?
- 3. Did the students find their evaluation measures educationally beneficial apart from serving as academic initiation rituals?
- 4. Does the student's status (being an African and a foreigner) enter into evaluation?

IV. Writing term paper, major papers, master's degree projects, theses, and doctoral dissertations

- A. What experiences did the students have (negative, positive)?
 - B. Which factors are associated with negative or positive experience?
 - C. Does the student esteem the writing exercises educationally beneficial apart from serving as academic initiation rituals?
- V. Critical factors such as access to relevant literature and data; reading; time spent on academic study or other duties, work, etc.; other responsibilities--family and relative responsibilities at the university and back home; and the significance of the discrepancy between previous education and present academic programs.
- A. How do these factors affect the academic experience of an African graduate student while he/she is pursuing his/her studies?
 - B. Does the Michigan State University experience have an impact on the student serving to broaden his knowledge about his country, Africa, and the third world in general?
- VI. Human interaction in academic related matters. Interaction with (1) academic advisors; (2) academic professors; (3) host country students; (4) nonhost country students (non-African); and (5) African students.

- A. How often under those conditions does the student interact with each of these individuals regarding academic business?
 - B. What is the quality of interaction (positive or negative)?
 - C. Which factors affect the frequency and quality of interaction between the subject and those groups?
- VII. The usefulness of the education for future professional activities. How does the student rate the usefulness of the education being received for future professional categories and why? (1) Core Courses; (2) Cognate Courses; (3) Elective Courses; and (4) Research Courses.

In addition to the above-mentioned thrust and the outlined dimensions within that thrust, the inquiry will include two other aspects on which lesser space and energy will be expended, but it is hoped that these two aspects will contribute toward the fuller illumination of the topic being studied. These aspects are: (1) the profile of African graduate students at a big mid-western public university, and (2) the effect of two variables, namely, academic level (i.e., master's and doctoral) and curriculum (i.e., social sciences, physical sciences and life sciences) on the educational experience of the sample population as reflected in the responses to the 19 rank-order questions.⁴²

⁴²More will be said regarding these questions later in Chapter IV.

The Significance of the Study

The significance of this research can be assessed from several perspectives.

The 1960s were characterized as an era of outstanding growth and massive expansion in American higher education. During that time, out of over 11.5 million college students in America, more than 4.5 million were enrolled in institutions of higher learning. Approximately seven million of the less than 14 million college-age population would be attending institutions of higher education.⁴³ Enrollment was particularly staggering in public colleges and universities. About 60 percent of all American college-age students attended public institutions; in 1970 an estimated 70 million students attended institutions of higher learning.⁴⁴

The predictions made in the early 1960s proved accurate with respect to enrollment in higher education. In fact, enrollment surpassed the estimated range. From 1960 to 1970 enrollment in higher education increased 212 percent in public institutions and 38 percent in private institutions.⁴⁵ The baby boom of the 1940s, the economic reward attached to college graduates over high school graduates in employment, and the increased opportunity of access to higher

⁴³Herman B. Wells, In a Decade of Decision, p. 31.

⁴⁴Sidney G. Tickton, Needed: A Ten-Year College Budget (New York: The Fund for the Advancement of Education, 1961), p. 6.

⁴⁵Ronald B. Thompson, Projection of Enrollments in Public and Private Colleges and Universities (Washington, D.C.: American Association of Collegiate Registrars and Admission Officers, 1971), ED 052738.

education to those from lower socio-economic segments of the population were among the major factors for the enrollment growth.⁴⁶

The jump in college enrollment in America during the 1960s coincided with the significant increase in international student flow to American campuses during the same period. This dramatic increase in student population on campuses aroused certain concerns regarding possible repercussions in areas such as limited laboratory space, restricted housing, insufficient financial aid, and overcrowded classrooms. Some educators feared that continued enrollment growth of American students and the accompanying problems would create significant pressure to reduce the number of incoming students from foreign lands.⁴⁷

Today the higher education industry in America is in a diametrically opposite position than it held from 1960 to 1970. Not since World War II has enrollment declined at such unprecedented rates in both public and private institutions of higher learning. In light of such declining enrollments, many existing programs may be eliminated, particularly as interest in them and funds dwindle.

Thus it is logical to assume that American colleges and universities will welcome the continued flow of international students in pursuit of further training to fill their classrooms. As a matter of fact, the issue, the need to increase the enrollment of foreign

⁴⁶Joseph Froomkin, Aspirations, Enrollments, and Resources in Higher Education in the Seventies (Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, 1970).

⁴⁷Wells, op. cit., p. 24.

students in American institutions of higher learning for survival, particularly in private schools, has already reached such a critical stage that it has recently caught the attention of national news media. The internationally-read magazine, Time,⁴⁸ published an extensive article entitled, "Private Colleges Cry 'Help,'" graphically describing the plight of private colleges due to declining enrollment and rapidly-rising inflation. The article described, among other things, how they are wooing foreign students to their campuses. Two weeks later Time⁴⁹ published another article entitled, "Foreign Flood" in its education section, describing the enrollment of foreign students on American campuses and how, although this is welcomed in general, it is creating tensions on some campuses, stemming from cultural value clashes even in academic interrelations between the foreigners and the host country students.

The ABC⁵⁰ Television Network, in the special report segment of its evening news, presented three consecutive reports on foreign students and how some private institutions have been fervently engaged in recruiting foreign students even when this meant violating immigration laws.

⁴⁸"Private Colleges Cry 'Help,'" Time, 15 January 1979, pp. 38-40.

⁴⁹"Foreign Flood: Those Many Alien Students," Time, 29 January 1979, p. 63.

⁵⁰"Foreign Students in American Institutions," narrated by Bill Stewart, ABC Evening News, Special Report, 19-21 February 1979.

Another factor compounds the flow of international students, particularly from the developing nations to the industrialized nations like the United States.⁵¹ The developing nations, like those on the continent of Africa, suddenly found themselves in a marginal position during the post-colonial era with respect to economic development and international relationships. Advancements in science and technology which do not lie in the cultural tradition and civilization of developing societies have tremendously revolutionized industry and produced severe consequences in relationships among global societies. This phenomenon resulted in the "developed" and "developing" nation's syndrome of international economic stratification, the former controlling the global political economy.⁵²

The most critical issue confronting developing countries during the post-colonial era, especially Black African countries, is how to meaningfully and equitably participate in the global economy in this increasingly interdependent human society.⁵³ The option of

⁵¹Richard E. Peterson, American College and University Enrollment Trends in 1971 (Berkeley: The Carnegie Commission on Higher Education, 1972).

⁵²See Irving L. Horowitz, Three Worlds of Development: The Theory and Practice of International Stratification (New York: Oxford University Press, 1966).

⁵³Since the Ethiopian empire-state has not been under European colonial powers, except for the brief period of 1936-41 when it fell to Italy, some explanation is required as to how the political economy of Ethiopia fits into the pattern of dependence and interdependence between the Third World and developed nations which evolved during the colonial and post-colonial eras. Three historical facts should serve to elucidate this:

First, contrary to the commonly projected myths by Abyssinian rulers that Ethiopia had enjoyed 2,000 years of uninterrupted

severing ties with the industrialized nations was rejected for fear, quite justifiably, that their position in the international arena might be further jeopardized.⁵⁴

Scientific and social knowledge, technological know-how and managerial skills must be transferred from developed to developing countries to achieve global harmony. Education is the main avenue selected to accomplish this purpose.⁵⁵ It is this premise which has staged the dramatic increase of African students in American academic institutions since post-colonial years.

Presumably, after their training these individual will return "as leaders of innovation" to their countries and bridge the gap

independence, the actual creation of the empire-state is as recent as nineteenth and twentieth centuries.

Second, the successful creation of the Ethiopian empire-state was indeed due to the fact of European colonial penetration into Africa, and to the process in which the Amhara rulers collaborated with the then major European colonial powers in the partition of the Horn of Africa and the adjacent territorial. In return, the rulers received substantial supplies of firearms with which to conquer and colonize the peoples in the southern ten provinces and increase the empire to its present empire.

Third, the Ethiopian empire-state does not owe its creation only to the European colonial activities in Africa, but indeed it remained a colonial outpost, economically dependent on European economic and geo-political schemes up until World War II, and later fell into the domain of superpower rivalry. For more details on these points, see the following sources: Getahun Dilebo, "Emperor Menelik's Ethiopia 1865-1916: National Unification or Amhara Communal Domination" (Ph.D. dissertation, Howard University, 1974); Addis Hiwet, Ethiopia: From Autocracy to Revolution (London: Review of African Political Economy Etonomy, 1975); and Bereket H. Selassie, Conflict and Intervention in the Horn of Africa (New York: Monthly Review Press, 1980).

⁵⁴Ali A. Mazrui, "The African University as a Multinational Corporation and Dependency," Harvard Educational Review 45 (May 1975): 191-210.

⁵⁵Festus C. Okafor, Africa at the Crossroads: Philosophical Approach to Education (New York: Vantage Press, 1974).

between the values of these two disparate categories of human societies.⁵⁶

In addition, there is an overwhelming need to seek more interdependence and cooperation among the global communities, especially as social forces demand fresh approaches and reassessment of old assumptions and solutions. Dwindling supplies of natural resources provide further stimulus to this effort.

In spite of the apparent friction and rift between the West and the developing countries because of inherited economic inequalities from the colonial and the neocolonial eras, and, in some instances, the growing ideological differences and diplomatic strains (with some states) the flow of students to the United States has been increasing.⁵⁷ The latest move by the Chinese government, in a major policy change after almost 40 years, to commence sending their students to the United States is an additional evidence of this pattern. As long as the United States remains a business and industrial leader, English the lingua franca in the international arena, the quality and the capacity of American education to absorb alien students remains high and until the economic political conditions in these societies

⁵⁶Margaret Cussler, "The Foreign Student--Innovator of the Future," in Sociology of Underdevelopment, eds. Carle C. Zimmerman and Richard E. Duwors (Toronto: The Copp Clark Publishing Company, 1970), pp. 371-380.

⁵⁷The data which will be presented in Chapter II on the flow of African students into the United States support this observation.

change, it is predicted that the flow will continue in the foreseeable future.⁵⁸

Based on these observations some scholars, such as Fuller, are suggesting that the United States, with its capacity, has a potential to serve as a higher education factory for the world, and should seriously consider this as one of its future economic bases.⁵⁹

The original goals which motivated the United States to embark on educational exchange programs are still valid and appealing. These objectives as expressed in the Mutual Educational and Cultural

⁵⁸See Philip Byers, "Asian Invasion of American Campuses--Why?" Exchange 6 (Spring 1971): 58-70. His assessment and prediction could apply just as well to African students.

However, it is not clear what impact the impending depletion of fossil fuels would have on currently flourishing international communication networks such as education and cultural exchange programs, when they are completely depleted. There are two schools of thought as to how the depletion of currently used sources of energy would affect human society, particularly industrialization.

One school has abiding faith in human ingenuity and suggests that if other energy sources are tapped, commensurate with technological inventions, the potential disruption of production would be avoided. (See Barry Commoner speech delivered at "Energy and Society National Symposium, Michigan State University 30 November 1977.)

The second school of thought is represented by Amitai Etzioni, who believes disruption is inevitable and societies will adjust accordingly to the slow pace. Its citizens will also find alternative ways of getting satisfaction other than in technologically produced goods. (See his speech delivered at the same symposium.)

Another factor can potentially affect the flow of students from developing to developed nations. Since students participating in the educational exchange are the "people in the middle" the flow of students from one particular society to another depends on such factors as the political and ideological relationships of those societies, world-wide political economic forces and the economic and social-political conditions of each country concerned with the educational exchange enterprise. (See John Useem, "The Study of Cultures," Sociological Focus 4 [1971], p. 16).

⁵⁹Aaron B. Fuller (Point of View), "The Educationalization of America: Is It Fanciful to Predict that the United States Could Become a Higher Education Factory for the World?" The Chronicle of Higher Education, 23 October 1978, p. 40.

Exchange Act of 1961 (Public Law 256; 87th Congress), also known as the Fulbright-Hays Act, were:

1. To increase mutual understanding between the people of the United States and the people of other countries
2. To strengthen the ties that unite us with other nations by demonstrating the educational and cultural interests, development, and achievements of the people of the United States and other nations
3. To provide international cooperation for educational and cultural advancement and thus
4. To help establish friendly, sympathetic and peaceful relations between the United States and the other countries of the world.⁶⁰

These notions were accepted as viable objectives and incorporated as an integral part of the national foreign policy. The United States government, therefore, was committed to furthering the cause of international exchange.

Closely related to this is the United States' desire, although not ostensibly, like any other major nation, to contribute and influence the development of the Third World Nations, including

⁶⁰ John M. Stalnaker, Chairman, Teacher and Scholar Abroad (Washington, D.C.: The Board of Foreign Scholarship, Bureau of Educational and Cultural Affairs, U. S. Department of State, 1964), p. 2.

African countries, through the enterprise of education as well as several other avenues.⁶¹

An African student on an American academic campus is a valuable asset. He/she is here not only to take and receive, but to give and share his/her culture, heritage, and experience. The student is putting him/herself at the disposal of the host country. Thus it is reasonable to suggest that there is a mutually reinforcing process at work in the relations of foreign students and the host institutions and the society supporting them.

However, to continue this mutual interest, serious attention and efforts should be directed toward the academic concerns of foreign students, particularly those coming from developing countries. Such study would help identify and articulate academic experiences of individuals from Third World societies being processed through American higher education.

The academic curriculum and its relevance to the students and societies, who represent potential consumers of educational products in another area, merit the attention of an academic community such as Michigan State University. Gone are the days when a student from a developing country travels abroad for education and upon return with

⁶¹Stan Berry, "International Students in Graduate Education," proceedings of the Sixteenth Annual Meeting, Council of Graduate Schools in the United States, 8-10 December 1976, pp. 163-164; Arthur W. Hummel, Jr., Deputy Assistant Secretary of State, Bureau of Educational and Cultural Affairs, at the Hearings of the Subcommittee on Africa Committee in Foreign Affairs House of Representatives, House of Representatives 84 (89th Congress), pp. 139-49; Walter Hiclaves, "Toward a National Effort in International and Cultural Affairs," p. 15.

any certificate or degree is assured a hero's welcome and a secure governmental post. The need of the developing societies for educated individuals has passed the stage of accepting any type of education to fill positions held by the expatriates.

These societies are looking for the type of education which will tackle the social, economic, political and technological problems beleaguering them at local and national levels. There are already severe criticisms leveled against formal education (particularly with foreign content) for its utter dysfunctionality in alleviating practical problems in developing societies.⁶² The notion that knowledge and skills and competencies have universal application all the time and for all societies has been challenged.

Today people are expressing their desire to receive education which is more meaningful and relevant, and which is compatible with their cultural, economic, and environmental realities. Such demand became clear when the students in the 1960s, both in the United States and Western Europe, took their case to the streets.

As Caldwell correctly noted, "One of the critical areas of irrelevance involved intercultural education."⁶³ It is a vexing

⁶²See George H. Axinn, "Education for Agricultural Service in Africa," paper presented at the Plenary Session of the Second General Conference of the Association for the Advancement of Agricultural Sciences in Africa (AAASA), Dakar Senegal, 24 March 1975; "Function and Dysfunction in Education for Rural Development, An International Survey," paper presented at the Annual Meeting of the Rural Sociological Society, Montreal, Quebec, Canada, 22-25 August 1974.

⁶³Oliver J. Caldwell, "Search for Relevance in Higher Education," Exchange 4 (Winter 1969): 2.

problem providing a challenge to American education. At a national conference on higher education and development in 1967, a United States official echoed similar concern when he stated that one problem America faces is "how education in America, for the foreign and American student alike, can help bring together the advanced and developing worlds."⁶⁴

This problem becomes even more serious when one considers the experience of the minorities in relation to the academic curriculum. The disparity in experience and cultural background between the minorities and the dominant majority makes the normal academic programs in American institutions irrelevant for the former. American blacks refer to this background in American curriculum as "lily white." It is based on the heritage, aspirations, and reflections of white Anglo-Saxon society and laced with some ecumenical flavoring.⁶⁵

⁶⁴Jacob Canter, "American Higher Education for Students of the Developing World," in Higher Education and the International Flow of Manpower: Implications for the Developing World, proceedings of the National Conference, University of Minnesota, Minneapolis, 13-14 April, 1967, pp. 29-37.

⁶⁵Caldwell, op cit., p. 2: A statement or two of qualification is appropriate here. What has been pointed out in the discussion above, particularly with reference to hard sciences, should not be construed as implied suggestions that these scientific principles do not transcend the boundaries of cultures and societies. The available evidence shows that they do. However, the areas of concern center around the interaction between science and given societies, and the consequences and implications in terms of orientations relative to areas and scope of scientific research, and to appropriate and imaginative application of scientific knowledge to improve human conditions in given societies.

In relating these ideas to the experience of developing countries, three patterns relative to scientific knowledge, which are

The basic difference between American citizens, whether white or black, and foreign students lies in the avenues at their disposal for participating in the process of curriculum change. Members of the latter groups simply do not have many avenues open to them whereby they can demand change in curriculum to suit their background and experience. The cause of foreign students does not have the immediate constituency that could bolster influence on educational curriculum change. This is due partly to their marginal status in the host country, and partly to their many expected roles.⁶⁶ An in-depth study such as proposed in this dissertation is an effective way of uncovering the academic needs of foreign students, especially from developing countries.⁶⁷

causes of concern and relevant to the discussion seem to be discernible.

Science in the Third World is still dependent (see D. J. de Solla Price, Little Science, Big Science [New York: Columbia University Press, 1963], pp. 102-106).

It (science) has not penetrated the larger societies in these countries (the Third World), and has been limited to a few marginal elitist centers. (See A. H. Othman, [Ph.D. dissertation, Michigan State University, 1977], pp. 2-3.)

Generally, the scientists from these countries are ill-equipped to do research in different and nonfamiliar environments from those in which they were trained (which are usually either the West or East) and exit from their societies to the industrialized nations when they are confronted with difficulties in their respective societies. (See C. K. Vanderpool, "Visiting Foreign Scientists in the United States: The Impact of Systematic and Role Circumscription and Dissociative Experiences on the Homogeneity of the International Scientific Community" [Ph.D. dissertation, Michigan State University, 1971], pp. 14-18).

⁶⁶See Francis Donahue, "The International Student: His Six Roles," Clearinghouse 45 (September 1970): 51-55.

⁶⁷In reference to the fruitfulness of such methodological approach and the productive results thereof, both in terms of their (such studies) contribution to knowledge and sharpening policy

Hopefully this study would contribute to furthering our knowledge of the Third culture.

Theoretical Frames of Reference

Since the subject under investigation may involve several complex phenomena in operation and to the extent that the study is exploratory in nature, it defies the customary approach of analysis by the use of some theoretical reference based on a particular discipline. In recognition of the interdisciplinary nature of the components comprising the academic experience of the participants, four theoretical frames of references from different areas of social science have been suggested. These are the theory of transfer of training from educational psychology; the theories of adaptation and adjustment (cognitive dissonance and "U" curve) from social psychology and sociology, respectively; the theory of cultural relativism from cultural anthropology; and the theory of the Third culture from sociology.

At the outset, since this is not a classic study set out in an effort to build a theory or theories, it must be pointed out that

questions, Useem and Useem in their recent critique on the literature on "Transnational Exchanges Among the Highly Educated," concluded: "Looking back over the history of research on international educated related interchange, it appears to us that the most imaginative work and the most informative contributions to both knowledge base and policy questions have occurred when studies have researched in depth the complex relationships in limited sample groups and/or programs." See John and Ruth H. Useem, "Generating Fresh Research Perspectives and Study Designs for Transnational Exchange Among the Highly Educated," paper presented at German-American Conference: International Interchanges, Bonn, November 1980, p. 3.

there will be no attempts to prove or disprove these theoretical constructs. As indicated earlier, they will be used only for providing a frame of reference for analysis and interpretation.

Transfer of Training

Some psychologists, specialists in the field of learning, have declared that there is no more important topic in the area of learning than that of transfer of training.⁶⁸ Embedded in this theory is the deeply held belief that what people learn in early life will affect their subsequent years and later life experience. The enterprise of many educational and training programs is founded on this very assumption, that what is taught in the classroom or in the training program will transfer to new situations.⁶⁹ This fundamental assumption inherently includes the training of foreign students, that they too will transfer newly acquired knowledge and training to new situations and effect change upon return to their respective societies.⁷⁰

Educators' preoccupation with this theory of transfer of learning goes back as far as the days of Greek and Roman prominence.⁷¹

⁶⁸J. Deese, The Psychology of Learning (New York: McGraw-Hill, 1958); H. C. Ellis, The Transfer of Learning (New York: The MacMillan Company, 1965), p. 6.

⁶⁹Ibid., p. 5.

⁷⁰Margret Gussler, op. cit., The Professional Education of Students from Other Lands, ed.: Irwin T. Sanders (New York: Council on Social Work Education, 1961), p. 86.

⁷¹C. E. Skinner, ed., Essentials of Educational Psychology (Englewood Cliffs, N.J.: Prentice-Hall, 1958), pp. 218-224.

It was assumed in those days, and up to the Nineteenth Century, that mastery of difficult academic subjects such as mathematics, Greek, and Latin would provide rigorous mental exercise, a notion analagous to strengthening the muscles by strenuous physical exercise.⁷²

However, with the emergence of experimental Nineteenth Century psychology and the redefinition of the philosophy of education in the United States, efforts were made to change the curriculum in order to provide pupils with education which they could use for specific and supposedly predictable life needs. The mental discipline theories have, thus, been questioned and disregarded.⁷³ Studies by early experimental psychologists, such as James, Thorndike, and Woodworth, formulated a new theoretical model known as "identical elements" about transfer of training. The concept of identical elements suggested that training in one kind of activity would transfer when certain features such as aims, methods, and approaches are identical for the two tasks; i.e., what is to be learned and what is to be done in a new situation?⁷⁴ Furthermore, some other models have been developed to explain the stimulus response relationships that affect transfer. Osgood developed a widely known model usually referred to as "Osgood's Laws of Transfer" regarding the "transfer surface" on

⁷²J. Charles Jones, Learning (New York: Harcourt, Brace and World, Inc., 1907), pp. 128-129.

⁷³C. E. Skinner, op. cit., p. 219.

⁷⁴H. C. Ellis, op. cit., p. 63.

which he attempted to reduce the outcome to the form of graph.⁷⁵ His transfer surface construct shows that the greatest amount of positive transfer should take place when stimuli and responses are identical or very similar in both the old learning situation and the new, or transfer situation. Negative transfer happens when the stimuli in the new situation are similar to those in the original learning situation, but call for a different response.

The Gestaltists, another group of psychologists, also contributed to the theory of transfer of learning. The Gestaltists added to the theory that a concept which emphasized that insight, understanding, or generalization emanates from the individual's reconstruction or recognition of experience.⁷⁶ Presentation of a detailed analysis and review on the learning transfer theory is beyond the scope and intent of this discussion, but it is useful to provide a comprehensive summary of the main components of the construct as condensed and synthesized by Ellis in his book entitled Transfer of learning as follows:

1. Over-all task similarity. Transfer of training is greatest when the training conditions are highly similar to those of the ultimate testing conditions.
2. Stimulus similarity. When a task requires the learner to make the same response to new but similar stimuli, positive transfer increases with increasing stimulus similarity.

⁷⁵C. E. Osgood, "The Similarity Paradox in Human Learning: A Resolution," Psychological Review 56 (1949): 132-143.

⁷⁶C. E. Slinner, op. cit., pp. 222-223.

3. Response similarity. When a task requires the learner to make a new or different response to the same stimuli, transfer tends to be negative and increases as the responses become less similar.
 - (a) Under conditions of high response similarity, this condition can produce positive transfer.
 - (b) Also, it is usually more difficult under this condition to obtain negative transfer in verbal learning than it is in motor skills learning.
4. Joint stimulus-response variation. If the responses in the transfer task are different from those in the original task, then the greater the similarity of stimuli, the less the positive transfer.
5. Learning-to-learn. Cumulative practice in learning a series of related tasks or problems leads to increased facility in learning how to learn.
6. Early-task learning. Transfer is maximized if greater effort is spent in mastering the early of a series of related tasks.
7. Insight. Insight, defined behaviorally as the rapid solution of problems, appears to develop as a result of extensive practice in solving similar or related classes of problems.
8. Warm-up. Warm-up is the pronounced but temporary facilitating effect resulting from practice in some activity prior to learning the transfer task.
9. Time interval between tasks. Performance on the second task is minimally determined by the time elapsing between original and transfer tasks, as long as the transfer task involves little memory for specific aspects of the original task.
10. Mediated transfer. Transfer can occur as a result of mediation due to the network of associative linkages between tasks.
11. Bilateral transfer. Positive transfer can be obtained as a result of practice with one limb to its analogous limb.

12. Task or stimulus variety. In general, variety of tasks, or of their stimulus components, during original learning increases the amount of positive transfer obtained.
13. Amount of practice on the original task. The greater the amount of practice on the original task, the greater the likelihood of positive transfer; negative transfer if likely to occur following only limited practice on the original task.⁷⁷

Cultural Relativism

This is a theoretical construct which, as its fundamental postulation, advocates that the values of cultures should not be judged by comparing, rather on their own. Herskovitz's concise and succinct description elucidates the theme of this concept as follows:

The very core of cultural relativism is the social discipline that comes of respect for differences--mutual respect. Emphasis on the worth of many ways of life, not one, is an affirmation of the values in each culture. Such emphasis seeks to understand and to harmonize goals, not judge and destroy those that do not dovetail with our own. . . . Evaluations are relative to the cultural background out of which they arise.⁷⁸

The crux of this point of view, with respect to a cultural value approach, stems from the basic recognition that persons are the product of their own particular cultures and are incapable of successfully and completely breaking away layers of cultural values covering their perceptual sights. Anthropologist Ruth Benedict, one of the early exponents of cultural relativism, eloquently described culture's total capture of a person's life and outlook:

⁷⁷H. C. Ellis, op. cit., pp. 72-74.

⁷⁸Melville Herskovitz, Cultural Relativism: Perspectives in Cultural Pluralism (New York: Random House, 1972), p. 15.

No man ever looks at the world with pristine eye. He sees it edited by a definite set of customs and institutions and ways of thinking. Even in his philosophical probings he cannot go behind these stereotypes; his very concepts of the true and the false will still have reference to his particular traditional custom.⁷⁹

She further expounded that a person's life history is first and foremost an accommodation to the cultural life of this society and by the time he/she becomes adult, he/she is a creature of that culture.⁸⁰

Vogt and Roberts, both anthropologists, echoed similar observation in reference to the profound effect of cultural values on society's outlook and adjustment to life in general, when they stated:

People see the world through cultural lenses compounded of particular combinations of values; they respond in different ways in accordance with their differing values. We must recognize that people are not just "driven" by situational pressures: They are also "pulled" by the ideals and goals of their cultures.⁸¹

Their observation was based on an interdisciplinary investigation of five culturally different communities--Zuni, and Navaho Indians, Mormons, Catholic Spanish-Americans, and Protestant-American homesteaders in Texas, United States of America; which were all in a

⁷⁹Ruth Benedict, Patterns of Culture (Boston : Houghton-Mifflin Company, 1934), p. 2.

⁸⁰Ibid., p. 3.

⁸¹Evon Z. Vogt and John M. Roberts, "A Study of Values," in Reading in Sociology, 5th ed., eds.: Edgar Schuler et al. (New York: Thomas Y. Crowell Company, 1974), p. 73.

hostile semi-arid physical environment, but responded in radically different ways according to their cultural value systems.⁸²

This concept becomes terribly decisive for this era of commitment to scientific knowledge expansion and modernity and development in developing societies, so that they can manipulate their environment to improve the lot of their people. Indeed, the purpose of thousands of foreign students, pilgrimages from developing societies to the institutions of higher learning in industrialized nations is routed in such an assumption. The pertinent question at this juncture is, "How much consideration should be given to cultural value differences in the enterprise of processing students from varied backgrounds in the academic institutions of industrialized societies?" Can cultural values interplay in the absorption and interpretation of scientific knowledge for future application? Clyde Kluckhorn, another anthropologist who is cognizant of this problem, addresses the issue as follows:

No tenet of intellectual folklore has been so damaging to our life and times as the cliché that 'science has nothing to do with values.' If the consideration of values is to be the exclusive property of religion and the humanities, a scientific understanding of human experience is impossible.⁸³

Some social scientists with comparative experience with respect to the phenomena associated with modernization and development are also calling for reexamination of the earlier approach to modernity and development, that whatever is good for the West will be

⁸²Ibid., p. 79.

⁸³As quoted in Vogt and Roberts, Ibid.

good for those societies which are striving toward modernization.

Eisenstadt's view, as summarized by Schram, represents this thinking:

Chiefly that it works better as a description of what has happened in Western countries than as a predictor of change in non-Western countries. Even in countries where the process had apparently already taken place, there was less than a perfect fit to the model. England, for example, had retained many traditional patterns and mechanisms despite being the home of industrial revolution. Japan had kept many of its own societal ways of dealing with problems despite a miraculous growth in industry and commerce.⁸⁴

Just as Vogt and Roberts observed in the case of the five drastically different communities referred to earlier, Herskovitz suggested a similar view about how societies in the developing nations may vary in responding to given problems, when he stated:

That differences in the manner of achieving commonly sought objectives may be permitted to exist without a judgment being entered on them involves a reorientation in thought for those in the Euro-American tradition, because in this tradition, a difference in belief or behavior too often implies something is wrong, or less desirable, and must be changed.⁸⁵

He further suggests that the cultural relativist paradigm takes into account over the dominant paradigm, the variability of dynamics, such as society's experience, individual drive, and talents which influence the process of change and development. The following excerpt from his writing reflects this view:

⁸⁴Wilbur Schram and Daniel Lerner, Communication and Change: The Last Ten Years and the Next (Hawaii: The University Press of Hawaii, 1976), p. 46.

⁸⁵Herskovitz, op. cit., p. 22.

No culture in its totality is a commodity for export. This is why any people who, by any method whether by conquest or persuasion, assume that they can cause another group to change its entire way of life, are building policy on a psychological unreality. . . . (Yet) Culture is not a straight jacket. . . . The restlessness of man, the creative drive of the gifted individual, the search for variety in experience, all of these assure us that man is not an automation, nor ever has been, nor at least while he persists as we know him, will ever be.⁸⁶

The importance of this construct to current study lies, firstly, in the purpose; the participants in this sample are involved in the process of acquiring scientific knowledge presumably to take back for application in their respective societies, an enterprise which involves philosophical and cultural values at both individual and societal levels. Secondly, of immediate importance is the fact that individuals in the population interact and engage in similar and frequently joint academic activities with American students and professors whose value system may be radically different from theirs. In an effort to examine the academic experience of such groups, it is safe to assume their own evaluations and analyses of their experience will be influenced by their own cultural values, as suggested in this theory.

Thus, in cases where value differences may surface in the course of the collaborative academic endeavors between the involved parties in this study, it is suggested that the clashes or differences should not be judged and interpreted on the basis of unilateral cultural value systems, but rather that they should be viewed from the standpoint of cultural relativity.

⁸⁶Ibid., p. 71.

Thus the concept of cultural relativism as a frame of reference is being suggested only in this limited sense. To discuss the other aspects which this construct encompasses is beyond the scope and practical necessity of this dissertation.

Adaptation Theory

DuBois,⁸⁷ Selby and Woods,⁸⁸ Sanders,⁸⁹ Beck,⁹⁰ Davidson and Sewell⁹¹ and Ford⁹² among others have reported that all foreign students in the United States go through the process of adaptation and adjustment to some degree in order to succeed during their sojourn. Adaptation may take place at various levels. For the purpose of this study, two theoretical constructs dealing with adaptation will be briefly discussed.

⁸⁷Cora DuBois, Foreign Students and Higher Education in the United States (Washington, D.C.: American Council on Education, 1956).

⁸⁸Henry A. Selby and Clyde M. Woods, "Foreign Students at a High Pressure University," Sociology of Education (Spring 1960): 138-154.

⁸⁹Irwin T. Sanders, ed., The Professional Education of Students from Other Lands (New York: Council on Social Work Education, 1961).

⁹⁰Robert H. Beck, "Professional Training in Education for Foreign Students in the United States," in The Professional Education of Students from Other Lands, ed.: T. Sanders (New York: Council on Social Work Education, 1961).

⁹¹H. W. Sewell et al., "Scandinavian Students' Images of the United States: A Study in Cross-Cultural Education," The Annals, American Academy of Political and Social Science 295 (September 1954): 126-135.

⁹²Charles C. Ford, "A Case Study of the Adaptational Patterns of Asian Graduate Students in Education at Michigan State University" (Ph.D. dissertation, Michigan State University, 1969).

Cognitive Dissonance.--The phrase, "cognitive dissonance" was coined by psychologist, Leon Festinger, to describe psychological incompatibilities between two or more items of knowledge or beliefs in an individual and his/her reaction to make them consonant. In expounding the concept, Festinger stated:

This theory centers around the idea that if a person knows various things that are not psychologically consistent with one another, he will, in a variety of ways, try to make them more consistent. Two items of information that psychologically do not fit together are said to be in a dissonant relation to each other.⁹³

This construct assumes that such incompatibility or dissonance generates tension in the individual and motivates him/her to do something to resolve (to eliminate or reduce) the dissonance, such as altering his/her behavior or beliefs.⁹⁴ Again, Festinger elaborates:

Cognitive dissonance is a motivating state of affairs. Just as hunger impels a person to eat, so does dissonance impel a person to change his opinions or his behavior.⁹⁵

This change may take place in two ways. The person may change his/her behavior to create consistency with the apparent cognition or alters or ignores that cognition by rationalization. It also suggests that every tension created by a dissonance is likely to be perceived

⁹³Leon Festinger, "Cognitive Dissonance," Scientific American (October 1962): 1-9.

⁹⁴Alfred R. Lindesmith and Anselm L. Strauss, Social Psychology, 3rd ed. (New York: Dryden Press, 1968).

⁹⁵Leon Festinger, A Theory of Cognitive Dissonance (New York: Harper and Row, Publishers, 1957), p. 6.

by the individual concerned. This is in line with what sociologists, particularly of median tradition, have held for a long time; who have argued that any investigation of sociological problems should include the viewpoints of the subjects concerned.⁹⁶

The importance of this construct to this study lies in the fact that the participants come from different value systems, academic and professional aspirations and may find the present conditions incongruent with what they have had or wished to have cognitive and, thus, experience cognitive dissonance.

The "U" Curve.--The second construct suggested here, and another frame of reference in viewing the participants' adaptation pattern, is metaphorically referred to as "U" curve. It is so named in reference to the observed pattern of psychological adaptation and adjustment characterized by unrealistic ups, drastic downs, a bottoming out and then a sharp rise of the sojourner in an alien culture during his/her period of sojourn. Lysgaard⁹⁷ and DuBois⁹⁸ were the first researchers who reported the evolution of such a pattern of adaptation during the successive stages of the stay. The following is Ford's summary of DuBois' explication of this postulation:

⁹⁶A. R. Lindesmith and A. L. Strauss, op. cit., p. 56.

⁹⁷Sverre Lysgaard, "Adjustment in a Foreign Society: Norwegian Fulbright Grantees Visiting the United States," International Social Science Bulletin 7 (1955): 45-51.

⁹⁸C. DuBois, op. cit., pp. 66-67.

1. The spectator phase--which is early in the student's sojourn and is characterized by psychological detachment from the new experience; a time when the student still has a tourist attitude of enjoying the new environment without having to meet many of its demands.
2. The adaptive phase--characterized by active involvement in the problem of adjustment, when the student must master the skills required by the host culture in general and by the academic environment in particular. It is the phase of the most acute strain and stress, of unresolved conflict when the so-called culture shock may be most acute.
3. The coming-to-terms-stage--in which an equilibrium is reached in the struggle for adjustment. Regardless of whether attitudes toward the host culture and the self are positive, negative, or objective, this stage is characterized by relative stability.
4. The pre-departure stage--which concludes the sojourn; at this stage the expectations of return to the home country dominate the student's feelings and attitudes. The tenor of this period again may be negative or positive, depending on the nature of the adjustment and of live expectations upon return.⁹⁹

Sewell and Davidson's study confirmed the occurrence of this pattern of adaptation and adjustment, based on their research on Scandinavian students in the United States.¹⁰⁰ Gullahorn and Gullahorn¹⁰¹ extended the "U" curve concept to examine the experience of foreign-educated students' adjustment on their re-entry to their original societies, and, hence, suggested the "U" curve concept, since the re-entry adjustment experience follows a similar pattern as the foreign student's adjustment to the alien culture.

⁹⁹C. C. Ford, op. cit., p. 29.

¹⁰⁰H. W. Sewell et al., op. cit.

¹⁰¹Jeanne E. Gullahorn and John T. Gullahorn, "An Extension of the U-Curve Hypothesis," Journal of Social Issues 19 (3) (1963): 33-47.

A similar phenomenon regarding foreigner's adjustment to an alien culture has been well documented by anthropologists usually under the term "culture shock syndrome."¹⁰² It is important, however, to point out at this juncture that the consideration of "culture shock" lives outside the realm of this study, that it is not being suggested as a frame of reference for analysis in this study. Since the bulk of the sample in this study falls into the middle stages, i.e., the coming-to-terms stage and the pre-departure stage, it is assumed here that the "U" curve will be useful for interpretation.

Third Culture

Kroeber (1945)¹⁰³ and Hewes (1965)¹⁰⁴ among others suggest that the interactions of persons from differing societies, and thus sharing culture has been the experience and heritage of the human race.

The increasing interdependence for sharing scientific knowledge, logically, technologically, and ideologically for industrialization, modernization, social change and for continued supply of natural resources for production of both societal and global scope, particularly between industrialized and non-industrialized societies,

¹⁰²Kalervo Oberg, "Cultural Shock: Adjustment to New Cultural Environments," Practical Anthropology 7 (1960): 177-182; is a representation of such works.

¹⁰³A. L. Kroeber, "The Ancient Oikumene As A Historical Culture Aggregate," Journal of the Royal Anthropological Institute 75 (Parts 1-2), (1945): 9-20.

¹⁰⁴Gordon Hewes, "The Ecumene as a Civilization Multiplier System," Kroeber--Anthropological Society Papers No. 25 (Fall 1965), Berkeley, California, pp. 73-110.

has dramatically increased the volume of persons from drastically varied cultures, who interact and engage in common useful enterprises and ventures.¹⁰⁵

The concept of a third culture was conceived out of attempts to explain the phenomena which develops from the interactions of persons from differing societies. The concept of a third culture has been used to describe the complex of "behavior pattern created, shared, and learned by men of different societies who are in the process of relating their societies, or sections thereof, to each other."¹⁰⁶ Essentially, it is a construct which attempts to conceptualize the modes and values and patterns of behavior developed in the process of the interaction in such person's attempt to accommodate one another's previous outlook, values, and beliefs, while they are engaged in similar or the same activities. It encompasses the following fundamental assumptions:

1. Men-in-the-middle of intersection societies function as cultural brokers between intersecting social units, societies, and countries. As men-in-the-middle, they are a cultural exchange unit in the continuing interactions between the large societies and countries.
2. The carriers of "third cultures" are a very limited segment of the total population: mostly individuals who have received a modern and higher education, have an occupation or a profession that is part of the modernizing-developing nation-building institutions, and typically have been recruited as adults.

¹⁰⁵Sal P. Restivo and C. K. Vanderpool, eds., Comparative Studies in Science and Society (Columbus, Ohio: Charles E. Merrill Publishing Company, 1974), p. 3.

¹⁰⁶John Useem, "The Community of Man: A Study in the Third Culture," The Centennial Review 7 (Fall 1963): 481-498.

3. These cultural brokers view themselves and are viewed by their consociates as actively engaged in future-oriented activities in which what is achieved in the present will prove valuable to subsequent generations.¹⁰⁷

In considering the modes, the roles and values developed from cross-cultural interaction, one is confronted with the problem and the need to present distinction between those roles developed out of cross-cultural interaction and those formed out of intra-cultural interactions. Sellitiz et al. (1963) suggestions relative to roles developed from cross-cultural interaction versus those out of intra-cultural interactions, offer some distinctions:

1. There is a difference in the possibility of having well-structured preconceptions about the other group. The members of two (intra-cultural) groups, being product of the cultures are more likely in many ways: they speak the same language, thus do not experience the difficulty of understanding each other, thus making possible the opportunity for observing individual behavior that does not conform to some previously heeded negative conceptions or stereotypes that may lead to the perceptions that these people are more like one-self than one had perceived. However, in cross-cultural interaction, neither party may have any clear initial stereotype, or that one or both have favorable preconceptions. Thus a person may be more struck by the differences in outlook and behavior than by similarities.

2. The influence of the broader context in which the personal interaction takes place. It is assumed here that the only major

¹⁰⁷Ibid., pp. 14-16 (as summarized by Othman. See O. H. Othman, op. cit., p. 6).

new experience that may produce change in ethnic attitude is the personal association, whereas in the case of the cross-cultural contact, one party, the person--the guest's personal association are but one part of a whole new experience.

3. There are differences in the range of relevant objects of attitudes. The beliefs and feelings which are referred to a group are essentially a collection of individuals, whereas in the case of cross-cultural interaction, the realm of attitudes could range from individual person to foreign policy.

Thus these roles are not formulated in toto within the original cultures for the interaction persons. Such roles are formulated new, based on new sets of normative expectations and new value combinations.¹⁰⁸

Previous studies of third culture groups have concentrated primarily on the Western residents, although references have been made regarding the "nationals" involved in the interactions with the Westerners, in a non-Western setting.¹⁰⁹

However, recently some studies have been conducted by graduate students under Drs. John and Ruth Useem of the Sociology Department at Michigan State University on the American Students who are engaged

¹⁰⁸ Claire Sellitz et al., Attitudes and Social Relations of Foreign Students in the United States (Minneapolis: University of Minnesota Press, 1963), pp. 7-9.

¹⁰⁹ John Useem, Ruth Useem, and John Donoghue, "Men in the Middle of the Third Culture: the Roles of American and Non-Western Peoples in Cross-Cultural Administration," Human Organization 22 (3): 169-179; John Useem, op. cit., 1963.

in cross-cultural interaction with foreign students and professors.¹¹⁰ Upon reviewing these studies and others in related areas, Asch suggests the similar phenomena--the burgeoning of special sets of attitudes and beliefs between the participants in trans-social contact situations in the process.¹¹¹

Since the characteristics and the nature of activities of the participants for this study, and their counterparts--the host country students and academic faculty fall into the description of the actors, as defined in the preceeding paragraphs, in the evolution of the third culture, it is suspected here that they employ or develop those modes, values, and beliefs to accommodate each other as they journey together on the road of academic enterprise.

¹¹⁰The following represent the major works which focus on this aspect.

Howard Bork, "Interaction of American Students with Western European Students at the Midwestern University" (M.A. thesis, Michigan State University, 1966); Jerry Judy, "Interaction of American Students with Indian Students at a Midwestern University" (M.A. thesis, Michigan State University, 1967); Susan M. Asch, "The Friendship Roles of American Associates of Thai Students on a Midwestern Campus; Implications for a New Bi-National Third Culture" (M.A. thesis, Michigan State University, 1968; and Asch, "Transnational Networks: A Multi-Method Study of the American Associates of Foreign Students" (Ph.D. dissertation, Michigan State University, 1975); Patterson A. Terry, "Relationships Across a Binational Interface: American-Japanese Interaction in a University Setting" (M.A. thesis, Michigan State University, 1969; Sal P. Restivo, "Visiting Foreign Scientists at American Universities: A Study in the Third Culture of Science" (Ph.D. dissertation, Michigan State University, 1971; C. K. Vanderpool, "Visiting Foreign Scientists in the United States: The Impact of Systematic and Role Circumscription and Dissociative Experiences on the Homogeneity of the International Scientific Community" (Ph.D. dissertation, Michigan State University, 1971).

¹¹¹Susan Asch, op. cit., 1975, pp. 14-19.

Limitations of the Study

The proposed study will be limited to the following aspects:

1. This study is limited to graduate students from Sub-Saharan Africa, currently studying at Michigan State University.
2. Representativeness is limited to African graduate students willing to participate in the study; nonparticipants may differ from possible participants.
3. Because of lack of funds and time, it was impossible to employ the control group technique in this study. This limits its capacity for the purpose of comparison and accuracy with respect to analysis and interpretation.
4. The completeness and accuracy of the data will be acceptable to the extent that space and time stipulations are appropriate and the investigator can establish rapport with students participating in this study, and the extent to which the subjects' views the value of the study and respond accurately and honestly to the interview schedule.
5. There was a conscious attempt on the part of the researcher to insure objectivity in preparing the interview instrument. However, because of human infallability, some bias may be inevitable and this might impose some limitations due to limitations associated with the use of such data-gathering techniques and methods.

Definition of Terms

Academic experience refers to the total sum of the impact on the students' perception on each sub-area selected for this study,

his/her encounter in the process of pursuing his/her academic program.

African students are students currently enrolled at Michigan State University and whose native home is one of the countries on the African continent, excluding the Republic of South Africa.

Graduate student refers to those African students currently engaged in post-bachelor academic programs on a regular basis.

Sub-Sahara Africa (Black Africa) refers to the group of countries located south of the Sahara Desert on the African continent.

Organization of the Dissertation

An outline of the study concerning the academic experience of African graduate students at a large Midwest university is as follows:

Chapter I will introduce the problem; the purpose, significance, theoretical frames of reference and limitations of the study; definition of terms and overview of the study.

Chapter II will present the background--an historical analysis of the flow of African students to the United States.

Chapter III presents a review of the prior research and related literature pertinent to the problem under consideration.

Chapter IV includes the execution of the research; namely, methodology, population, procedure.

In Chapter V the profile of African Graduate Students at Michigan State University is given.

In Chapter VI data analysis relative to the educational experience of African graduate students are presented.

In Chapter VII the effects of academic level (i.e., master's and doctoral) and fields of specialization (i.e., social science, physical sciences, and life sciences) on the subjects' educational experience as reflected in their responses are analyzed.

The space and content of Chapter VIII are given to a summary of the study findings, conclusions, recommendations, and suggestions for further research.

CHAPTER II

FLOW OF AFRICAN STUDENTS TO THE UNITED STATES--

A HISTORICAL ANALYSIS

Introduction

According to the available records the flow of African students to American campuses for the purpose of education began in 1774 when two people from the Gold Coast (now Ghana) enrolled at Princeton University, then called College of New Jersey. These two later returned to West Africa.¹ During the following decades up to the 1960s there was a sporadic migration of African students to American Colleges and Universities. During these decades students came from Sierra Leone in the early years; the 1850s to the 1870s; from Liberia, during the 1880s and 1890s; from the Congo, during the 1900s, from South Africa and Nigeria, in the early 1900s. During years prior to World War II students from East Africa joined the flow.² The record regarding students from North Africa is even more scanty for the

¹Horace Mann Bond, "The Negro Private and Church-Related Colleges: Origins and Development," Journal of Negro Education Yearbook XXXX 3 (Summer 1960): 221; Russell G. Hanson, "Factors Associated with Academic Achievement of African students enrolled in higher educational institutions in the United States" (Ph.D. dissertation, University of Michigan, 1972), p. 2; Richard D. Ralston, "A Second Middle Passage: African Students Sojourns in the United States during the Colonial Period and Their Influence Upon the Character of the African Leadership" (Ph.D. dissertation, University of California, Los Angeles, 1972), p. 3.

²Ibid., pp. 3-4.

reasons which will be presented later in this chapter; however, there is some evidence suggesting their presence in American schools from around the 1900s onward.³

As was noted earlier,⁴ from such humble beginnings the flow of African students to the United States rose dramatically during the early 1960s, reaching a total of more than two thousand students, with an increase of above 170 percent between the years 1950/51 to 1960/61.⁵ As will be noted later in this chapter, the flow continued progressively, with over 29,000 African students constituting 12.4 percent of the global students in the United States in pursuit of higher learning during the 1977/78 academic year.⁶

As is often the case any activity relating to an educational enterprise such as foreign students coming to the United States, it does not operate in a vacuum; instead, it is influenced by the socio-economic and political conditions and the dominant forces affecting these conditions during any given period. Thus these conditions and the forces dominating them, both in the African continent and the United States, have influenced the flow of African students to American campuses in a variety of ways through different periods during the more than 200 years since the flow commenced. Ralston, who

³See the Unofficial Ambassadors, publication of Institute of International Education (I.I.E.), 1953, p. 34.

⁴See Chapter I, p. 7.

⁵See also R. G. Hanson's summary, op. cit., p. 2.

⁶Open Doors (New York: I.I.E., 1977/78).

studied African students in America during African colonial period, and how their experiences in America influenced the character of African leadership upon their re-entry to the continent, has categorized three discernible phases based on the chronological periods and the dominant forces influencing the socio-economic and political conditions in the African continent and the United States. The following are these phases and the influencing forces are summarized by this researcher (see Table 2.1).

Having established general periodic both chronologically and in the sense of the dominant socio-economic and political dynamics affecting the flow of Africans to the United States and their sojourn "experiences" in terms of the types of institutions they attended, the type of education they received, and the goals of their education, it will be useful to make a closer examination of the pattern of the flow according to some variables. Thus a comparison can be made of the general pattern of the flow between the two decades leading to independence⁷ and the decade and a half of post independence.⁸

At the outset it must be stated that this analysis is not intended to be a critique, expounding the virtues, disadvantages,

⁷The reason for limiting the years to approximately to two or so decades stemmed purely from the lack of recorded data on foreign students at national level before those years.

⁸1960 is usually referred to as the year of African independence, since more than half of the independent states were decolonized about that year. Thus the academic years prior to 1960 will be referred to as pre-independence, and those after 1960 will be referred to as post-independence years.

consequences associated with the historically sustained flow of Africans to American institutions of higher learning. This is not to discount in any way the usefulness of such an exposition, examining the implications of such cross-cultural education for the African societies. To the contrary, such an exercise could be exciting and challenging in terms of dissecting the premises and expectations on which such cross-cultural education enterprise is anchored. However, this dimension falls outside the realm of the intent and scope of this research.

The following variables will be used as a basis for a meaningful examination of the pattern of the flow of African students to the United States: (1) the country of origin, (2) the region where the country is located, (3) the academic year, (4) the language of instruction and the language used by the modern sector (official language), (5) gender, (6) the number of countries/territories where the students originated, (7) the volume of the flow of African students in relation to the United States, (8) fields of specialization, (9) the academic level (i.e., undergraduate and graduate), and (10) sources of sponsorship.

Flow of African Students to the United States
According to the Country and Sub-Region of
Origin⁹

First, the volume of the flow will be examined according to the country of origin in comparison with the countries in the same sub-region.

⁹The same caution expressed regarding the data in Table 1.1 should be repeated here. The statistics utilized in analyzing the

TABLE 2.1.--The pattern of flow of African students to U.S. educational institutions according to major phases, and the relevant variables therein, during the African pre-independence years (as summarized from Ralston's Analytical Exposition)^a

Phases		Variables ^b			
Pre-Independence Years	Period	Influencing Force	Goals	Type of School Attended in the United States	Type of Occupation Engaged in Upon Returning
Phase I	Late 18th Late 19th Century (ca. 1774- ca. 1903)	Missionary Movement (mainly Black Americans)	To receive religiously-oriented education	White missionary or abolitionist schools in the north	Entered church work
Phase II	Last Decades of 19th century to 1st few decades of 20th century (ca. 1904-1945)	Missionary movement and other external stimuli--e.g., influence and advice of those already returned	To receive broader education that would equip them to deal with social and economic problems (secularly-oriented elite)	Predominantly black seminaries, church-related liberal art colleges, and agriculture or industry-oriented schools mostly in the American south	Engaged in social and political activities at community level, with the colonial structure
Phase III	The immediate year after WWII to the independence (1946-1957, 60)	Missionary movement, foundations and self-help Ethos, University scholarships etc.	To receive appropriate education to change (i.e., various professional and graduate lines) the whole system)	Some are in Phase II, until 1949, but dispersed into all sections and the country during the following years	Involved themselves in full-fledged nationalistic movements became leaders in toppling the colonial regimes

^aR. D. Ralston, op. cit., pp. 12-23.

^bAs a cautionary note, it must be pointed out that some of these variables may not apply to the pattern of the flow of African students from the North African countries and Ethiopia to U.S. educational institutions. Two historical factors may account for this possibility. First, while the countries in North Africa were colonized in the same fashion as were those in the sub-Sahara (although Egypt attained independence early--1922), missionary activities were more limited in North Africa, due to the dominance of the Islam religion which it had established itself in the region earlier. In the case of the Ethiopian empire-state, the Abyssinian core had been independent for several centuries and free from European colonization, but established its own colonization among the adjacent territories from the 19th century (see Chapter I, p. , footnote 53). Secondly, in the case of Ethiopia, the Christian Orthodox church which had been dominant in collaboration with the ruling elites, successfully minimized the activities of foreign missions and their impact (in comparison, for example, to the rest of Black Africa).

However, it is also true that in general the foreign missions did sell the value of modern education, even in those countries where the missions were unsuccessful in gaining converts for their respective faiths. Thus the influence of mission education in such societies cannot be altogether ruled out.

Table 2.2 presents the number of students enrolled in American Institutions from each African country according to the five sub-regions of the continent, Eastern Africa, Middle Africa, Northern Africa,¹⁰ Southern Africa, and Western Africa, during the two decades leading up to 1960.

Eastern Africa

As the numbers in Table 2.2 indicate, there were not many students from East Africa arriving on American shores for the purpose of education until the school year 1949/50. Further examination of

pattern of the flow of African students to the United States, are presented in this chapter, should be viewed as estimates only rather than as exact figures or actual representations.

¹⁰ Although the main inquiry in this dissertation has focused on the educational experience of the African graduate students (at Michigan State University) from Black Africa (excluding those from the Republic of South Africa), the analysis of the flow of the students from continent to the United States for the purpose of education will include the pattern of the flow of the students from the North African states. The decision to include this group (North Africans) in the analysis was made with two purposes in mind: (1) it was deemed a useful exercise for the purpose of comparison of the pattern of the flow between the major regions of the continent; (2) since the flow of students from the developing countries to industrialized nations implies transfer of knowledge, skills, culture, etc., and since those countries in Northern Africa also fall under the broad categorization contemporarily referred to as "The Third World," it was felt useful to include in the pattern of the flow of students from all the major regions of the African continent, in order to compare the level of "transfer," (at least as viewed from the student flow standpoint).

However, the reason why the flow of the students from the Republic of South Africa has not been included in this analysis as presented in this chapter was precisely due to this fact as discussed in the preceding paragraph. That is, South Africa has its own relatively advanced technology, although this technology is controlled by the white minority community.

Since open door figures do not distinguish the flow of the students from that country to the United States, along racial lines, it was felt that the inclusion of this flow would complicate the comparison discussed earlier.

TABLE 2.2.--The number of African students in United States colleges and universities by country and region during the academic years indicated

	1915-16	1918-19	1923	1930-31	1935-36	1939-40	1945-46	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
<u>EASTERN AFRICA</u>																	
1. Burundi																	
2. Cormorotis																	
3. Djibouti, Republic of																	
4. Ethiopia			1					39	42	42	32	43	62	110	151	151	145
5. Kenya								5	6	9	11	23	19	22	17	32	73
6. Malagasy (Madagascar) Republic							1			1							
7. Malawi								1		1						4	5
8. Mauritius		6						10			5						
9. Mozambique								6			3	1	2	3	2	2	2
10. Re'une																	
11. Zimbabwe								7	9	7	6	5	14	14	14	18	19
12. Rwanda																	
13. Seychelles																	
14. Somalia									2								
15. Tanzania								2	2	4	3	6	5	9	12	11	20
16. Uganda					1				1	6	8	6	4	6	10	21	26
17. Zambia													1		6	4	7
Subtotal	0	6	1	0	1	0	1	70	62	70	68	84	107	164	212	243	297

TABLE 2.2.--Continued

	1915-16	1918-19	1923	1930-31	1935-36	1939-40	1945-46	1949-50	1950-51	1951-52	1952-53	1953-54	1954-54	1955-56	1956-57	1957-58	1958-59
<u>MIDDLE AFRICA</u>																	
18. Angola								1	1	1	1				2	1	1
19. Cameroon								2				3	4	4	2	3	6
20. Central Africa Empire																	
21. Chad																	
22. Congo, Republic																	
23. Equatorial Guinea																	
24. Gabon																	
25. Sao Tome' Principe.																	
26. Zaire									1	1	2	2	5	0	2	3	3
Sub-Total								3	4	2	3	5	9	4	6	7	10
<u>NORTHERN AFRICA</u>																	
27. Algeria		1					3	7	6	31	4	4	1	4	1	1	3
28. Canary Islands	1									1							
29. Egypt	6	12	25	35	8	35	28	345	354	349	337	349	351	371	381	405	453
30. Libya									1	2	2	1	4	22	11	17	36
31. Morocco					1		1	8	11	11	22	18	15	17	17	16	22
32. Spanish Sahara																	
33. Sudan										1	2	1	7	12	17	29	53
34. Tunisia								1	3	1	5	2	1		7	6	14
Subtotal	7	12	25	35	9	35	32	361	375	396	372	375	379	426	434	474	581

TABLE 2.2.--Continued

	1915-16	1918-19	1923	1930-31	1935-36	1939-40	1945-56	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
<u>SOUTHERN AFRICA</u>																	
35. Botswana																2	2
36. Lesotho		3			1			2	2	1	2	1	3	1		1	1
37. Namibia								1	1						1		1
38. Swaziland		3			1			3	3	1	2	1	3	1	1	3	4
Subtotal		6			2			6	6	2	4	2	6	2	2	6	7
<u>WESTERN AFRICA</u>																	
39. Cape Verde Island																	
40. Benin, Republic																	
41. Gambia																	
42. Ghana	28		2		3	1	1	62	81	83	88	84	81	62	153	135	150
43. Guinea																	
44. Guinea-Bissau																	
45. Ivory Coast																	
46. Liberia		5	2	1	7	9	11	92	96	106	141	151	188	146	172	210	205
47. Mali																	
48. Mauritania																	
49. Niger																	
50. Nigeria					1	13	3	201	255	283	264	276	268	226	222	192	209
51. St. Helena																	
52. Senegal										1	2						
53. Sierra Leone		10	3		5	1	8	46	47	45	33	28	27	23	31	37	47
54. Togo									2	2	3	5		9	4	4	3
55. Upper Volta																	
Subtotal	28	15	7	1	16	24	23	401	481	520	531	544	564	466	582	578	614

SOURCE: The data for this table has been tabulated from the following sources: For the school years 1915-16 to 1952-53, The Unofficial Ambassadors Publication of I.I.E. 1953 Issue; School years 1952-53, Education for One World I.I.E., 1954; School years 1954-55 to 1959-60, Open Door, I.I.E.

the figures in the table reveals that 11 countries of the 17 in the region were represented during the years between 1950 and 1960, with Ethiopia, Kenya, and Tanzania taking the lead numerically in that order. Uganda and Zimbabwe / Rhodesia are the other two countries from which the number of students increased during this period. A casual observation suggests that most of the students originated from the English-speaking countries.

Middle Africa

The nine countries categorized under this sub-region were not represented by any student in the institutions of the United States until the 1949/50 school year. However, this data in the table indicate some did come from Angola, Cameroon, and Zaire, although not a significant number.

North Africa

Of the eight states and territories designated as comprising the sub-region referred to as North Africa, only three countries and territories had students studying in American schools, with Egypt sending the most prior to 1949/50 academic year. As the figures indicate in Table 2.2, commencing with 1949/50 school year, the number of students originating from this region increased, with Egypt being the one country sending the most during the 1950/60 years.

Southern Africa

Of the four countries designated as comprising southern Africa, with the exclusion of the Republic of South Africa, only Namibia sent students to the United States during the years prior to 1950. However, between 1950 and 1960 students from Namibia, Switzerland, and Lesotho, albeit very few, attended American schools.

Western Africa

Of the 17 countries and territories in this sub-region, four countries, all English-speaking, Nigeria, Liberia, Ghana, and Sierra Leone, in that order, had students in progressively greater number comparatively speaking receiving higher education in the United States during the decades preceeding 1960.

As can be observed from the data in the table, a very low and sporadic flow of students came from Senegal and Togo between 1950 and 1960.

When the volume of the flow is contrasted by the five sub-regions, as tabulated in Table 2.3, Western Africa and Eastern Africa, in that order, led in number of students represented in American colleges and universities during the decades leading up to 1960.

Table 2.4 presents the volume of the flow of African students to the United States for the pursuit of education by country and the sub-regions during the post-independence years. As can be readily observed, the flow has increased significantly from almost every sub-region of the continent. Students from fifteen of the 17

TABLE 2.3.--The flow of African students in percentages by the five-sub-regions for the academic years indicated

	1915-16	1918-19	1922-23	1930-31	1935-36	1939-40	1945-46	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
Eastern Africa	0	16.7	3	0	3.7	0	1.8	8.4	6.7	7.1	7.0	8.3	10.7	15.5	17.2	18.6	19.7	23.9
Middle Africa								0.4	0.4	0.2	0.3	0.5	0.8	0.4	0.9	0.5	0.7	0.6
Northern Africa	20	33.3	75.8	97.22	33.3	59.3	57.1	43.1	40.5	40.0	38.1	37.2	35.7	40.2	35.1	36.3	38.6	38.1
Southern Africa		8.3	0	0	3.7			0.4	0.3	0.1	0.2	0.1	0.3	0.1	0.1	0.2	0.3	1.0
Western Africa	80	41.1	21.2	2.78	59.3	40.7	41.1	47.9	52.0	52.6	54.4	53.9	53.1	43.9	47.1	44.3	40.8	36.0
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: The annual figures of the students originating from each sub-region of Africa has been obtained by addition as 2.3 indicated on Table 2.2. The percentage of the students from each region has been calculated in relation to the total number of African students for the indicated school years.

TABLE 2.4.---Flow of African students to the United States by country and subregion, for the 1960-61 to 1976-77 academic year

	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
I. EASTERN AFRICA																		
1. Burundi				4	9	6	11	13	10	7	6	6	1	2	10	5	5	5
2. Comoro Islands											1	1	1	0				
3. Djibouti, Republic of																		
4. Ethiopia	170	171	176	171	220	266	294	324	361	422	540	759	883	1046	1289	2050	2290	1700
5. Kenya	155	332	543	697	775	774	712	681	586	523	492	534	499	540	568	870	1120	1190
6. Malagasy (Madagascar) Republic	1	2	7	15	22	22	21	17	13	9	7	11	6	7	6	9	31	21
7. Malawi	2				53	83	92	93	91	73	65	59	63	57	76	58	60	45
8. Mauritius	10	0	12	21	5	9	10	17	9	12	18	19	21	27	29	21	29	22
9. Mozambique	0	0	0	7	16	19	41	38	37	42	33	35	17	16	13	12	11	7
10. Re'union																1		
11. Zimbabwe (Rhodesia)	16	61	145	221	177	203	255	264	227	200	193	171	174	188	219	260	390	410
12. Rwanda			1	2	2	2	3	1	1	1	1	5	2	8	7	4	3	2
13. Seychelles						2	5	8	9	13	5	4	2	2	3	2	3	1
14. Somalia	11	8	1	59	76	102	91	98	75	94	80	60	55	53	53	39	62	45
15. Tanzania (Tanganyika & Zanzibar)	36	62	149	214	251	305	259	246	225	297	215	238	217	256	272	350	370	320
16. Uganda	29	40	102	127	159	223	215	239	229	225	257	263	244	262	252	240	310	340
17. Zambia	9				71	83	90	88	106	92	47	61	53	58	58	80	90	210
Subtotal	440	676	1136	1521	1836	2099	2099	2127	1976	1920	1960	2216	2238	2522	2954	4001	4864	4315

TABLE 2.4.--Continued

	1959-60	1960-61	1961-62	1963-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
<u>MIDDLE AFRICA</u>																		
18. Angola	0	0	0	11	23	26	44	33	32	23	21	13	10	14	8	10	21	22
19. Cameroon	9	1	10	34	72	94	107	123	128	124	125	138	130	138	186	250	430	470
20. Central Africa Empire				1			2	7	6	5	5	5	5	6	7	16	8	4
21. Chad			1	1	1	2	1	5	3	3	10	4	5	8	6	2	2	4
22. Congo, Republic	0	11	57	31	19	15	6	7	17	12	30	23	17	12	8	6	17	4
23. Equatorial Guinea									0	0					1	1	0	2
24. Gabon			1	4	1	3	5	5	3	3	3	1	2	3	3	1	2	3
25. Sao Tome Principe																1	0	0
26. Zaire	2	4	39	64	88	94	73	86	55	90	91	81	91	101	102	110	190	210
Subtotal	686	1129	1167	1489				1542	1336	1533	1919	2191	2279	2604	2864	2710	3450	4277
<u>NORTHERN AFRICA</u>																		
27. Algeria	27	38	46	55	58	74	71	94	96	203	296	389	496	573	690	240	430	770
28. Canary Island													1			20		
29. Egypt	490	840	923	1136	1217	1279	1059	993	868	836	1015	1103	1027	1148	1163	980	910	1200
30. Libya	27	38	46	55	58	74	71	94	96	203	286	389	496	573	690	980	1540	140
31. Morocco	59	64	78	79	77	85	67	55	37	69	83	78	72	93	92	80	110	160
32. Spanish Sahara													1					
33. Sudan	53	109	135	127	170	180	211	216	150	119	135	111	109	157	166	350	360	500
34. Tunisia	30	40	39	37	53	75	79	90	89	103	114	121	77	60	63	80	100	37
Subtotal	686	1129	1267	1489	1633	1767	1558	1542	1336	1533	1919	2191	2279	2604	2864	2710	3450	4277

TABLE 2.4.--Continued

	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
SOUTHERN AFRICA																		
35. Botswana				2	4	3	10	17	19	22	22	18	13	14	8	18	22	18
36. Lesotho		3	2	2	10	12	19	14	12	14	13	11	14	10	15	19	32	32
37. Namibia (Southwest Africa)	14	5	4	2	10	6	25	24	23	19	18	20	12	15	5	7	1	5
38. Swaziland		2	1	4	3	7	13	22	19	30	25	19	26	26	15	32	26	22
Subtotal	14	10	7	10	27	28	67	77	73	85	78	68	65	65	43	76	91	77
WESTERN AFRICA																		
39. Cape Verde Island																1	2	
40. Benin, People's Republic	0	1	7	11	15	8	6	3	1	3	4	8	13	13	11	6	15	8
41. Guinea			1	2	6	13	13	26	26	34	44	69	62	75	100	100	160	67
42. Ghana (Gold Coast)	167	160	201	246	279	282	306	358	374	407	539	647	745	871	946	1350	1620	1570
43. Guinea		13	58	79	90	90	99	48	37	27	21	19	22	10	16	10	18	2
44. Guinea-Bissau																	1	
45. Ivory Coast		1	7	8	13	17	13	19	20	22	30	48	41	45	54	190	64	55
46. Liberia	170	166	180	219	285	315	291	282	299	295	337	372	381	431	436	700	840	620
47. Mali			3	11	23	8	26	10	8	6	7	6	9	8	4	11	19	14
48. Mauritania	0	0	0	0	0	0	5	1	2	0	1	1	0	2	4	1	4	1
49. Niger			1			2	6	6	8	6	7	10	6	8	9	4	8	7
50. Nigeria	258	343	552	813	1140	1382	1570	1732	1790	1760	1851	2333	3077	4092	4817	7210	11440	11870
51. St. Helena		1									1	1					1	
52. Senegal	0	0	0	0	0	0	23	5	11	17	32	29	26	26	32	21	32	20
53. Sierra Leone	39	60	94	114	147	149	155	179	189	221	241	312	355	463	552	930	1290	880
54. Togo	1	3	17	25	35	39	33	39	25	29	11	15	21	16	22	13	24	7
55. Upper Volta	0	0	0	4	7	4	3	5	3	3	7	5	4	3	4	3	16	8
Subtotal	635	748	161	1532	2040	2318	2540	2723	2793	2850	3133	3875	4762	6063	7007	10550	14445	14129

SOURCE: Compiled by the researcher from Open Door (I.I.E.) Annual Report.

countries and territories in Eastern Africa enrolled in varying numbers in American schools during the post-independence years.

As can be observed from Table 2.4, Ethiopia and Kenya, likewise Tanzania, Uganda, and Zimbabwe, were the larger flow took place during this period. It should be noted, also, that the pattern is similar to the decade preceeding 1960, in that these five countries in the order indicated above, sent the most students, although the volume of students has increased significantly during the post-independence era.

The trend in the middle African states is similar in that the number of countries from which students originated after 1960 has increased, and the volume of the flow has been larger, although only in relative terms.

In Northern Africa the flow increased from each country and territory, with Egypt and Lybia leading the region during the period under review. Perhaps the most noteworthy trend in this region during the post-independence period is the fact that Lybia took over the leadership in the middle of the 1970s. This is undoubtedly due, at least partially, to the cash revenues procured from the sale of oil, with the much-hiked price in the world market and the resultant creation of the organization of Petroleum Exporting countries (OPEC), with its power to set standardized collective price policy for oil.¹¹

¹¹This pattern holds for all the subset countries belonging to the OPEC during a similar period. The following figures substantiate this observation. In the period of five years between 1971/2 and 1976/7, the number of students from these countries has increased by 350 percent. Consequently, the flow of the percentage of students from these countries has also increased in relation to the volume of

In Southern Africa the volume of students increased during the post-independence years, but has remained insignificant in relation to the volume from the other regions.

The situation with respect to Western African countries is interesting in that five out of the seventeen entities sent students to the United States during the decades preceeding 1960, whereas during the succeeding years all sent students regularly, with the exception of Cape Verde Island, Guinea-Bissau, and St. Helena. A close examination of two figures in the table reveals that the volume of students from each English-speaking country increased progressively. Although the Francophone countries joined the rest in sending students, the volume from that sub-set of countries remained low in relation to that from the Anglophone countries.

The situation in Nigeria demands special note in this respect. The volume of the flow from Nigeria increased by 450 percent between 1960 and 1977. It sent the largest number of students from the West African sub-region and, indeed, from the whole continent, the most heavily populated country in Africa and linguistically an Anglo-phone, it is also a member of the OPEC. During the mid-1970s, it sent the second highest number of students to the United States of any of the OPEC member states, ranking next to Iran.¹²

students from global regions studying in the United States. For instance the percentage of students from the OPEC member countries was 12.4 percent, 25.0 percent, 25.6 percent in the academic year of 1971/72, 1975/76, and 1976/77, respectively. See Open Door, op. cit., pp. 16 and 17.

¹²See Open Door, op. cit., pp. 16 and 17.

When the total volume of flow of students originating from the five sub-regions during the post-independence years is compared, Northern Africa, Western Africa, and Eastern Africa sent more, in that order, up to 1963. However, as Table 2.5 reveals, by 1964, Western Africa took away the lead from North Africa by a significant margin and Eastern Africa took second place. The volume of the flow from Western Africa leaped considerably and progressively since then up to the 1977/78 academic year. Middle Africa rated fourth place, and Southern Africa rated fifth, although there was a progressively considerable increase from both of these sub-regions in relation to the proportion of the volume of flow coming in the preceeding year from the same sub-regions.

Flow of African Students According to Lingua
Franca

Lingua franca is another, perhaps a very important, variable which may influence the extent and the quality of the exchange of persons between countries for the purpose of education and culture sharing. In particular this avenue has significant relevance with respect to the African experience, since every country on the continent has been under some kind of major European powers either as a direct colonial territory or as a protectrate, except for Ethiopia which was occupied by Italy for only five years (1936-1941). Of the six major European colonial powers, namely Great Britain, France, Portugal, Belgium, Spain, and Italy, the first two occupied about 37 territorial entities in Africa, mostly as formal colonies or a protectorates. Following were Portugal, Spain, and Italy, in that

TABLE 2.5.--The flow of African students to the United States in percentages by the five sub-regions during the independence years

	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Eastern Africa	24.6	26.2	31.2	32.4	32.0	32.6	32.23	31.6	30.8	28.9	26.7	25.7	23.3	21.9	21.8	22.5	19.4	17.6
Middle Africa	.62	.62	2.97	3.1	3.6	3.6	3.7	3.9	3.8	3.9	3.5	3.1	2.7	2.4	2.5	2.5	2.8	3.0
Northern Africa	38.4	43.8	34.8	31.7	28.4	27.5	23.9	22.9	20.8	23.1	26.1	25.4	23.7	22.6	21.9	15.1	14.0	17.4
Southern Africa	.78	.39	0.19	0.21	0.47	1.43	1.0	1.1	1.1	1.3	1.1	0.9	0.7	0.7	0.32	0.7	0.5	0.4
Western Africa	35.6	29.0	30.8	32.6	35.5	35.9	39.1	40.4	43.5	42.9	42.7	45.0	49.6	52.6	53.5	59.2	63.4	61.7
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: The percentages of students from each of the five African sub-regions in relation to the annual total flow of African students to the United States has been calculated by the researcher from the figures presented in Table 2.4.

order.¹³ Whatever educational enterprises the colonial powers expanded to the Africans, the structural fabrics set up to operate them were to function according to their own (colonial) interests in all aspects, i.e., in curriculum content, mode of instruction, and the level of offerings.¹⁴

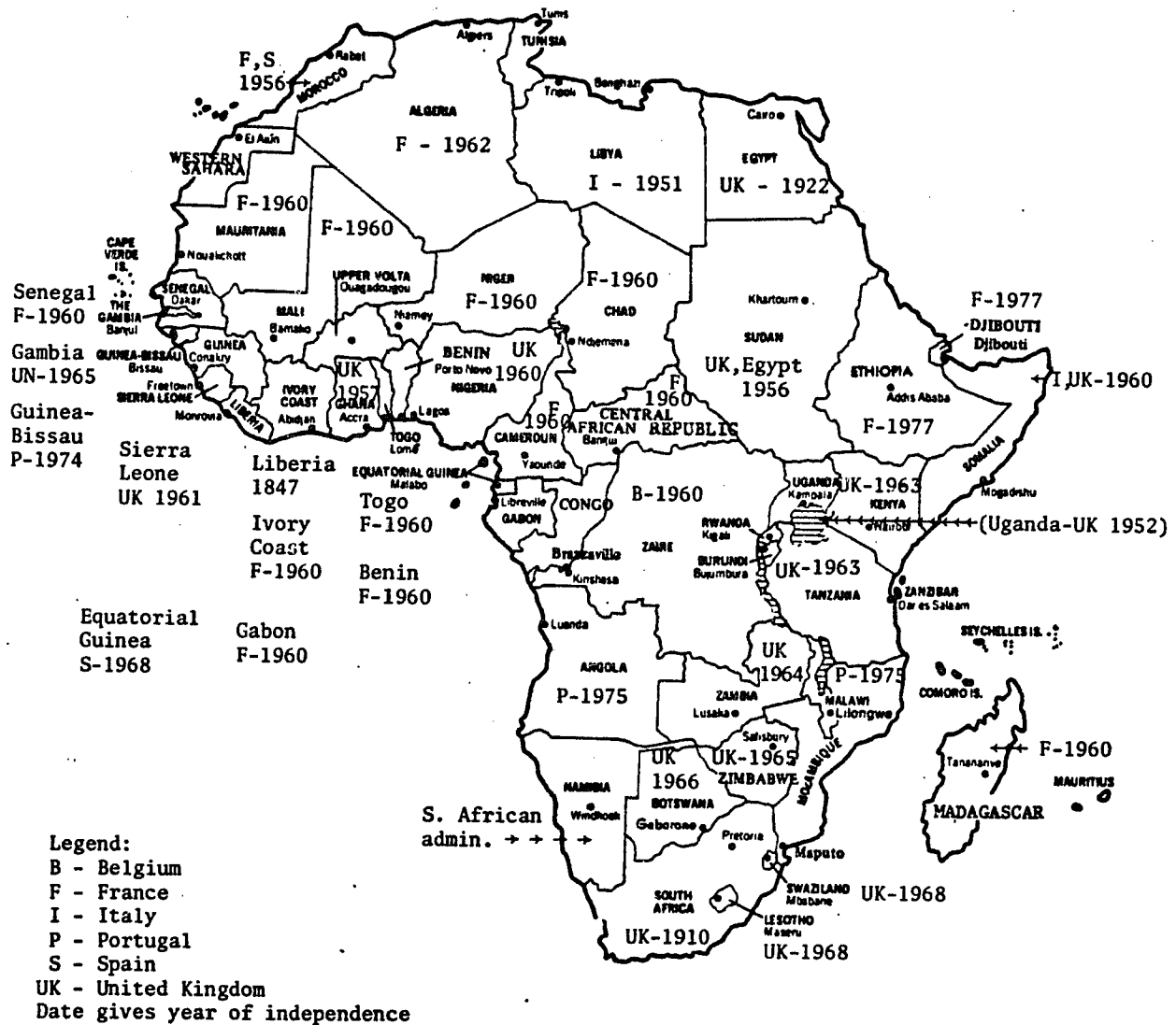
In spite of the well-anchored and fundamental challenges which some liberationists have made to the existing colonial educational structures for their gross neglect of legitimate African problems and interests,¹⁵ there has been no fundamental departures from the colonial structure in the field of education during the post-independence years.¹⁶ To be sure, the post colonial years ushered in changes, i.e., there was indigenization of personnel; there was expansion--more schools; there was even some resemblance of curriculum indigenization, but the alterations did not pass beyond these

¹³See the map on page 73, which shows which African countries and territories were occupied by each European power, and the date of independence.

¹⁴See D. B. Abernethy, The Political Dilemma of Popular Education: An African Case (Stanford, Calif.: Stanford University Press, 1969), pp. 75-91; and J. L. Lewis, ed., Phelps-Stokes Reports on Education in Africa (London: Oxford University Press, 1962).

¹⁵President Julius Nyerere's philosophical discourse in his famous speech, "Education for Self-Reliance," epitomizes the thrust of this challenge. See Julius Nyerere, Education for Self-Reliance (Dar es Salaam: Ministry of Information and Tourism, Information Division, 1967).

¹⁶See John W. Hanson, Imagination and Hallucination in African Education (East Lansing, Mi.: Institute for International Education and African Studies Center, 1965), pp. 12-22.



Map 2.1.--Map of Africa.

superficial gestures.¹⁷ The lack of modification and the reverence for the status quo is even more evident in the area of higher education, since most of the colleges created in Africa during the colonial rule were replicas of the major institutions such as those in London, Paris, and since the Africans who manned them were the processed products, so to speak, of the European Institutions.¹⁸ Thus understandably, educational systems of the independent African states continued close ties with those of their respective "colonial parents" during the aftermath of independence years.

The area of economic and political relations, an important variable, which usually influences cultural and educational cooperation between given independent states, is another area of interfacing in the lives of former colonies and the independent nations. For instance, most of the former British colonies remained in the British Commonwealth and with the exception of Guinea, the French former colonies stayed in the French community of Nations.¹⁹

However, with their achieving the status of nationhood, while preserving the above-discussed linkages with the "parent countries"

¹⁷Ibid., pp. 1-4; 12-14; and 43-46.

¹⁸See J. Ki-Zerbo, "Africanization of Higher Education Curriculum," in Creating the African University: Emerging Issues, ed.: T. Yesufu (Ibadan: Oxford University Press, 1963), pp. 20-26; Kagenda Atwoki, "Makere University: The Crisis of Identity," in Creating the African University, *ibid.*, pp. 91-101.

¹⁹See Ali A. Mazrui, The Political Sociology of the English Language: An African Perspective (The Hague: Mouton Publishers, 1975); Mazrui, The Anglo-African Commonwealth: Political Friction and Cultural Fusion (New York: Pergamon Press, 1967).

institutions and organizations (functional systems), these countries did make new educational cultural and economic linkages with other nations such as the United States, based on their own national best interests.²⁰ It is in this historical context that one has to view the pattern of flow of African students to the United States after 1960.

Thus when analyzing the origins of African students receiving schooling in the United States according to the lingua franca of their home country, three major categories become evident: Anglophone (18 countries); Francophone (22 countries); others (two Portuguese, two Spanish, two Arabic).²¹ Tables 2.6, 2.7, and 2.8 present the volume of the flow of students from the Anglophone countries, Francophone countries, and the others, respectively, for the 1959/60, 1964/65, 1969/70, 1974/75, 1975/76, 1976/77 academic years.

Anglophone Africa

Examination of the data in these three tables shows that Anglophone Africa sent more students to American institutions of higher learning than the other two linguistically categorized subset countries during the post independence years. The volume of the

²⁰ See Immanuel Wallerstein, Africa, the United States, and the World Economy: The Historical Bases of American Policy Toward Africa (New York: Praeger Publishers, 1975), pp. 12-17.

²¹ See Ali A. Mazrui, Africa's International Relations: The Diplomacy of Dependency and Change (Boulder, Co.: Westview Press, 1977), pp. 91-92. On the role of the English and French languages on transforming African culture, see also Mazrui, The Political Sociology of the English Language, op. cit.

TABLE 2.6.--The flow of African students to the United States from Anglophone Africa for the years indicated

Anglophone Africa	1959-60	1964-65	1969-70	1974-75	1975-76	1976-77
1. Nigeria	258	1382	1851	7210	11440	11870
2. Ethiopia ^a	170	266	540	2050	2290	1700
3. Ghana	167	282	539	1350	1620	1570
4. Liberia	170	315	337	700	840	620
5. Kenya	156	774	492	870	1120	1190
6. Tanzania	36	251	215	350	370	320
7. Uganda	29	223	257	240	310	340
8. Sierra Leone	39	149	241	930	880	1290
9. Somalia	11	102	80	39	62	45
10. Sudan	53	180	135	350	360	500
11. Zambia	9	83	47	80	90	210
12. Malawi	2	83	65	58	60	42
13. Zambabwe	16	203	193	260	380	410
14. Swaziland		7	25	32	36	22
15. Botswana		3	22	100	22	18
16. Lesotho	3	12	13	19	32	32
17. Namibia	14	6	18	7	1	5
18. Gambia		13	44	100	100	67
Total	1133	4334	5114	14745	20013	20251
Increase in %		282.5	18.0	188.3	36.1	

SOURCE: Compiled by the researcher from Open Door I.I.E., Annual Report.

NB: The countries in this category use the English language either as the official language and the language of instruction or as the language of instruction only.

^aThe use of English as a medium of instruction in Ethiopian schools commenced with the introduction of modern education during the reign of Menelik II, although French remained the dominant language until World War II. As British influence increased in Ethiopia in the wake of Italy's loss of colonial territories as the result of the defeats suffered in the war, and as Ethiopia began to depend on Great Britain for personnel and ideas for the running of its modern education institutions, the use of the English language became increasingly predominant from the elementary level upward. About 1950 when the U.S. influence replaced that of Great Britain in education and in other spheres as well, the English language naturally continued to be used in schools (although in 1959 Amharic was introduced in teaching grades 1-6) from the elementary to the tertiary level. For more discussion on the language question in Ethiopian education, see Girma Amare, "Government Education in Ethiopia," Ethiopia Observer 4 (1963): 335-341.

TABLE 2.7.--The flow of African students to the United States from Franchophone African countries for the years indicated

Francophone Countries	1959-60	1964-65	1969-70	1974-75	1975-76	1976-77
1. Algeria	27	83	286	240	430	770
2. Morocco	59	85	83	80	110	160
3. Tunisia	30	75	114	80	100	37
4. Senegal	4		32	21	32	20
5. Ivory Coast		17	30	190	64	55
6. Guinea		90	21	10	18	2
7. Niger		2	7	4	8	7
8. Malagasy	1	22	7	9	31	21
9. Upper Volta		4	7	3	16	8
10. Mali		8	7	11	19	14
11. Chad		2	10	2	2	4
12. Central African Republic			5	16	8	4
13. Gabon		3	3	1	2	3
14. Togo	1	39	11	13	24	7
15. Mauritania			1	1	4	1
16. Mauritius	10	9	18	21	29	22
17. Zaire	7	94	91	110	150	210
18. Burundi		6	6	5	5	7
19. Rwanda		2	1	4	3	2
20. Congo, Republic	0	15	30	6	17	4
21. Cameroon	9	94	125	250	430	470
22. Benin, People's Republic	0	8	4	6	15	8
TOTAL	148	658	899	1083	1558	1836
Increase in Percent		344.6	36.6	20.5	43.9	17.8

SOURCE: Compiled by the researcher from Open Door (I.I.E.) Annual Reports.
 NB: The countries in this category were the French language either as the official language and the language of instruction or as the language of instruction only.

TABLE 2.8.--The flow of African students to the United States from other linguistic categories--Arabic, Portuguese, and Spanish

	1959-60	1964-65	1969-70	1974-75	1975-76	1976-77
<u>Arabic</u>						
Egypt	490	1279	1015	980	910	1200
Libya	<u>27</u>	<u>74</u>	<u>286</u>	<u>980</u>	<u>1540</u>	<u>1610</u>
Sub Total	517	1353	1301	1960	2450	2810
<u>Portuguese</u>						
Angola		26	21	10	21	22
Mozambique		9	18	12	29	22
Guinea Bissau		—	—	—	—	—
Sub Total		35	39	22	50	44
<u>Spanish</u>						
Equatorial Guinea						
Spanish Sahara						
TOTAL	517	1388	1340	1980	2500	2854
Increase in Percent		168.5	-3.5	47.9	26.1	14.2

SOURCE: Compiled by the researcher from Open Door, I.I.E., Annual Reports. NB: The countries in this category use the indicated languages either as the official language and language of instruction or as the language of instruction only.

flow was increased from the Anglophone countries between 1960-65, 1965-70, 1970-75, and 1975-77 by 282.5, 18.0, 188.3, 37.3 percent, respectively. The proportion of the volume of the flow of students from this sub-set of countries comprised 63.0, 67.9, 69.5, 82.79, and 81.2 percent, respectively, during the interval years 1959/60, 1964/65, and 1969/70, 1974/75, and 1975/76 and 1976/77. It is interesting to note that the countries comprising Anglophone Africa are geographically located in the sub-Sahara. It is not by pure coincidence that more students from these countries have been making the pilgrimage to the United States even from the beginning of the period when the flow commenced. As the reasons for the pattern of the flow will be elaborated later in this chapter, it will be noted that, with the exception of Somalia and the Sudan, this was also the part of the African continent where the Christian missionary movement thrived.²²

Francophone Africa

As indicated earlier, the volume of the flow from the Franco-African countries, both those north and south of the Sahara, is less than the one from Anglophone Africa. However, the flow from the countries under this category has been progressively increasing during the post-independence years. For instance, the volume of the student flow these countries was increased by 344.6, 36.6, 22.5, 69.5 percent between 1960/65; 1965-70; 1970-75; 1975-76; and 1976/77

²²See Ali A. Mazrui, Africa's International Relations, op. cit., pp. 89-91, on the impact of Christian Missionary movements on African cultural values.

academic years respectively. The volume for flow from this sub-set countries comprised 8.2, 10.3, 12.2, 6.1, 6.5, and 7.5 percent of the total flow from the continent during the 1959-60, 1964-65, 1969-70, 1974-75, 1975-76, and 1976-77 academic years.

As Table 2.8 reveals, the volume of the flow from the countries under the third linguistic category has also increased during the post-independence years. The increase in the volume of the flow from the two North African countries, Egypt and Libya, which are classified under this category for the purpose of convenience has already been noted when analyzing the pattern of the flow under the sub-region sub-heading. The flow of students from the group of sub-countries placed under this category was increased by 168.5, -3.5, 47.9, 26.1, 14.2 percentages between 1960-65, 1965-70, 1970-75, 1975-76, 1976-77 academic years, respectively. The proportion of the flow from this group constituted 28.8, 21.8, 18.2, 11.1, 10.4, and 11.4 percent of the total of African students in the United States during 1959-60, 1964-65, 1969-70, 1974-75, 1975-76, and 1976-77 school years.

It may indeed be a too simplistic and narrow approach to suggest one specific reason as an explanation for the fact that both during pre-independence and post-independence years more students came from Anglophone Africa vis-à-vis the rest. However, an attempt must be made to do so. The influence of Christian values on African aspirations has already been discussed in previous pages.²³ The

²³It is being suggested here that the fact that American missionaries, particularly Protestants, penetrated Anglophone Africa

function of the English as lingua franca, either as the official language, or as the language of instruction, or both, has been suggested as a possible variable in influencing the volume of the flow of students. The data presented in this section for analysis (Tables 2.6, 2.7, 2.8) confirms this proposition. Related to this, as suggested earlier, is the preservation by the independent African nations of the economic, political, and cultural-educational linkages with their former European colonial powers. These linkages might influence the volume of the flow by providing enabling avenues, (e.g., scholarships) for students to go to schools in respective European countries tied to the countries from which the students originate.²⁴

The Number of Countries

As can be seen from Table 2.9, the number of African countries represented in American institutions by their students has increased through the years, particularly after 1960. During the 1915/16 academic year, only three countries were represented. Since 1960, however, the number of African countries sending students to the United States has risen from 28 in 1959/60 to almost about 50 in 1976/77. This represents African students on American campuses from all countries and territories of the continent.

early, and expanded their activities, particularly in the field of education, should not be ignored as a possible reason underlying the fact that American institutions attract more students from Anglophone Africa in relation to students from the other linguistic segments of the continent. (See Rupert Emerson, Africa and United States Policy [Englewood, N.J.: Prentice-Hall, Inc., 1967] pp. 49-51.)

²⁴Ibid., p. 46.

TABLE 2.9.--The number of African countries represented by students in the United States during the academic years preceding independence and post-independence

Academic Year	Number of African Countries Represented in United States Colleges and Universities
1915-16	3
1935-36	12
1945-46	8
1950-51	25
1959-60	28
1964-65	43
1969-70	47
1974-75	52
1975-76	48
1976-77	48

SOURCE: Compiles by researcher from unofficial ambassadors (I.I.E. (1953; Education for One World (I.I.E.) 1954; and Open Door, (I.I.E.), 1959-60 to 1976-77.

TABLE 2.10.--The volume of the flow of African students (percentage)
in relation to international students in the United
States from 1950-51 to 1976-77

Academic Year	Percentage of African Students in Relation to Total International Students
1950-51	3.1
1951-52	3.2
1952-53	2.8
1953-54	3.0
1954-55	
1955-56	
1956-57	3.1
1957-58	2.0
1958-59	3.2
1959-60	3.7
1960-61	4.9
1961-62	6.3
1962-63	7.2
1963-64	7.8
1964-65	7.9
1965-66	7.8
1966-67	6.7
1967-68	5.8
1968-69	5.4
1969-70	5.3
1970-71	5.7
1971-72	6.5
1972-73	7.6
1973-74	9.4
1974-75	11.6
1975-76	13.6
1976-77	12.4

SOURCE: The percentages for African students in the United States in relation to total foreign students was calculated and compiled by the researcher from Open Door, (I.I.E.) for the respective years.

The Volume of the Flow of African Students
in Relation to Global Flow

The volume of African student population constituted about 3 percent of the volume of global students in American higher education during the early 1950s. By 1960-61, however, the picture began to change substantially (see Table 10). By 1964-65 Africans comprised 7.9 percent of the international body of students receiving schooling in the United States, in fact, for six consecutive years, from 1958/59 to 1964/65, the percentage increase of students originating from the African continent was reported to have been greater than that for any other global area.²⁵ By the 1976-77 academic year, the volume of African students in relation to the total population of foreign students has risen to 12.4 percent.

Gender

In this age of consciousness of inequality of access to opportunity for individual development, such as that provided through higher education, based on sex discrimination, this analysis would not be complete without some examination of who comes to the United States for higher education from standpoint of gender.

As the pattern has existed from the start to the present, the overwhelming majority of the students from abroad, particularly from developing countries with exception of the Philippines, have been male.²⁶ The situation with respect to percentage of genders

²⁵Open Door, 1966, op. cit.

²⁶Ibid., p. 6 and 14; 1970, p. 12.

of African students in the United States is no exception. As the data in Table 2.11 shows, the percentage of males has fluctuated between the upper 70s and mid-upper 80s, and the percentage of females has fluctuated proportionately in a ratio inverse to that of males during the years from 1952-53 to 1969-70. The only noticeable increase in the percentages of the female segment, although not significant, was during the four academic years from 1970-71 to 1973-74 when the portion of females jumped up to 14.0, 15.5, 15.0, and 14.7, respectively.

The rather lopsided participation of the male gender in education is not limited to those coming to the United States for higher education. Indeed, the inequality of access to education for women is one of the perennial problems which faces African society. Empirical studies by Weeks,²⁷ Mbilinyi,²⁸ and Wallace,²⁹ among others, certainly reveal that the majority of African women do not have a chance to attend school, and if they do attend, they do not survive even the primary education years, let alone attending high school and college. Scarcity of money in families, and the resultant parental choice to reserve the fees for the boys, cultural value

²⁷S. G. Weeks, "An African School" unpublished, Cambridge, Ma.

²⁸M. Mbilinyi, The Education of Girls in Tanzania (Dares Salaam: Institute of Education, University College, 1969).

²⁹T. Wallace, "Educational Opportunities and the Role of Family Background Factors in Rural Uganda, in Access to Education in East Africa Rural Africana, No. 25, ed.: M. J. Mbilinyi (Fall 1974), Michigan State University, pp. 19-46.

TABLE 2.11.--The distribution of African students in the United States by gender in percentages between the 1952-53 and 1973-74 academic years

Academic Year	Gender Distribution	
	Male Percent	Female Percent
1952-53	87.4	12.6
1953-54	86.6	13.4
1954-55		
1955-56		
1956-57	87.2	12.8
1957-58	86.9	13.1
1958-59	86.5	13.5
1959-60	87.0	13.0
1960-61	87.7	12.3
1961-62	87.9	12.3
1962-63	77.7	12.1
1963-64	88.0	12.0
1964-65	87.1	12.9
1965-66	86.8	13.2
1966-67	87.0	13.0
1967-68	86.2	13.8
1968-69	86.2	13.9
1969-70	86.2	13.8
1970-71	86.0	14.0
1971-72	84.5	15.5
1972-73	85.1	15.0
1973-74	85.3	14.7

SOURCE: The percentages of gender distribution was calculated and compiled by the researcher from figures on foreign students in the United States in Open Door (I.I.E). NB: The Open Door (I.I.E.) publication ceased compiling figures for foreign students in the United States by gender after its 1963-64 publication. Thus no data were available to contrast the African students' enrollment in American institutions by gender for the academic years succeeding 1973-74.

systems which encourage the girls to marry, rather than go to school, and the deep fear that girls will be spoiled or become pregnant if they go to higher schooling, are given as some of the main reasons for this sharp hiatus between the two genders in terms of access to formal education.³⁰

Academic Status of African Students Enrolled in
United States Colleges and Universities

Historically the African students who crossed the Atlantic to study in American schools were undergraduates. At least a few plausible explanations should shed some light as to why this was so. First, the colonial powers who controlled African education gave it a low priority in their planned activities with respect to individual colonial territories. Whatever educational opportunities they expanded were based on the consideration of providing low level and middle manpower level to serve and sustain the lie of colonial administration in their respective territories. In fact, there was no serious consideration regarding African education until missionaries and Africans exerted pressures on the colonial administrations.³¹

³⁰Ibid., p. 31.

³¹See Ralston, op. cit., p. 77; Lewis, op. cit., and Gray L. Cowan, James O'Connell, and David G. Scanton, eds., Education and Nation-Building in Africa (New York: Praeger, 1965). At this juncture it is instructive to note that there was variation in the approach to education of the Africans among the colonial powers. If one attempts to arrange the colonial powers in Africa in terms of the extent of education which they provided to Africans, Great Britain, France, Belgium, Portugal, Spain rank in that order. Please see: Tom Mboya, "African Higher Education; A Challenge to America," Atlantic, 1961, pp. 23-26.

Secondly, then existent African colleges, such as Ibadan and Makerere, which were created toward the end of colonial era, i.e., the 1940s and early 1950s, were fashioned in affiliation with parent country universities, so that those who completed the courses in the extension schools in Africa and who desired to pursue further education and were qualified, could do so in the "parent" country institutions. Thirdly, the early colonial educational systems were meant to induce the sons and daughters of traditional African elites to function within the existing colonial structure³² upon the completion of their education. The American educational system, which was regarded as inferior to the European system was not able to attract students with such sociological characteristics. Thus, by and large, the few Africans who were recorded as pursuing graduate work in the United States during the pre-independence era, could be safely assumed to be those who stayed on after completion of undergraduate study.

However, during the years following 1960 both Americans and Africans, for slightly different motives, have made some well-reasoned efforts to reverse this situation, the preponderance of undergraduates vis-à-vis graduates studying in the United States's colleges and universities.

The year 1960, and the years immediately succeeding, witnessed the mushrooming of universities on the African continent. Almost

³²See Ralston, op. cit., pp. 78-82; Ibrahim Abu-Lughod, "Nationalism in a New Perspective: The African Case," in Patterns of African Development: Five Comparisons, ed.: Herbert J. Spiro (Englewood Cliffs, N.J.: 1967), p. 47.

every nation crowned with independence erected a university, more or less as a symbol of pride in its national sovereignty. It was presumed that these universities would foster and effectively guide the cultural and intellectual life of the people of the respective sovereign state. The African leaders placed unquestionable and unwavering faith in education as a vehicle that unlocks the door to modernization,³³ and leads to fulfilling the goals of economic growth, social justice, indigenization, and national integration.³⁴ Because they were allocating quite sizable budgets from limited treasury resources to higher education, these leaders understandably wanted to incorporate (education) with training of personnel or manpower development in their respective countries. This is distinctly evident in the recommendation evolved at the conference of African states at Addis Ababa in 1961, that

considerable numbers of African individuals should undertake advanced studies overseas and that an expanded supply of expatriate staff be provided for new higher institutions, universities, technical colleges, research institutes and laboratories [in Africa].³⁵

Thus, in general, there has been some effort to reduce the number of African students who go abroad for undergraduate studies, with some exceptions, i.e., those students for whom the home institutions can

³³F. H. Harbison and C. A. Myers, Manpower and Economic Growth (New York: McGraw Hill Book Company, 1964).

³⁴D. K. Adams and R. Bjork, Education in Developing Areas (New York: D. McKay Company, 1969).

³⁵United Nations Economic Commission for Africa (UN/ECA) and UNESCO, Final Report, Conference of African States on the Development of Education in Africa, Addis Ababa, 15-25 May 1961 (Paris: UNESCO, 1961), p. 6.

not provide the desired programs and facilities or the space. This policy posture by African leaders is favored for several reasons. First, sponsoring students abroad, particularly in the United States, is very expensive vis-à-vis educating them at home. Secondly, African education planners wanted to avoid losing the most promising students to foreign institutions, which might endanger programs in their own institutions of higher learning. Thirdly, it is believed that having the undergraduate education abroad prolongs one's sojourn abroad, which could conceivably lead to cultural disconnection from the home society and thereby foster alienation.³⁶

From the host countryside, the following reasons have been suggested as justification for preference for graduate over undergraduate students from foreign countries, particularly from developing countries.

1. [the] foreign graduates have less severe problems in adjusting to the American environment than undergraduates;
2. [the] graduates are most likely to be satisfied with the United States's academic program;
3. [the graduates] generally perform at an acceptable academic level;
4. [the] graduates have more precise educational and professional goals than undergraduates;

³⁶ See the discussion in the report and Hearings of the subcommittee on Africa: Committee on Foreign Affairs, U.S. Congress, House. African Students and Study Programs in the United States House of Representatives 84th Congress, Washington, D.C., 1965; Report of a conference on the Admission and Guidance of African Students held at Howard University (Washington, D.C., March 17-18, 1967) by J. W. Jacqz.

5. they are less concerned than undergraduates with learning about the United States and its culture and institutions and less interested in informing Americans about their own cultures.³⁷

This posture of preference of graduate students over undergraduates for study in the United States, stated by both the host country and African education planners, may well have reduced the number of undergraduates studying in the United States. Such students might otherwise have come if it has not been for such constraints imposed as a means of discouraging them through an international policy during the post-independence era. These effects to reverse the ratio in favor of graduates vis-à-vis undergraduates during the post-1960 period notwithstanding, this policy has not met with discernible success in the case of African students.

The American educational institutions classify all foreign students pursuing academic programs of some magnitude into three classes, namely: "undergraduates," "graduates," and "special students."³⁸ Using this set of classifications, the statistics in Table 2.12 present the academic status of Africans enrolled in

³⁷Barbara Walton, as summarized in "The Foreign Graduate Student: Priorities for Research and Action: A Colloquium held at Wingspread, Racine, Wisconsin, June 16-17, 1970" (New York: College Entrance Examination Board, 1971), p. 9.

³⁸Education for One World (I.I.E.), 1953-54, pp. 9, 10.
NB: Since this was the first time I.I.E. commenced reporting the academic status of foreign students under this classification, it was not possible to include the academic status of African students in the United States for the years before 1953/54.

TABLE 2.12.--The percentages of flow of African students to United States colleges and universities according to academic status

Academic Year	Undergraduate	Graduate	Special	Total
1953-54	54.2	42.3	3.5	932
1954-55	54.2	42.3	3.5	932
1955-56	50.0	46.4	3.6	1064
1956-57	51.7	41.9	6.4	1228
1957-58	49.6	41.6	8.8	1293
1958-59	48.0	43.0	9.0	1442
1959-60	48.2	42.2	9.6	1713
1960-61	47.0	44.0	9.2	2509
1961-62	53.6	39.1	7.3	3602
1962-63	58.2	37.0	4.8	4636
1963-64	56.7	35.0	8.4	5684
1964-65	56.4	36.5	7.1	6378
1965-66	57.7	36.4	6.0	6430
1966-67	55.5	39.1	5.4	6677
1967-68	54.5	41.3	4.3	6358
1968-69	53.0	43.0	4.0	6410
1969-70	49.0	46.1	5.0	6919
1970-71	51.0	46.2	2.7	8175
1971-72	56.0	41.7	2.3	8600
1972-73	57.7	40.2	2.1	10695
1973-74	57.7	40.3	2.1	12009
1974-75				17890
1975-76	15,580	38.0	37.1	24750
1976-77	62.0	38.0		

SOURCE: The data for this table has been calculated from Education for One World, 1954, 1955, Open Door, I.I. E. Publication, 1956-1977.

United States colleges and universities in percentages for the academic years 1953-54 to 1976-77.³⁹

As can be observed from the figures, the larger volume of the flow of African students in the United States during the years preceeding 1960 and after has been undergraduate. There was some fluctuation of the volume, however, in terms of these two groups during the academic years between 1956-57 and 1960/61, when the difference was slightly narrowed as more students were enrolled for graduate studies. But during the following academic years between 1961-62 -- 1968-69 the opposite seems to have taken place in that the number of students registered as graduates dropped slightly in relation to the undergraduate, when the total enrollment of African students in the United States institutions leaped dramatically. A closer examination of the data in the same table reveals that the percentages for the two academic years 1969-70 and 1971-72 appeared to narrow slightly. After 1971/72, however, the difference began to widen again, with the undergraduate enrollment increasing by more than a 5 percent margin to over 25 percent.

Given the earlier discussed policy posture, i.e., the preferences for having graduate students rather than undergraduates in American institutions of higher learning expressed by both American

³⁹Two points need to be made regarding figures of 1974-75 to 1976-77: (1) Open Door publication for 1974-75 did not tabulate the academic status of foreign students in the United States; (2) 1975-76 and 1976-77 issues of the same publication eliminated "special students" as a category and reported the other two, i.e., "undergraduates" and "graduates."

and African educational planners, and given that there was a considerable boom in the number of new institutions of higher learning on the African continent during the post-independence era, the question arises as to why this phenomenon, i.e., the greater volume in the flow of undergraduate students enrollment in United States schools persists. No one can be so authoritative as to state with certainty why this has been so. However, an attempt must be made, even at the risk of making gross generalizations, to suggest some plausible reason for the persistence of this pattern. First, given the lack of adequate access to education in the past, and the current dramatic increase in appetite for modern education demonstrated by Africans, it may not be possible to accommodate all the high school graduates desiring to pursue higher education regardless of how many more colleges and universities are created on the African continent.

Consequently, some segment of the education-hungry new entrants may have to look elsewhere, i.e., abroad, for admission to colleges or universities. Secondly, in some instances, the home institutions in Africa may not offer majors in certain fields, and in other cases, facilities may not be adequate or may not even exist to make it possible to successfully pursue a particular line of study. Thirdly, notwithstanding the other factors just listed, i.e., the unavailability of a particular academic line of study or lack of space or of necessary facilities, some students may find it more difficult to pursue their study at home institutions because of economic problems and the United States environment offers an alternative

route. Indeed, historically it has been the case that the American economy has provided students with the opportunity to work their way through, at least in some part, while studying.⁴⁰ Fourth, the diversity of the American academic system, referred to in Chapter I, may be responsible for this situation. For instance, the mushrooming of the community colleges in the United States as the result of the egalitarian movement in the 1960s,⁴¹ expanded the capacity of the educational system to accommodate more foreign students. These students may adopt the same approach used by many American students who may not have earned the high grades usually necessary for admission to full-fledged four-year college. They enter Community Colleges where such stringent academic standards are not required for entrance, and upon "rehabilitating," so to speak, their academic status (accumulating high grades there), transfer to the four-year colleges. This approach is particularly pertinent to many students from the African continent, because of the fact that all African universities depend on stringent external examinations, a practice which does not exist in the United States for recruiting enrollees from the high school graduate population.⁴² Furthermore, the standard of attainment required of candidates in these screening examinations is set according to the availability of spaces at the institutions of higher

⁴⁰Odenyo, op. cit., p. 11.

⁴¹See Leland L. Medsker and Dale Tillery, Breaking the Access Barriers: A Profile of Two Year Colleges (New York: McGraw-Hill Book Company, 1971).

⁴²See A. Adenyo, op. cit., p. 13.

learning in a given country in a given academic year, rather than measuring academic excellence, per se. This undoubtedly leaves out a sizable population of high school graduates, who could qualify had the institution's economic capacity been large enough to absorb them. However, institutions of higher learning continue to use arduous external examinations which may not even predict the academic potential of each candidate, but which are usually accepted by the academic community for the simple purpose of discriminating among applicants, and hence, legitimizing such a ploy as meritocratic. Fifth, the political conditions of some of the countries during certain periods are so unstable that their educational institutions, particularly those for higher education cannot function regularly and efficiently. In such cases many students who can find the means, flow to outside countries, including the United States, in search of an environment which is peaceful and conducive to pursuing their education.⁴³

Fields of Specialization

Before presenting statistical facts with reference to areas of academic majors selected by Africans studying in the United States, it may be useful to briefly suggest factors which may have a bearing on the selection of particular fields of study by students originating

⁴³An illustrative case representative of such phenomenon is that of Ethiopia. During the late 1960s and early 1970s when student demonstrations opposing the regime of the late Emperor Haile Sellassie I, and the resultant, often violent, confrontations with the security officers became daily occurrences, there was an exodus of high school and college students to American campuses.

from given parts of the global community. Possible factors include the level of technological development of the home society, the objectives of the sponsors with reference to the education of the recipient, the aspirations of the student (career and society-oriented service goals), the political economy of a given society, social values, and the prestige accorded to specialization in certain fields of study vis-à-vis other areas, the type of area or discipline orientation the student has been exposed to in his/her previous education, etc. These factors, independently or in interaction with one another, may indeed influence the sum of the decision balance which produces the ultimate choice of pursuing a particular field vis-à-vis others. Most of the above-listed factors can apply to the Africans studying in the United States during the different periods of the flow.

As has already been discussed in the earlier pages of this chapter,⁴⁴ those who came during the first phase in accordance with the needs of their sponsors, took what these sponsors, the missionaries, wanted them to study--theology and teaching.⁴⁵ Those who matriculated during the second and third phase began diversifying their fields of specialization with the intent of contributing to the social and economic needs of their home society. Another imminent factor that influenced the type of major Africans selected, particularly during the second phase, was the peculiar popular notion with

⁴⁴See page 57.

⁴⁵Ralston, op. cit., pp. 69, 70, 102, 189, 190.

respect to education among the people who had any involvement in educating the Black race, in both the New World and the African Continent. Vocational education based on the Tuskegee experience in the Southern States of the United States was regarded as the prescribed answer. Thus students during the second and third phase were recruited by philanthropic sponsor(s), with the collaboration of the missionaries and colonial authorities, to pursue lines of study such as vocational education (agricultural related areas at college level) in American southern Black schools, such as Tuskegee and Hampton.⁴⁶ The African students, however, keenly aware of the fact that if they were ever to compete with the Europeans for employment, and challenge the social system back home, they must go to some comparable fields and levels of education, began departing from the vocational lines into areas of political science, economics, education, etc. In fact, the determination to pursue this line of selection was so firm that some, in defiance, even risked reprisals as severe as the cutting off of funds by their sponsors.⁴⁷

The years around the 1960s, perhaps up to mid-1960s, comprised the period of rush and crash education in Africa. In the wake of the arrival of independence, there was a sense of urgency to produce enough educated cadre to indigenize the newly decolonized states, by

⁴⁶Ibid., pp. 4-5; K. J. King, Pan-Africanism and Education: A Study of Race Philanthropy and Education in the Southern States of America and East Africa (Oxford: Clarendon Press, 1971), pp. 5-20, 177-211.

⁴⁷Ibid., pp. 212-250; see also Ralston, op. cit., pp. 12-23.

dismounting the European expatriates, at least those in the institutional leadership positions. For those who went anywhere abroad, including the United States, any type of sponsorship from abroad was accepted. Any degree or field of specialization was welcomed. Perhaps the most accurate description of the drama of this period with respect to crash education is the article by Tom Mboya, entitled "African Higher Education: A Challenge to America." Mboya, who was credited for arranging with John F. Kennedy the highly publicized, "East African Students' airlift to the United States for Education," eloquently articulated the urgent need for more educated Africans and the ways America could best contribute to such a cause.⁴⁸

Those who came during late 1960s and from the early 1970s onward, as described earlier during the second phase after independence, were truly the product of the African bureaucracy.⁴⁹ During this period, the major theme seemed to be the aim of integrating higher education including the education of those who went abroad, with the manpower needs and planning for their respective countries. There, too, the debate arose among American educational policy makers, and funding sources, i.e., governmental agencies and foundations, as to whether American educational institutions should take African manpower needs into account in receiving African students. This issue had gained enough pre-eminence among these two parties--Africans and

⁴⁸Tom Mboya, "African Higher Education: A Challenge to America," The Atlantic, July 1961, pp. 23-26.

⁴⁹The term "bureaucracy" is being used here in Weber's conceptual frame of reference.

Americans--that a conference was held at Howard University on March 17-18, 1967, to address this very issue and to engage in dialogue concerning it.⁵⁰ Central to this consideration was the question of what major sponsored students should be allowed to study in the United States. The general consensus forged at the debates during this period was that sponsors and the home countries should invest in those Africans desiring to pursue the "high priority areas" such as physical and life sciences, and technical fields such as engineering etc., which were seen as badly needed for the development of the country.⁵¹

Having briefly discussed the socio-political and economic environment operating with respect to the choice of academic specialization by Africans in American institutions during the different phases of their study in America, it will be useful to present the statistical data indicating the pattern of specialization (Table 2.13). The recorded statistics on this aspect of foreign students' characteristics as it is indicated in Table 2.13 goes back only as far as 1952-53. A careful examination of the data in this table reveal that the greatest number of African students in the United States during the years preceeding 1960 majored in the social sciences, followed by engineering, physical and life sciences, and humanities in that order. Among the other areas medicine, education,

⁵⁰See Jane W. Jacqz, *African Students at U.S. Universities*, op. cit.

⁵¹See also the various testimonies given at the Congressional hearing on African Students in the United States, op. cit.

TABLE 2.13.--Distribution of fields of study of African students for the 1952-3 to 1973-4 academic years

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63
Agriculture	64 (7.7)	75 (7.7)		68 (6.6)	(5.7)	(7.4)	(6.9)	88 (5.3)	141 (5.7)	207 (5.8)	310 (6.8)
Business Administration	68 (8.2)	56 (5.7)		53 (5.1)	(5.2)	(6.0)	(6.9)	138 (8.2)	204 (8.2)	225 (6.3)	(7.6)
Education	54 (6.5)	64 (6.5)		92 (8.9)	(25.2)	(10.5)	(9.0)	150 (9.0)	174 (7.0)	285 (8.2)	288 (6.3)
Engineering	114 (13.8)	138 (14.0)		177 (17.1)	(13.5)	(15.0)	(15.9)	251 (15.0)	366 (14.7)	474 (13.2)	637 (14.0)
Humanities	106 (12.8)	104 (10.5)		128 (12.4)	(10.9)	(14.8)	(15.4)	249 (14.9)	361 (14.5)	533 (14.9)	600 (13.2)
Medical Science	109 (13.2)	130 (13.0)		129 (12.5)	(9.8)	(10.0)	(9.2)	158 (9.4)	211 (8.5)	284 (7.9)	425 (19.3)
Physical and Life Science	158 (19.1)	155 (15.7)		150 (14.5)	(12.4)	(14.1)	(14.4)	265 (15.8)	447 (18.0)	632 (17.6)	800 (17.5)
Social Science	155 (18.7)	266 (26.9)		237 (22.9)	(17.3)	(22.2)	(22.3)	375 (22.4)	580 (23.4)	941 (26.3)	155 (25.3)
TOTALS	828 (100)	989 (100)		1034 (100)	(100)	(100)	(100)	1674	2484 (100)	3581	

TABLE 2.13.--Continued

	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
Agriculture	361 (6.4)	547 (8.5)	550 (8.6)	539 (8.2)	450 (7.1)	388 (6.2)	352 (5.2)	403 (5.2)	362 (4.2)	421 (4.1)	514 (4.7)
Business Administration	450 (7.9)	519 (8.1)	574 (9.0)	645 (9.8)	731 (11.6)	712 (11.3)	835 (12.3)	1139 (14.6)	1507 (17.6)	1868 (18.3)	1965 (17.9)
Education	366 (6.4)	368 (5.8)	353 (5.5)	493 (7.5)	394 (6.2)	434 (6.9)	447 (6.6)	502 (6.4)	479 (5.6)	549 (5.4)	524 (4.8)
Engineering	867 (15.2)	993 (15.5)	977 (15.3)	1012 (15.4)	981 (15.5)	985 (15.7)	1160 (17.1)	1337 (17.1)	1345 (15.7)	1664 (16.3)	1728 (15.8)
Humanities	706 (12.4)	733 (11.5)	769 (12.1)	727 (11.1)	775 (12.3)	857 (13.6)	907 (13.3)	1033 (13.2)	1009 (11.8)	1217 (11.9)	1543 (14.1)
Medical Science	443 (7.8)	459 (7.2)	457 (7.2)	386 (5.9)	395 (6.3)	410 (6.5)	457 (6.6)	603 (7.7)	667 (7.8)	972 (9.5)	1029 (9.4)
Physical and Life Science	1037 (18.2)	1113 (17.4)	1081 (17.0)	1110 (16.9)	1070 (17.0)	1019 (16.2)	1117 (16.4)	1174 (15.0)	1426 (16.6)	1533 (15.0)	1660 (15.2)
Social Science	1462 (25.7)	1666 (26.0)	1612 (25.3)	1666 (25.3)	1513 (24.0)	1479 (23.5)	1520 (22.4)	1617 (20.7)	1783 (20.8)	1996 (19.5)	1993 (18.2)
TOTALS	5692 (100)	6398 (100)	6373 (100)	6578 (100)	6309 (100)	6284 (99.9)	6795 (99.9)	7808 (99.9)	8576 (100.1)	10220 (100)	10956 (100.1)

SOURCE: The percentages of distribution of fields of specialization by Africans has been calculated by the researcher from Open Door (I.I.E.) Annual Report.

agriculture, and business administration were selected as the second group of fields of study, with some periodical fluctuation. During years immediately following 1960, social science was still the favorite field of study, while physical sciences and life sciences lightly surpassed engineering and humanities following it. Medical science, business administration, agriculture, and education were selected in that order. By the 1963-64 school year, a new pattern of preference of majors seemed to be emerging. The previously favored fields, such as social sciences and humanities, still held important places, while the other fields with technocratic orientation such as business administration, physical and life sciences, engineering, and medical sciences were gaining in attractiveness relative to the originally-favored areas. During the same period, the percentage of students specializing in education and agriculture was progressively decreasing.

As can be noted in Table 2.13, the pattern of shifting toward more technocratic fields continued with much sharper indications of preference. Business and management held the highest rank, engineering and natural and life sciences ranked as the next highest favored fields in that order, while social science, which has been the field most favored by Africans in the past, slipped to the fourth highest rank. Humanities, another area which had attracted a sizable number of Africans in the United States in the past, took fifth place. The position of agriculture and education did not change during this period. Medical sciences, which attracted roughly about 11 percent

TABLE 2.14.--Distribution of fields of study of African students for the academic year 1975-76^a

Field of Major	Percentages
Business and Management	20.3
Engineering	16.9
Natural and Life Sciences	15.8
Social Sciences	14.6
Agriculture	5.6
Humanities	5.6
Education	5.6
Health Profession	5.6
Mathematics and Computer Science	2.2
Fine and Applied Arts	2.2
Other	5.6

SOURCE: Open Door (I.I.E.) 1976-77.

^aThe figures in this table could not be in or with Table 2.14 primarily for two technical reasons. First because of the lack of data for 1974-75 and second because starting with 1975-76 academic year, Open Door has changed its format of recording of fields of specialization.

of African students in the United States during the immediate pre-1960 years, and between 7 and 8 percent during the 14 years succeeding 1960 (inclusive), dropped to 5 and 6 percent during 1975-76 survey. In view of the prominence of agriculture in the African economy and the well-recognized urgent need to modernize its modes of production and the fact that the United States possesses some of the most developed and advanced institutions in agricultural academic fields, the tendency of Africans not to select agriculture as a field of specialization is puzzling.

The same could be said with respect to medicine and education, since America also leads in the fields of both medicine and education, and African needs in these two fields are just as urgent. In the case of medicine, however, the stiff entrance competition and the exorbitant costs associated with American medical education may be the constraining factors. As to the relatively low percentage of students specializing in education, the historically low prestige accorded the educational field by the European academic community as an academic area of worth at the university level, and the resultant manning of the educational industry with personnel of nondegree level training, and the capacity of African institutions to produce such cadre in large volume, and just as importantly, the relatively lower cost of offering degree programs in education in African universities, vis-à-vis say agriculture and medicine, can be advanced as possible reasons, albeit conjectural.⁵²

⁵²The pervasive phenomenon of assigning low economic and social prestige to education as a profession in developing countries

Sources of Financial Support

The marginal position of Africans in the United States in securing financial support for their education has been well-established by every major survey.⁵³ In examining the sources of financial support for African students in the United States, it is instructive to look back briefly at the history of those forces which created and shaped the evolution and expansion of the foreign student movement in American higher education, for the experience of African students in this regard falls into the pattern shaped by these forces.

Schulken,⁵⁴ in her excellent exposition examining these forces, delineates three major factors, and demonstrates how each has contributed decisively, albeit not with total exclusiveness to the foreign student movement in American higher education.

The first factor, the one which perhaps had the most enduring impact in its own right in fostering the pilgrimage of foreign

has been well documented by experts in the field. W. Elliott, ed., Education and Training in the Developing Countries (New York: F. A. Praeger, 1966); C. S. Brembeck and J. W. Hanson, eds., Education and the Development of Nations (New York: Holt, Rinehart and Winston, 1966); J. Tibbetts, M. Akeson, and M. Silverman, Teachers in the Developing Nations (Belmont, Calif.: Wadsworth Publishing Company, Inc., 1968) and H. A. Nwagwa, "The Attitude of Nigerian Secondary Students Toward Elementary Teaching As a Career" (Ph.D. dissertation, Columbia University, 1973) are some of the representative works which came to such conclusions.

⁵³See Phelps-Stokes Fund, Survey of African Students, pp. 31-51; Davis, I.I.E. Survey, p. 10.

⁵⁴Emma W. Schulken, "A History of Foreign Students in American Higher Education from Its Colonial Beginnings to the Present" (Ph.D. dissertation, Florida State University, 1968).

students to the United States, and which continued to contribute to the subsequent two factors succeeding it, both in period and prominence in impacting on the process and nature of foreign student education in the United States, was that of Missionary Movement. With its purpose and objective embodied in the colonial colleges, it ignited fires of enthusiasm which dominated most of the nineteenth century, and initiated and preeminently influenced the development of the involvement of American higher education with foreign students in the following three distinct manners:

1. The student-missionary movement which blossomed in the nineteenth century and functions up to the present in various capacities, in addition to expanding the Christian missionary activities abroad, inspired many young people in the countries they served to come to the United States for education, with the explicit idea of returning to their respective homelands for service upon completion.⁵⁵

2. The early missionary involvement in educational issues and in the introduction of some Western technologies established the early contact with foreign lands, particularly the areas now referred to in generic terms as Third World, and even created the conditions for the government to send its youth to the United States for modern education.

⁵⁵Ibid., pp. 33-47; 49.

⁵⁶Ibid., pp. 196, 197.

3. The American Board of Commissioners for Foreign Missions (ABCFM) directed the education of foreign students, both at home and in the United States, as to where they should be educated and what type of schools they should attend (in the United States).⁵⁷

The second major force which played a significant role in facilitating and fostering the education of foreign students in the United States was composed of American philanthropic foundations, which coincidentally emerged about the time foreign missions lost prominence in the international scene, because of the resurgence of nationalism and the resultant desire to control the educational process in the context of national goals. In the absence of United States government policy regarding educational programs and the international interaction resulting from the social and political development, partly due to the historical American isolationist behavior in the areas associated with foreign policy and partly due to the then prevailing attitude of noninterference with education, the foundations extended their resources to sponsor students to come to the United States during the first three decades of the twentieth century.⁵⁸ Of the more than 200 foundations which mushroomed during this period, by 1925 more than 115 were involved in some way in financing the exchange of students and teachers.⁵⁹

⁵⁷Ibid., pp. 197, 198.

⁵⁸Ibid., pp. 87-103.

⁵⁹E. L. Cieslak, The Foreign Student in American Colleges: A Survey and Evaluation of Administrative Problems and Practices (Detroit: Wayne State University Press, 1955), p. 10

The third major force which has impacted the sponsorship and related activities of foreign students in the United States is the eventual, and gradual, involvement of the federal government. As the result of the United States emerging as a major economic and political power during the post-world War II era, the increased interest of developing societies in modern education and technology which was cultivated by missionaries and traders earlier, and the burgeoning constituency among the American public which is pushing for investment in activities which foster the chance of world peace through international programs such as education,⁶⁰ previously shouldered mainly by missionaries, and later by foundations, the federal government finally began assuming, albeit gradually, some financial assistance, for the education of foreigners in American institutions of higher learning.⁶¹

Having briefly presented the three major factors which contributed to the evolution and expansion of the education of foreign students in the United States, it is appropriate to briefly examine how each of them contributed to the education of African students in the United States.

⁶⁰American Council on Public Affairs, Education and the United Nations, A Report of a Joint Commission of the Council for Education in World Citizenship and the London International Assembly (Washington, D.C.: American Council of Public Affairs, 1943), p. v.

⁶¹Cora Dubois, Foreign Students and Higher Education in the United States (Washington, D.C.: American Council on Education, 1956), p. 7; Margaret L. Cormack, "The Wandering Scholar," Odyssey 5 (Autumn 1967): 10.

At the outset, it should be noted the potential benefit of all these three forces to African students was limited in scope, due to the historical negative relationship between United States and the African continent, i.e., slavery, lack of contact due to European complete domination of Africa, America's isolationist tendency, which will be referred to in the succeeding paragraphs.

Missionary Sponsorship to Africans

Although Africa attracted the attention of even the first foreign efforts made by missionaries from the United States as far back as early 1770s,⁶² these activities, and hence the impact of foreign student movement, were limited in the nineteenth century, due to two fundamental reasons. The American slavery question⁶³ and the complete European domination of Africa, even in matters related to Christian church activities. In spite of these factors adversely affecting the American and African relationships, missionaries did become the early contacts between the United States and the African continent,⁶⁴ and by the early 1960s, there were approximately 8,800 and 1,000 protestant and Catholic American missionaries, respectively, in Africa.⁶⁵

⁶²Leonard Woolsey Bacon, A History of American Christianity (New York: The Christian Literature Company, 1897), p. 257.

⁶³See E. W. Schulken, op. cit., p. 70, footnote 2.

⁶⁴For a more detailed history of American missionaries in Africa, read Ralston, op. cit., Chapter II.

⁶⁵Activities of Private United States Organizations in Africa, Hearings before the Subcommittee on Africa of the Committee on Foreign Affairs, House of Representatives, 87th Congress, 1st session,

Utilizing American higher education as one of the avenues in producing personnel for their work, they sent Africans to church-related white schools in the eastern United States, such as Princeton and Oberlin College, which played major roles in educating the new converts from Africa, as well as from other parts of the world.⁶⁶

As Black Americans gained participation in the missionary enterprise in Africa, and their own institutions expanded, i.e., predominantly black seminaries, church-related liberal arts colleges, and industry-oriented schools, mostly in the South, black missionaries recruited Africans to study in these schools and return to the homeland and serve their fellow people.⁶⁷

Philanthropic Foundation Sponsorship to Africans

For the reasons already stated, the benefits to African students in the United States from the generous foundation sponsorship era was somewhat limited; nevertheless these foundations were an important source of support at the very critical period of African student flow to the United States.

Washington: Government Printing Office, p. 133; U.S. Catholic Missionary Personnel Overseas, January 1, 1964 (Washington: Mission Secretariat, August 1965), pp. v, vi, xi.

⁶⁶Ralston, op. cit., pp. 57, 58; Robert S. Fletcher, History of Oberlin College: From Its Foundation Through the Civil War Vol. II (Oberlin: 1943), pp. 527-28, 534.

⁶⁷Ralston, op. cit., 58-68; African Students in the United States: A Guide for Sponsors of Student Exchange Programs with Africa (New York: Committee on Educational Interchange Policy [I.I.E.], 1960), p. 5.

The Phelps-Stokes Fund, organized in 1909 by the will of Miss Caroline Phelps Stokes, largely for the development and education of Blacks in the United States, was extended to educational work in Africa.⁶⁸ Dillard and associates report that during the period from 1921-31, more than 200 African educators were sponsored to study the American educational system.⁶⁹ With the recognition of the financial plight of African students already in the United States pursuing academic work, three-fourths of whom were considered inadequately prepared financially for their continuation in school, the Fund administrators extended some assistance to them.⁷⁰

At this juncture, it is useful to note the characteristics of Africans sponsored by the Fund and the type of school selected for the beneficiaries. King, in his study, entitled Pan-Africanism and Education, has presented what is probably one of the most complete analysis of the work of the Fund in education both in the United States and Africa. He notes that the concern for recruiting Africans of special outlook and channeling them to schools with certain curriculum and of particular intellectual bent, stemmed from two then prevailing concerns with respect to African education. First, the then popular notion among colonial administrators and missionaries, even those from Europe, that Africans need special education vis-à-vis

⁶⁸E. W. Schulken, op. cit., p. 108; K. J. King, op. cit., Chapters I, III, IV, V, and VIII.

⁶⁹J. H. Dillard, et al., Twenty Year Report of the Phelps-Stokes Fund, 1911-1931 (New York: The Fund, 1932), pp. 9-28.

⁷⁰Ibid.

the one provided for whites.⁷¹ The second concern among the same group, with respect to Africans crossing the Atlantic to study in the United States, stemmed from the fear that American experience would expose them to radicalism, and thus equip them to challenge the status quo upon their re-entry.⁷² Dr. Thomas Jesse Jones, a white sociologist who had worked with Black Education in Southern States, and who later assumed the position of leadership for the Fund both in the United States and Africa, found the answer in Tuskegee, a Black Institution with agricultural and vocational education orientation, and other schools like it.⁷³ Tuskegee provided the answer not only to the concerns of educational curriculum, but also to the desire to shelter the Africans' minds from the then contemporary black and white radical intellectuals, for Jones considered it to be "a safe Black Institution."⁷⁴ Of particular fear to Jones was the then emerging school of thought among Black Intellectuals, led by W. E. DuBois, one of the imposing intellectual figures of his time, opposing the Black special education--agricultural-vocational curriculum notion, as advocated by Washington of Tuskegee, on the grounds that such a limited curriculum would perpetuate the Black dependence in the area of leadership.⁷⁵ As one of the eloquent advocates of Pan Africanism

⁷¹King, op. cit., p. 22.

⁷²Ibid.

⁷³Ibid., p. 212.

⁷⁴Ibid., p. 222.

⁷⁵See W. E. DuBois, Souls of Black Folk (New York: The New American Library, 1969), pp. 74-78.

and an articulate critic of white domination both in the United States and Africa, DuBois certainly possessed sufficient distinguished credentials to cause deep concern among the colonialists, the missionaries, and Jones in their schemes to protect the Africans from "radicalism."

The third component of this sheltering the African minds scheme consisted of recruiting what King called, "The Good African," for American education. King defines, the "Good African" as conceptualized under this scheme, as follows:

[He should have] a cooperative attitude in race relations, both in America and Africa; readiness to take advice on his education abroad, and abjure politics, pride in remaining African, with high determination to return to serve his people as soon as possible; a capacity to serve on his return within the existing colonial framework.⁷⁶

The United States Government Financial Support
to African Students in the United States

The African student in the United States did not benefit directly from the federal government's greater involvement in the enterprise of international education until the late 1950s and 1960s, the major reason being the well-documented lack of governmental relations with Africa.

The United States government relations with Africa up to the mid-1950s, in the analytical words of Emerson,⁷⁷ "were slight and

⁷⁶King, op. cit., p. 232; see also King, "African Students in Negro American Colleges: Notes on the Good African," Phylon 31 (Spring 1970): 16-30.

⁷⁷Emerson, op. cit., p. 15.

sporadic. . . ." He further provides the underlying reason:

even then Africa generally brought up the rear among the major areas of the world interest. In relation to Africa, apart from Liberia, no special ties existed such as those which linked the United States to Europe, Latin America, or parts of Asia. The threatened carving up of China excited much interest in the United States, while the almost total colonial take-over of Africa aroused no American response, either of opposition or of participation in the scramble.

The guiding principles were isolation and noninvolvement, and Africa appeared to offer no adequate compensation for breaching them, nor were there any compelling circumstances to force concrete American stands and actions.⁷⁸

Thus the essential elements of United States policy toward Africa during the colonial era, as succinctly summarized by Wallerstien, "(1) [were] the priority of world alliances for the United States, (2) the urging of the wisdom of decolonization on Europe, and (3) the opposing of any political 'radicalism' in Africa."⁷⁹ As the drum of independence swept the continent from coast to coast during the years approaching 1960, the American interest in Africa took on an additional dimension above United States economic and strategic interests--humanitarian.⁸⁰ With John F. Kennedy's 1960 presidential campaign, Africa received prominent space in American political debates,⁸¹ and with his ascendancy to the presidency, the whole

⁷⁸Ibid.

⁷⁹Immanuel Wallerstein, "Africa, the United States, and the World Economy: The Historical Bases of American Policy," in U.S. Policy Toward Africa, ed.: Frederick S. Arkhurst (New York: Praeger Publishers, 1975), p. 16.

⁸⁰See U.S. Congress, Senate Report of Senator Theodore Francis Green on a study mission: Economic Aid and Technical Assistance in Africa, S. Res. 162, 84th Congress, 1957.

⁸¹See Arthur Schlesinger, Jr., A Thousand Days (Boston: Houghton, 1965), p. 554.

American policy toward Africa was overhauled.⁸² Ali Mazrui, a highly respected African political scientist, in analyzing the United States and African relations, points out the missionary factor in American national temperament which manifests itself in ideological crusades--in anti-communism, and also in the "form of 'boy scout' altruism and go all out to help the needy."⁸³ In comparing, in a very general way, the extent of this missionary factor as it relates to United States foreign policy during all presidents, Professor Mazrui credits the John F. Kennedy presidency as standing out "for having put greater emphasis on the boy scout side of that American zeal."⁸⁴

With this positive attitude toward African needs and aspirations, and new policy formulations which were made accordingly, the United States government provided generous financial aid to African students to study in American colleges and universities commencing in the early 1960s.⁸⁵

In fact the period of the 1960s was the era of financial bonanza in terms of securing scholarships for Africans to study abroad. Despite President Kennedy's deemphasizing consideration of the cold war between the West and East in his policy decisions to

⁸²Emerson, op. cit., p. 27.

⁸³Mazrui, op. cit., p. 157.

⁸⁴Ibid.

⁸⁵John W. Masland, Educational Development in Africa: The Role of United States Assistance, Education and World Affairs (New York: Occasional Report No. 4, 1967), p. 33.

respond positively to the needs of Africa (and, of course, to developing countries in general), the competition between the West and East for the minds of young Africans did find its way to the continent.⁸⁶ As a matter of fact, the competition to court Africans to pursue higher education in their respective ideological blocs, became so ostensible that the African students began playing the same cold war games, i.e., being very manipulating, telling each side what the party wanted to hear and asking for more money, at times changing their minds, accepting assistance from one side and switching to the other at the slightest provocation.⁸⁷ Some even withdrew from the institutions where they were pursuing their education in some countries, particularly in the Eastern Bloc, and subsequently scholarships were arranged for them in the West.⁸⁸

During this period the United States government channeled financial assistance to African students in the United States through varied federal agencies such as AID, which are generally manpower-oriented by policy design.⁸⁹ Two scholarship schemes designed to aid students from the Sub-Sahara are worth noting. The African Scholarship Program of American Universities (ASPAU) was a

⁸⁶See David Hapgood, "The Competition for Africa's Students," The Reporter (September 12, 1963): 41-42; see also Emerson, op. cit., pp. 30-31.

⁸⁷Ibid.

⁸⁸See Kenneth L. Baer, "African Students in the East and West: 1959-1966: An Analysis of the Experience and Attitudes," Programs of Eastern African Studies, Occasional Paper #54, Syracuse University, July 1970.

⁸⁹Masland, op. cit., p. 34.

project where universities and colleges, government, foundations, and international agencies became partners in establishing such scholarships for African undergraduate students, linking 32 sub-Saharan African countries, involving 234 colleges and universities between 1960-70.⁹⁰ The second financial scheme, known as the African Graduate Fellowship Program (AFGRAD), aimed at helping African students to pursue graduate studies; 60 United States universities participated in providing more than 150 scholarships for this program.⁹¹

Home Government Sponsorship

This source of support is not usually mentioned, but it is very important, particularly in the case of African students. Consistent with their commitment to the cause of education, African countries not only allocated considerable portions of their respective national budgets to expand education at home, but channeled significant percentages to sponsor the students whom they deemed promising, to receive higher education in the United States. As a matter of fact, as the data in Tables 2.15 and 2.16 to be presented later indicate, African students were sponsored by their own government in far higher proportion than were students from any other area of the world.

⁹⁰ A Report on the African Scholarship Program of American Universities, 1960-1970, p. 1 and 2. This project, however, has been terminated due to AID's decision to withdraw its share of financial contribution to the fund.

⁹¹ Marsland, op. cit., p. 34.

Self-Help

This also is another source of paying one's expenses while studying in the United States. There always have been a significant percentage of foreign students in the United States on this basis. Self-help encompasses several ways of paying for oneself. It includes those who rely on support from home, those who live on previous savings, those who work their way through, and those who contribute a large share from their own pocket (from savings or earnings), but need to have some help from elsewhere to manage. The latter scheme of "self help" has been a legacy associated with African students in the United States. The West African scheme of "self-help" in the 1940s,⁹² and the Mboya Airlift⁹³ program (during the 1960s) for students from East Africa are representative cases of such schemes. Essentially they involved influential Africans collecting funds from individual American citizens, and from African families in each of several countries, to pay for deserving African students to come to study in the United States.⁹⁴

As will be presented in Tables 2.15 and 2.16, the contemporary scene, with respect to sources of financial support for African students in the United States, basically reflects the presence of all of

⁹²See A Survey of African Students in the United States (New York: Phelps-Stokes Fund), op. cit., pp. 22-24.

⁹³See Mansfield I. Smith, "The East African Airlifts of 1959, 1960, and 1961" (Ph.D. dissertation, Syracuse University, 1966).

⁹⁴See African Students in the United States. A Guide for Sponsors, op. cit., pp. 6 and 7.

TABLE 2.15.--Distribution of Africans in the United States by Sponsorship for 1956-57 to 1961-62

	Financial Support					
	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
U. S. Government	128 (11.8)	1141 (11.0)	1283 (10.6)	217 (15.9)	442 (20.4)	700 (21.8)
Foreign Government	337 (31.1)	375 (32.9)	435 (33.9)	386 (28.3)	524 (24.2)	683 (21.3)
Self	285 (26.3)	250 (21.9)	269 (21.0)	253 (18.6)	346 (16.0)	397 (12.4)
Private	277 (25.5)	333 (29.2)	383 (29.9)	449 (32.9)	768 (35.5)	1218 (37.9)
U. S. Government and Private	25 (2.3)	24 (2.1)	17 (1.3)	23 (1.7)	43 (2.0)	128 (3.9)
Freign Government and Private	33 (3.0)	33 (2.9)	43 (3.3)	35 (2.6)	40 (1.9)	86 (2.7)
TOTALS	1085 (100)	1141 (100)	1283 (100)	1363 (100)	2163 (100)	3212 (100)

SOURCE: The percentages of Africans according to their source of financial support has been calculated by the researcher from figures in Open Door, I.I.E., Annual Report.

TABLE 2.16.--Distribution of African Students in the United States according to their source of sponsorship for
1962-3 to 1973-4

	1962-3	1963-4	1964-5	1965-6	1966-7	1967-8	1968-9	1969-70	1970-1	1971-2	1972-3	1973-4
U. S. Government	23.1 981	26.3	29.6	29.9	22.0	20.4	17.1	9.8	8.7	7.0	5.9	4.5
Foreign Government	17.3 733	16.5	15.9	14.7	11.2	9.5	8.7	8.5	8.0	9.1	8.7	10.0
Self	13.5 572	13.0	13.6	14.2	19.6	22.2	24.4	30.8	36.8	39.2	48.2	51.2
U.S. College & University	10.3 436	9.6	9.5	10.5	13.2	17.3	20.9	21.8	26.6	27.1	23.2	20.6
U.S. College or University and Private	10.0 425	8.6	7.5	6.3	8.5	6.8	5.7	2.5	2.0	1.8	1.4	1.8
U.S. College & University & U.S. Government	3.3 139	2.7	2.2	2.6	6.6	5.7	4.4	5.2	2.7	1.5	1.1	0.6
U.S. College or University & Foreign Government	4.5 189	5.3	5.0	6.1	2.3	2.0	3.1	3.5	1.1	1.0	0.8	0.6
Private	14.5 619	14.0	12.7	12.9	14.0	13.6	13.0	14.0	13.5	12.5	10.0	10.4
Private & Foreign Government	1.7 71	2.0	1.9	1.4	1.2	1.2	0.7	2.9	0.7	0.6	0.4	0.2
Private & U.S. Government	1.8 76	2.0	1.9	1.5	1.3	1.4	0.7	1.0	0.5	0.2	1.7	0.2
TOTAL	100 4241	100	100	100	100	100	100	100	100	100	100	100

SOURCE: The percentages of Africans according to their source of financial support has been calculated by the researcher from figures in Open Door (I.I.E.) Annual Report.

these elements, i.e., missionaries, foundations, federal government, foreign governments, individual contributions, and personal funds, albeit contributing in varied capacities. Perhaps this is so because the assumptions and motives of the entities listed above, which were responsible at various periods for the initiation and facilitation of the flow of foreign students, including Africans, to institutions of American higher education, are still in operation.⁹⁵

It is with this brief historical background that the statistical data in Tables 2.15 and 2.16 are presented. The data in these two tables are self-explanatory. However, some observations are in order. As can be observed from both tables, the percentage of African students receiving scholarships from the United States government almost doubled in 1960 (i.e., it rose from 11.8 percent in 1956-57 to 20.4 percent in 1960), and reached a climax of 29.9 percent in 1965-66. The proportions of those sponsored by foreign governments, the largest in the latter half of the 1950s, started declining in 1960. During the same period, however, they remained substantially high up until 1960-61. The portions of those who were self-supporting was the second highest in 1956-57, but declined during the same period. On the other hand, the size of the group sponsored by private organization sources leaped dramatically, while the proportions of those supported by the combination of the United States government and private funding remained somewhat low and steady, with minor intermittent fluctuations between 1955-56 to 1961-62.

⁹⁵ See E. W. Schulken, op. cit., pp. 178-196.

Close examination of the figures in Table 2.16 reveals that the proportions of those receiving financial support of any kind progressively declined between 1963-64 and 1963-64, while the volume of those classified under "self-help" rose significantly. By 1973/74 the percentages of students under "self-help," college-university and United States government, private and foreign government recipients came to be the highest, in that order.

What the trends in Table 2.16 may indicate is that the number of Africans studying in the United States has increased significantly, while the number of financial slots (scholarships) available to Africans has not kept up with the increase of the flow.

Why the United States

The arrival of a foreign student on American soil, or in any country for that matter, for education, is usually the result of converging goals of home country authorities, host country authorities, sponsoring agencies (whether governmental or private), and the individual student involved, although there may be considerable variations with respect to the rank order of such goals and interests between the individual and the other concerned parties.⁹⁶

The goals and interests of home societies, sponsoring nongovernmental agencies, and the host country, in the case of African

⁹⁶Committee on Educational Interchange Policy, The Goals of Student Exchange (New York: Institute of International Education, 1955), p. 45; see also Thomas Marshall, "The Strategy of International Exchange," in Students and Links Between Cultures, ed.: Ingrid Eide (Boston: Scandinavian University Books, 1970) for reasons why home countries send students abroad.

students, have been discussed, at least by the way of reference, in previous sections.⁹⁷ It is thus appropriate to examine briefly the reasons why African students do come to the United States for education, from the students' perspective.

Again one cannot look at this issue without segmenting it into two major historical periods (in this case anyway) namely pre-colonial and post-colonial eras. Since the colonial educational system's primary purpose was to serve and sustain the social, economic, and political structures in the respective territories, African concerns took the peripheries. The elitist educational system, with its constricted curriculum and restricted access to it by a purposely designed recruiting mode (i.e., the arduous external examinations such as Cambridge and London, which provided education for the sons and daughters of the African tradition elites as a reward for their actively sought support for the colonial status quo) further intensified the marginality of the Africans originating outside the elite circle.⁹⁸ Thus in the African students' experience viewed in this context, America provided another avenue for those who were thirsty for modern education.

Related to the point discussed in the foregoing paragraph is the role American education played in inspiring Africans to vigorously attack the colonial system. They found some parallels between

⁹⁷ See Chapter 1, pp. 3, 4, 21-28; Chapter 2, pp. 4, 57-74.

⁹⁸ See Ralston, *op. cit.*, pp. 80, 82-84; Nyerere, *op. cit.*; Fafunwa, *op. cit.*

American and African experience, both in their historical experience, i.e., colonial control, and in the resultant cultural and economic exploitation, and the role of education in unshackling individuals from these conditions. American education stood out as a system that had evolved in rebellion to the old colonial structure, and had evolved directly in response to indigenous problems and aspirations. These sentiments were reflected in the statements made by those who studied in the United States during the colonial years. Okeke stated in his Ph.D. dissertation that the history of American education is a valuable tool, "in the hands of colonials struggling to obtain their freedom from alien rule." He further lashed out with two stinging attacks on colonial education--one for gross neglect of development, and the second for the lack of adaptation. Regarding neglect he says, "The British were in Nigeria for many years before the ascendancy of the USSR, the modernization of Japan, the revival of Turkey." On its lack of adaptation to African needs and aspiration, he observed,

The present Nigerian education is outside-oriented. Its program does not spring from the life of the people. It is imposed upon the peoples by outsiders, most of whom know little of the social life of the people--who find little worthy in the life of the people and therefore, attempt to make them over in their own image. This has created superficiality among the people--the educated Nigerian is living on somebody else's ideas and philosophy of life.⁹⁹

⁹⁹As quoted in Sir Eric Ashby, Universities: British, Indian, African. A Study in the Ecology of Higher Education (London: Hazell Watson and Viney, Ltd., Aylesbury Bucks, 1966), p. 264.

Okogwu, another United States educated African, made an implicit observation about American education, crediting its ability to respond to societal needs, in criticizing the transplantation of colonial education into African societies with no regard for relevance.

He stated:

The ideal of adapting education to local environment is contradicted by the octopus of British-sponsored external examination--one of the strongest charges that could be made against education in Nigeria and one around which all other charges resolve, is that it lacks adaptation.¹⁰⁰

The African apprehension concerning colonial education and the resultant active search for alternative models has been a logical preoccupation during the post-independence era. The African admiration for American education vis-à-vis British, and the underlying reasons for this admiration during this period, have been succinctly encapsulated by Sir Eric Asby, a British scholar with intimate knowledge of the British colonial education, and a prominent participant in educational policy during the transitional period.

As an introduction to his analysis, "It is not difficult to imagine how the American educational system strikes an African whose only experience of western education has been in the English pattern."¹⁰¹ Then he named the following four contributing factors in explaining this phenomenon (paraphrased):

¹⁰⁰Ibid.

¹⁰¹Ibid.

1. In contrast to the notion which the Africans were taught by the British that the only valid road to higher education was attained through successfully passing externally prepared examinations, the American system does not require the passage of such examinations. Furthermore, the fact that these examinations were prepared in England symbolized neo-imperialism to the Africans, and thus such practices provided ammunition with which to attack the British system of education.

2. The Africans discovered that they could be accepted at reputed American universities with "five passes at O-level," whereas if they were to enter a British university, a pass "in at least two subjects at A-level general certificate of education" was required.

3. The English university stresses rigid, narrow specialization. In contrast, the American university emphasizes diversity, and thus offers a variety of courses for higher degrees, including some courses deemed by the former to be inappropriate for higher scholastic inquiries. Yet, the Africans have found such courses more suitable than more traditional ones in tackling some of the developmental problems in their own societies.

4. To the African eye, American education, both at the secondary and tertiary levels, appears more democratic and less stratified, although some stratification exists, than British education. The fact that the Africans see that facilities are provided on the same campus, both for the highest achieving college students to succeed in academic excellence, and conversely for those who wish

to pursue more practical skills, such as poultry extension management, sanitary inspection, etc., contributes to their opinion that the American educational system is nonelitist.¹⁰²

However, there are at least two factors which influence the incoming Africans of the 1970s, as opposed to those who arrived on the United States side of the Atlantic for the purpose of education during the pre-independence period and the early 1960s. First, most African students who enroll in American institutions originate from independent nations, and they do not look to American education to provide an alternative weapon with which to wage war against the European colonial domination, in the political sense anyway, as was the case during the pre-independence era. Today's African students have been processed through the academic and political scene of the 1960s and 1970s, when global anti-American sentiment projecting the United States as a major force of neo-imperialism has heightened,¹⁰³ and when some other ideological forces such as Marxism-Leninism and Maoism have penetrated the African political and intellectual arena as models more appropriate for liberation and social justice.¹⁰⁴ Secondly, unlike the Africans who came during the pre-independence era, contemporary African students in the United States were much more exposed to American education while they were still in Africa,

¹⁰²Ibid., pp. 264 and 265.

¹⁰³Ali A. Mazrui, "The Functions of Anti-Americansim in African Political Development," African Report 14 (January 1969): 11-15.

¹⁰⁴Ibid. See also David B. Ottaway, "Why the Outcry over Cuba's African Role?" The Washington Post 5 January 1978.

due to governmental relationships which created cultural and educational structural relationships, hence made it possible for an invasion of American culture to the roots of African systems through educational and technical assistance, Peace Corps, and of course, the American missionary movement, which provided the first vehicle for interaction.¹⁰⁵

The third major reason why Africans still come to the United States for education is economic, i.e., the opportunity to receive financial support for education from various sources which the American economy provides, including the opportunity to work to cover partial or total expenses of receiving an education.¹⁰⁶

Summary

In this chapter an historical analysis of the flow of African students to colleges and universities in the United States has been presented. Since the commencement of the flow of Africans to the United States in pursuance of modern education, the most significant event relevant to this migration in the search for advanced knowledge was undoubtedly the dawning of African independence, which for the most part, occurred in the early 1960s. Thus the thrust in this analysis has been to compare the pattern of the flow of African students to American institutions of higher learning during the two decades leading to independence, and the post-independence decades.

¹⁰⁵ Ali A. Mazuri, "The Function of Anti-Americanism," op. cit.; Ashby, op. cit., pp. 265 and 266.

¹⁰⁶ See K. D. Luke, "U.S. Influence on East African Education," Overseas 3 (October 1963): 4-9; Odenyo, op. cit., p. 11.

Ten variables were selected as a basis for the examination of the pattern of the flow. The following variables were selected:

(1) the country of origin, (2) the major regions of Africa, (3) the academic year, (4) the language of instruction and the language used in the modern sector (in many instances it is the official language of the state), (5) gender, (6) the number of countries (territories) where the students originated, (7) the volume of the flow of African students in relation to the volume of global students in the United States, (8) fields of specialization, (9) the academic level (i.e., undergraduate and graduate), and (10) sources of sponsorship. With the exception of two variables in the patterns of the flow, namely, gender and academic level (i.e., undergraduate and graduate) a similarity among the variables was a discernible increase of varying degrees, in the volume of Africans arriving at American campuses during the post-independence years, over the two decades immediately prior to 1960. That is, the volume of the flow of Africans to the United States for the purpose of education increased from each country in Africa (i.e., those which sent students to the United States), from each African region, from each African region, from each linguistic region (i.e., lingua franca), in each field of specialization, and in each category of sources of sponsorship during the post-independence years. Furthermore, the number of countries/territories sending students to the United States increased during those years (students came from almost every country / territory). The volume of the flow of African students in relation to global student flow also increased considerably (from 3.1 percent in 1950-51

to 12.4 percent in 1976-77). As was implicitly indicated earlier, the ratio of gender was not significantly altered (i.e., the overwhelming majority of African students who arrived in America during the post-independence years were still male).

Although the desirability of reducing the volume of undergraduate Africans flocking to the United States for education, in contrast to those who came for graduate education, has been debated among the major sponsors, American educational policymakers, and their African counterparts, the majority of the African students crossing the Atlantic for education has remained those who were at the undergraduate level. Possible reasons for the persistence of this pattern of the flow have been suggested.

In the final section of the chapter is a review of some factors which could explain, in general, why the volume of African students coming to the United States has increased during the post-independence year.

CHAPTER III

REVIEW OF LITERATURE

Introduction

The thrust of this research has been to examine the academic experience of African graduate students at a large midwestern public university. In particular, the central emphasis has been to inquire into the dynamics present in the academic environment which the African graduate deals with along the road of his/her academic journey from the date of enrollment to the moment of completion in triumph. Development of academic curriculum required for graduation; the process of acquiring knowledge, i.e., method of teaching; class participation; evaluation; writing; critical factors, i.e., access to relevant data and literature; family obligations; the parity or lack of parity between previous and present education; human interaction in academic-related matters; and the usefulness of current education on re-entry to one's society, were the main academic dimensions selected for this inquiry.

Upon extensive reading of literature relating to the academic experience of foreign students in American higher education, the researcher discerned that the areas studied by the students in the field can justifiably be categorized into the following divisions: academic performance, variables associated with academic achievement,

academic problems and adjustment, satisfaction and relevance. It was deemed useful to handle the literature review for the current inquiry in this manner.

Since African students are one segment of the total global population of students in the United States in pursuit of higher education, and as such share some common experiences in the process of schooling in the host country, and since the literature on African students in the United States is very limited, vis-à-vis literature on students from other geographical areas of the world, it was decided to include a brief review of representative literature on the sub-topics of academic experience listed in the preceding paragraphs relative to the experience of the global students in the United States, and to present literature which focuses on African students, although it is very limited, in more detail.

Literature on the Academic Experience of Global Students in the United States

Academic Achievement

Among foreign students in American institutions of higher learning who came during the prewar era, the overall of their academic performance was not particularly impressive, to say the least. It was the era when students who come to the United States for the purpose of education were motivated by the potential advance of their social position in their respective societies upon return; as the results of foreign education, rather than the intent of contributing to the enhancement of development in their societies was the principal

goal. To put it differently, the major preoccupation of the type of foreign students who were arriving on American campuses at that period was just to receive any degree. They lacked intense commitment to a particular discipline of knowledge, and consequently, many who were academically mediocre came.¹ Understandably, this experience created deep suspicion and concern among some American educators in regard to the scholastic quality of foreign students who enroll in American institutions.²

It is not by coincidence that the studies on the academic experience of foreign students in the United States during the years following this period (i.e., late 1940s, 1950s, and early 1960s) focused on academic achievement.

The post-war era, however, witnessed the arrival of a good many students who were motivated by the desire to achieve academic excellence, so that the knowledge and skills they received in America would contribute to the social and economic betterment of their respective societies, and more students began majoring in more of the technological fields for which the United States institutions are renowned.³

¹Barbara Walton, Foreign Student Exchange in Perspective: Research on Foreign Students in the United States (Washington, D.C.: Department of State Publication, 1968), p. 35.

²See Hans Rosenhoupt, "The New Children's Crusade," Columbia University Forum, Spring 1960, pp. 15-21; George Beebe, The Foreign Student in the New York City Area: Final Report of One Year Study (New York: Greater New York Council of Foreign Students, October 1955).

³Walton, op. cit., p. 35.

As mentioned earlier, several studies addressed the academic performance of foreign students, but only three studies dealing with this aspect of the academic experience of foreign students will be reviewed.

In 1953 the committee on problems of foreign students of the Association of Graduate Schools conducted an examination of foreign student achievement at member schools.⁴ The data were collected from 25 graduate schools on 2,229 students, 85 percent men, and 15 percent women, representing 80 different countries. Of the total number whose academic records were examined, 12 percent were in the physical sciences, 17 percent in the biological sciences, 39 percent in the social sciences, 9 percent in language and literature, 18 percent in engineering, and 5 percent unspecified. The result of the study indicated that the students from the British Commonwealth and Europe did better than those from Latin America. The students from the latter area experienced considerable academic difficulty; 35 percent received grades which resulted in "below average" records.

Hountras's study on factors associated with the academic achievement of graduate students at the University of Michigan from 1947 to 1949 examined the records for the above-indicated period. Of the 587, 257 (43.78 percent) were on probation, mostly those originating from the Near East, Latin America, and the Far East.⁵

⁴Association of Graduate Schools, Report of the Committee on Problems of Foreign Students. Ralph A. Sawyer et al., pp. 1-15. (Mimeographed.)

⁵Panos T. Hountras, "Factors Associated with the Academic Achievement of Foreign Graduate Students at the University of Michigan from 1947 to 1949" (Ph.D. dissertation, University of Michigan, 1955).

Thompson, in examining the academic record of 681 foreign students at Ohio State University, reports that 240 earned degrees at different levels, 30 received the Bachelors, 148 the Masters, and 62 the Doctor of Philosophy, while 203 of the total number were still in the process of earning degrees. As a result of this investigation, he concluded that this rate of success of foreign students was remarkable, notwithstanding the language handicap and the cultural adjustment which they had to make to succeed.⁶ He further noted that at no time has the GPA of the foreign graduate school students recorded below 3.32 (B = 3.00).⁷ As will be shown in the succeeding paragraphs, studies done during later years indicate even better academic performance by foreign students.

Some researchers focused on comparing the academic achievement of foreign students with that of the host country students. Porter's study at the University of Washington supported the view which evolved later that foreign students perform at higher levels than do American students.⁸

Mestenhauser reports that although the foreign student achievement at some institutions has been "of uneven quality," by and large the foreign student performance is better than his American

⁶Ronald B. Thompson, "Academic Records of Foreign Students," College and University 27 (October 1951): 31.

⁷Ibid., p. 33.

⁸Robert D. Porter, "A Personnel of 1105 Foreign Graduate Students at the University of Washington" (Ph.D. dissertation, University of Washington, 1962).

classmates."⁹ Cieslak's study also showed that "the academic performance of foreign students as a group in American colleges and universities compares very favorably with that of American students."¹⁰ Of the 92 institutions which replied to the question with respect to the academic performance of foreign students in comparison to that of their American counterparts, 53 said that it was about the same, 32 indicated that it was "better than the general scholastic average," and 7 reported that it was "below the general scholastic average."¹¹

Factors Associated with the Academic Achievement of Foreign Students

There has been considerable interest in the factors affecting the academic success of foreign students, and consequently, there have been several studies examining the relationships between some of these factors and academic success.

Because of their desire to map out the relationship between the academic achievement of foreign students and a selected set of variables, researchers developed a chart usually referred to as "The Relationship of Academic Achievement with Various Factors." It was first designed by Klinger using six studies on the academic

⁹Joseph A. Mestenhauser, ed., Research in Programs for Students: A Report of the Waldenwoods Seminar (New York:

¹⁰Edward C. Cieslak, The Foreign Student in American Colleges: A Survey and Evaluation of Administrative Problems and Practices (Detroit: Wayne State University Press, 1955), p. 130.

¹¹Ibid.

achievement of foreign students (Putnam, Moore, Hountras, E.L.I., and Warmbrunn).¹²

Telleen expanded this chart. Her chart included the six studies summarized by Klinger and 34 others in her review of literature, in a study in which she was attempting to develop a predictive model of the academic achievement of graduate students from India.¹³ In the interest of saving time and space, the same chart is used here, with some modifications, to capsulize the relationship between foreign students' academic achievement and selected variables. The modification is based on the fact that this chart (the new) contains studies on foreign students only, and includes eight new studies, all on foreign students (see Chart 3.1).

Academic Adjustment

Most of the researchers with this thrust of investigation treat the academic adjustment in conjunction with other areas of adjustment, e.g., personality, etc., of the foreign student, rather than as a specific dimension as such.

Another discernible characteristic of this category of research on foreign students is that the studies usually set out to identify the general problems by the use of some inventory instruments, such as those developed by Porter, "The Michigan International

¹²Roberts B. Klinger, "A Comparison Between American and Foreign Student Groups on Certain Moral Values" (Ph.D. dissertation, The University of Michigan, 1961).

¹³Judy C. Johnson Telleen, "A Predictive Model of the Academic Achievement of Graduate Students from India" (Ph.D. dissertation, The University of Michigan, 1970).

CHART 3.1.--The relationship of academic achievement with various factors

	1951	Koenig	1952	Putman	1953	Moore	1954	Houmtras	1955	Useem	1962	E.L.I.	1963	Clark	1964	Parakan	1965	Salve	1965	Brandwine	1966	Kamel	1966	Hattari	1966	Sugimoto	1966	Hill	1967	Ohuche	1969	Chara- resek- haraiah	1966	Moghrabi	1967	Chil		Halgasz	1972	Thomas	1962	Porter	1970	Ellakany	1975	Ruth	1963	Pavri	1970	Telleen
Age at Date of Admission		*				--									--										--											*			--	*		*	*	*	*					
Admission Status			--			*																		--											*															
Country of origin			--		*	*					*													--																										
G.P.A.																																								*										
Degree Earned Beyond B.A., B.S.			--																																															
Degree Held at Time of Admission							*																			*																								
English Background		*	*	*	*	*					*						*						--	*	*		*		*				*	*	*	*	*	*	*	*	*		--							
Father's Occupation																																																		
Field of Specialization		*	*	*	*	*						--												--				*							*	*	*	*	*	*	*	*	*	*	*	*	*			
Length of Residence at Graduate School							*																			*		*																						
Marital Status					--	*	*								*		*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Number of Years Out of School Before Resume Study				--																																														
Preparation at Institution Prior to Admission	*																				*				*																							*		
Presence of Scholarship		*	*	*	*	*	*						*																																	*	*	*		
Probationary Status				*																																														
Religion																																																		
Sex	--	*	*	*	--	--															*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	--				
Source of Financial Support															*										*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Type of Visa																									*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Undergraduate Academic Standing		*																																																
Undergraduate	--																																																	

*Relationship

--No Relationship

Students Problem Inventory (M.I.S.P.),"¹⁴ and "The Mooney Problem Check List," or by the use of an instrument developed by an interested researcher for a particular study.¹⁵

Again for the interest of brevity, three studies deemed representative of such research will be briefly reviewed.

Vaswani conducted a comprehensive study identifying the problems which both undergraduate and graduate foreign students encountered at the University of California, Berkeley. Writing papers, taking lecture notes, selection of courses, and lack of participation in group activities were some of the academic-related problems reported by the participants.¹⁶

Sharma investigated the adjustment problems experienced by foreign non-European graduate students enrolled in selected universities in the state of North Carolina, and analyzed the relationships between the adjustment problems and some selected variables, i.e., educational and home background, the nature of financial support, the types of academic programs pursued, the student's age upon entering the United States, the length of residence in the United States, institution, the usefulness of student personnel services available

¹⁴See John W. Porter, "The Development of An Inventory to Determine the Problems of Foreign Students" (Ph.D. dissertation, Michigan State University, 1962).

¹⁵Some other studies already discussed under the previous sub-topics, performance, and factors associated with it, however, do touch on other aspects.

¹⁶Hari V. Vaswani, "A Study of the Problems of Foreign Students at the Berkeley Campus of the University of California" (Ph.D. dissertation, University of California at Berkeley, 1950).

to foreign graduate students, and geographical regions from which the student originated.¹⁷

The following is the result of the descriptive analysis when the academic problems were arranged according to degree of severity from maximum to minimum as experienced by the non-European foreign graduate students:

- | | |
|--|------------------|
| 1. Participating in class discussion | Maximum Severity |
| 2. Giving oral reports | |
| 3. Understanding lectures | |
| 4. Taking appropriate courses that satisfy your objectives | |
| 5. Taking notes in class | |
| 6. Preparing written reports | |
| 7. Taking standardized tests like Graduate Record Examination | |
| 8. Writing essay type examinations | |
| 9. Understanding American Educational system | |
| 10. Understanding examination procedures | |
| 11. Competing with American students for grades | |
| 12. Maintaining satisfactory academic record | |
| 13. Understanding textbooks | |
| 14. Taking objective tests | |
| 15. Using library effectively | |
| 16. Getting adequate credit for academic work done outside the United States ¹⁸ | Minimum Severity |

The results also indicated that those areas on top of the list in terms of severity took a longer time to resolve. The following is a list of academic problems arranged according to length of time taken in their resolution from maximum to minimum as experienced by the non-European foreign graduate students:

¹⁷Sarlma Sharma, "A Study to Identify and Analyze Adjustment Problems Experienced by Foreign Non-European Graduate Students Enrolled in Selected Universities in the State of North Carolina" (Ph.D. dissertation, University of North Carolina, 1971).

¹⁸Ibid., p. 109.

1. Giving oral reports	Maximum Time
2. Participating in class discussion	
3. Taking notes in class	
4. Taking appropriate courses that satisfy your objectives	
5. Preparing written reports	
6. Understanding lectures	
7. Writing essay type examinations	
8. Competing with American students for grades	
9. Understanding American education system	
10. Understanding textbooks	
11. Taking standardized tests like Graduate Record Examination, Miller Anology Test, and others	
12. Maintaining satisfactory academic record	
13. Understanding examination procedures	
14. Using library effectively	
15. Taking objective tests	
16. Getting adequate credit for academic work done outside the United States ¹⁹	Minimum Time

The research further revealed that personal adjustment, geographical area of origin, area of specialization, source of financial support, and academic status were factors in the academic adjustment of the foreign non-European graduates.²⁰

Evi, in his investigation of goals and problems of foreign graduates from the Far East at the University of Southern California, attempted to identify problems which these students encountered. The result of the study showed that the participants encountered the most problems in their academic work, Japanese, in particular, more than any other group, and that all groups had difficulty with English. Classroom discussions, term papers, group activities, note taking, comprehension of lecture, examinations, class assignments,

¹⁹Ibid., p. 113.

²⁰Ibid., pp. 149 and 150.

and obtaining superior grades were the other major problems identified as related to English.²¹

Relevance

A few studies have queried the relevance of American academic training for foreign students upon return to their respective societies. The majority of these studies focused on the Agency for International Development (AID), sponsored individuals who studied in the United States, particularly those who came to pursue technical training, usually for a brief period of time.²²

The extensive study by Susskind and Shell, on engineering graduates from the University of California who had returned home to their respective countries, represents a different approach to those referred to above, and is relevant for this review. By the use of extensive surveys Susskind and Shell inquired about the level of usefulness of graduates' engineering training in the United States. More than half of the Masters graduates, and most of those who had completed doctorates, reported high use of technical knowledge acquired. High use of the acquired research skills was reported by about one-third of the Masters graduates and over two-thirds of the doctoral graduates.

²¹Pyung Eui Han, "A Study of Goals and Problems of Foreign Graduate Students from the Far East at the University of Southern California"(Ph.D. dissertation, University of Southern California, 1975).

²²See S. Spaulding et al., The World's Students in the United States: A Review and Evaluation of Research on Foreign Students (New York: Praeger Publishers, 1976), pp. 64-70.

The results further indicated that more than 90 percent of the Ph.D.s, and 67 percent of the M.A.s, from the developing countries thought that their education level was "about right," while 83 percent of the M.A. graduates from developed countries assigned the same rating. About a third of the Master's graduates from developing countries felt that the program was too theoretical. In their suggestions for alterations of the curriculum the respondents noted that graduate engineering education in the United States was more suitable for those planning to work in highly specialized positions in a technologically advanced society than for those returning to work in a developing country.²³

Oqumbi studied "The Perceived Relevance of Foreign Students Training to their Role as Future Change Agents in National Development" at Michigan State University. The sample for his investigation was comprised of graduate students in the following ratios: 250 foreign and 150 American and 45 (unstratified) from the Instructional Development Technology Department. On questions concerning the relevance of the programs, both foreign students and students in the control group rated it above average. The perceived relevance of the content of core courses and teaching style of the instructors were recorded by the sample as average to poor. There was significant difference statistically between the foreigners and Americans on this

²³ Charles Susskind and Lynn Schell, Berkeley--Golden Gates for Foreign Engineers. A Study of the Foreign Students who Received Graduate Engineering Degrees at Berkeley, 1954-65 (Berkeley: Institute of International Studies, University of California, 1967).

point, however, In general, the Americans were more positive about the relevance of their education than were the foreign students.²⁴

Ford also queried the relevance of the curriculum at Michigan State University for foreign students. His sample consisted of South Asian and South East Asian students in College of Education at Michigan State University. He used the case study as the mode of investigation. The results indicated that the participants fell into three categories in terms of adaptation and their perception of the relevance of the education they were pursuing: negative-anxious, those who were openly and highly dissatisfied; negative-accommodating, those who were generally dissatisfied but accepted the conditions as inevitable; positive, those who were satisfied (those who felt the education would be relevant, and those who wanted to remain in the United States). Eleven had serious reservations about the relevance of their current education to the environment in their own society, while only three were openly negative. On the other hand, only three rated their education as having high relevance.²⁵

There is another body of literature addressing the issue of relevance of the academic curriculum offered in American institutions to the foreign students, particularly to those from developing

²⁴Adebayo Ogunbi, "The Perceived Relevance of Foreign Students' Training to Their Role as Future Change Agents in National Development (An Evaluation)" (Ph.D. dissertation, Michigan State University, 1978), pp. 222-227.

²⁵Charles C. Ford, "A Case Study of the Adaptational Patterns of Asian Graduate Students in Education at Michigan State University" (Ph.D. dissertation, Michigan State University, 1969), pp. 80-84.

countries. This category of literature is mainly nonempirical in nature, and critical of the curriculum. The authors advance the ways in which American curriculum should be modified to encompass the interest of international students' needs, especially those from the nonindustrialized nations.

Some writers such as Canter,²⁶ Harari,²⁷ and NAFSA²⁸ address the issue in a general manner, i.e., the curriculum, while others such as Kelly (horticulture),²⁹ Lewis (agricultural economics),³⁰ and Moravcsik (natural sciences)³¹ focus on a specific academic field, and its inappropriateness for the students from developing societies.

²⁶Jacob Canter, "American Higher Education for Students of the Developing World," in Higher Education and the International Flow of Manpower: Implications for Developing World, proceedings of the National Conference, University of Minnesota, Minneapolis April 13-14, 1967, pp. 29-37.

²⁷Maurice Harari, Global Dimensions in U.S. Education: The University (New York: New York Friends Groups, 1972).

²⁸NAFSA, "Report on Meeting Crucial Issues" (Washington, D.C.: June 1973).

²⁹William Kelly, "Horticultural Training of Graduate Students from Developing Countries," paper presented at the 17th International Horticultural Congress, College Park, Maryland, August 1966.

³⁰A. B. Lewis, "Training Foreign Graduate Students in Agricultural Economics," Journal of Farm Economics 49 (August 1967): 684-704.

³¹Michael J. Moravcsik, "Foreign Students in the Natural Sciences: A Growing Challenge," 9 Exchange 9 (Summer 1973): 45-56.

Literature on the Academic Experience
of African Students in the
United States

Academic Performance

The pages of history have recognized the academic success of some of the first African graduates of American institutions. Among the intellectual giants processed through the American educational system were: J. E. K. Aggrey of Ghana, the first African to distinguish himself as a scholar in the United States, who successfully served as educator on both sides of the Atlantic;³² Nhamdi Azikiwe of Nigeria, Aggrey's protege, who became a prominent personality in Afro-American institutions and later became the first president of independent Nigeria;³³ Kwame Nkrumah of Ghana, who later became an articulated spokesman for African socialism both in his literary work and public oratory, and led his country to independence.³⁴

The Phelps-Stokes fund survey was perhaps the first piece of literature which demonstrated the general performance of African students in the United States. The result of the survey revealed that scholastically African students, in spite of the two major problems, among others, i.e., discrimination or segregation and

³²See Edwin Smith, Aggrey of Africa (London: Student Christian Movement, 1929).

³³See K. A. B. Jones-Quarterly, A Life of Azikiwe (Baltimore: 1965).

³⁴Kwame Nkrumah, Ghana: The Autobiography of Kwame Nkrumah (London: 1959).

finance, did quite well. The survey further reported that 25 percent were on Deans' honor rolls, and several had graduated Summa Cum Laude.³⁵

Out of the 175 responses to the questionnaire, 136 recorded their satisfaction with the type of education they were receiving.³⁶

The IIE Survey of the African student, which was conducted a decade later, reported that "nearly four-fifths (79%) of the African, . . . were satisfied with their academic programs. During the interviews, however, 88% in the North and 66% in the South acknowledged that they were having academic difficulties."³⁷ In the report only 6% of the African students said that they were having problems. Overall grade averages as reported by the students were: 7% received "A", 43% "B", 23% "C."³⁸ Of the 31 Academic Advisers who were asked to rate the performance of African students compared to the performance of other students, "39% thought that Africans were doing about the same as other foreign students; 16% said that the Africans were getting better grades, and 22% thought that the Africans were not doing as well as other foreign students."³⁹ The advisers also rated the academic performance of African students in comparison to American students. "Nineteen

³⁵Phelps-Stokes Fund, op. cit., pp. 31-51.

³⁶Ibid.

³⁷IIE Survey of the African Student, op. cit., p. 5.

³⁸Ibid., p. 16.

³⁹Ibid.

percent said that the Africans were doing about the same grade level of work as the Americans, 36% thought they were doing better, and 23% rated Africans as not doing well."⁴⁰

Factors Associated with Academic Achievement
of African Students in the
United States

Hanson's research for his Ph.D. dissertation is the only study to date, as far as this researcher can determine, which dealt with the factors associated with the academic achievement of African students enrolled in American institutions. He used the data gathered by the IIE Survey of 1961, and statistically analyzed it as to which factors were associated with the academic achievement of the Africans of the survey. Among personal factors, marital status and country of origin were found to be related to academic achievement, while sex, age, and length of stay in the United States were not. Among educational factors academic class, field of study, indecision concerning course selection, courses with no future occupational application, difficulty with studies, and self-evaluation of academic success compared to other foreign students, were found to be related to academic achievement. Proficiency in English (i.e., self-assessed) and satisfaction with educational programs in the United States were not found to be significant. The financial factors investigated were found to be unrelated to the African students' academic achievement. Finally, the size and location of the institution were also found to be related to academic achievement.⁴¹

⁴⁰Ibid.

⁴¹Russell G. Hanson, op. cit., pp. 37-119; 121-127.

Two other studies which investigated the factors related to academic achievement were based on two nationalities from West Africa.

Romanus O. Ohuche studied 1882 Nigerian students in the United States during 1966-67 academic year, 1426 undergraduates and 456 graduates. The result of his investigation showed that there was no relationship between academic achievement and previous educational experience (as measured by the grade in the school certificate examination), availability of scholarships, or location where undergraduate education was received (whether in the United States or elsewhere).

The study did indicate, however, that those "undergraduates who completed the equivalent of the higher school certificate examination [in their country] performed better academically than those who did not."⁴²

Clark studied Ghanaian students in the United States. The results showed that those persons with government scholarship performed better academically than those who did not have government scholarship, that those in the last two phases of cultural adjustment were more successful than those in the first two phases,⁴³ and

⁴²Romanus O. Ohucho, "Scholastic Factors Pertaining to the Academic Achievement of Nigerian Students in the United States" (Ph.D. dissertation, Iowa State University, 1967).

⁴³For definitions and classifications of one's adaptive phases in a new culture, see Chapter I, pp. 48-51.

that those attended accredited universities performed better than those who did not.⁴⁴

Experience with the Academic Environment

One study that has focused its inquiry on the academic environment and African students is noteworthy. Wetzel explored the academic needs of African students at the University of Illinois. The sample for his study comprised of 286 individuals, 78 Africans pursuing academic programs at the time, 105 graduates who had returned to their respective countries and 103 faculty who had experience in Africa. He developed an appropriate inventory for each cohort for the gathering of information for the research.⁴⁵ The following are the conclusions of his study:

1. Programs of study pursued by African students at the Urbana-Champaign campus of the University of Illinois are frequently not applicable to African problems or situations. Both African students and the faculty members who advise or teach them are unaware of the resources within the university which can aid in making studies more appropriate. Each group tends to place responsibility for practical application upon the other.
2. African students frequently experience difficulty in adapting to American patterns of daily class assignments and frequent examinations. Learning to use and understand American English is a problem for African students during the early part of their educational sojourn in the United States. Findings of this study suggest that writing and speaking are the skills which precipitate the most difficulty.

⁴⁴Violet E. W. Clark, "Ghanian Students in the United States" (Ph.D. dissertation, The University of Michigan, 1963).

⁴⁵Norman R. Wetzel, "A Study of the Academic Needs of African Students at the University of Illinois" (Ph.D. dissertation, University of Illinois at Urbana-Champaign, 1974).

3. African students reject the idea that they should be given "special" help or consideration which would infer their inferiority to domestic students, but they would like to form closer relationships with American students and faculty members.
4. African students and returnees make up a homogeneous group with regard to their item scores on Inventory Form A. Neither environmental orientation nor length of academic or professional experience was a factor contributing to variability in the item scores of the Africans.
5. Academic orientation was a factor which contributed to variability in certain item scores of the respondent groups.⁴⁶

Summary and Conclusions

The purpose of this chapter was to review literature related to the topic under investigation. More specifically it was to consult the studies and opinions of the other students of the field with reference to the academic experience of African students.

Since African students are a segment of the total of global student population who study in the United States, and since no extensive research has been done on African students, it was deemed useful to include a brief, relevant research review on global students in the United States, so that a more extensive insight could be gained from such an exercise.

Under each of these two major divisions--global students and African students--the literature in five sub-topics, academic performance, factors associated with achievement, academic problems and adjustment, and satisfaction and relevance was reviewed.

⁴⁶ Ibid., pp. 87 and 88.

In general, the review of the literature, both on global students and African students, showed that foreign students do perform as well or even better than host country students, and if they do have difficulty in academic achievement, it is usually during the first phase of their sojourn.⁴⁷

As to factors associated with academic achievement, the result has been mixed and often contradictory, i.e., certain factors seemed to have bearing in some studies while in other cases they did not.⁴⁸

It was noted that the research which had dealt with the area of academic problems and adjustment consisted basically of surveys identifying the occurrence of such problems as a part of the general inventory on foreign students' adjustment problems.

Most of the surveys of this kind done on foreign students, including African students, did indicate overwhelmingly the existence of some kind of academic problems and of difficulties in the way of resolving them.

The literature on foreign students' satisfaction with their education in the United States suggests that foreign students indicated that they were reasonably satisfied. The situation in respect to African students is interesting, in that the Africans who studied in the United States when there was still overt discrimination against

⁴⁷For the definitions and classifications of the adaptive phases, see Chapter 1, pp. 43-45.

⁴⁸See the Chart on page 139.

people with dark skin pigmentation in this country, most of whom studied under harsher economic conditions than those which now prevail, and who experienced acute cultural disparity and a considerable gap between their previous education and current education, still reported that they were satisfied with their educational programs.

The literature on academic relevance to post-training life, back home in their respective societies was reviewed based on the experience of two groups, namely returnee graduates and those were still pursuing academic programs. The review indicated that reports on the returnees was mixed. In general the experience of those who returned to Western Europe was more favorable in terms of the utility of their American education, while the experience of those who went back to the developing societies was less favorable. As to the opinion of those who were still in school when the studies were done, the results showed that they were less than optimistic to somewhat optimistic with respect to the relevance of their education when they would go back to their respective fields of work.

The general characteristics of the literature on alien students in American higher education has been briefly noted previously in the first chapter of this dissertation.⁴⁹ In this chapter some aspects of the nature of the literature, specifically those of the academic experience have been discussed. Scholars who have intimate knowledge of the literature on the experience of

⁴⁹See Chapter, pp. 7-13.

foreign students in the United States during their sojourns, particularly those who have had the assignment of evaluating it, while they are critical of some aspects of the focuses and perspectives of the studies, do not call for a moratorium on research on the experience of foreign students. To the contrary, they have made recommendations for more studies of some specific neglected areas, some new approaches and shifts in emphasis.⁵⁰

This study attempts to incorporate some of such neglected areas and includes some other areas deemed relevant as the result of insights gained in the process of studying the area and personal observations.

In terms of scope, rather than investigating one specific area of academic experience, the intent of the researcher was to incorporate a holistic approach so that academic experience could be examined from a total perspective. The purpose of this research is to go beyond the mere identification of academic problems; rather, it is to focus on how the participants manage and how they view themselves and the learning process on their journey through the academic environment.

⁵⁰ See Margaret L. Cormack, An Evaluation of Research on Educational Exchange, op. cit.

CHAPTER IV

RESEARCH DESIGN AND PROCEDURES

Introduction

The subject of this inquiry was the academic experience of African graduate students at a large Midwestern public university. In the process of delineating the sub-areas of consideration in the proposed investigation, the two popularly researched areas of academic experience in the sojourn experience of foreign students in American higher education were eliminated, namely, the academic performance of foreign students, and the comparison of their academic performance, with that of host students. Two major reasons accounted for this decision.

1. The available literature relating to this topic clearly suggests that foreign students in American colleges and universities do perform well, and do "stack up" to the level of performance by their American counterparts.¹

2. In general these studies have an in-built inclination to view the whole matter from the institutional standpoint. They tend to compare the achievement of foreign students with that of American students, and to measure how the former adjust to the American system (thus implicitly suggesting that the ultimate ideal

¹See Chapter III.

is to produce Americanized scholars), rather than to view the issues from the foreign students' perspective.² Thus the focus for inquiry for this study became an examination of the experience of the participants in the process of their learning adventures, rather than of the end results (grades). This was done out of recognition of the meaningfulness of studying the academic experience of the selected population by examining the process of the total academic journey within the academic environmental context, an approach which has recently been used by American social scientists in studying students' graduate school experience.³

More specifically, the goals of this study can be divided into three major parts. Part one was designed to develop a profile of the African graduate students. In part two, an attempt was made to explore and examine educational experience of African graduate students while they were enrolled in master's and doctoral programs at Michigan State University. Specifically, the examination focused on the following dimensions: (1) the development of individualized academic programs required for graduation; (2) the processes involved in acquiring knowledge (i.e., methods of teaching, class participation); (3) evaluation; (4) research; (5) critical factors, (i.e.,

²See Richard Spencer, "The Academic Performance of Foreign Students In American Colleges and Universities: Comments on the Literature 1960-67, with Bibliography" (Urbana, Ill.: University of Illinois, Office of Instructional Resources, Measurement and Research Division, 1967), p.

³J. Katz and R. T. Hartnett, eds., Scholars in the Making: The Development of Graduate and Professional Students (Cambridge, Ma.: Ballinger Publishing Company, 1976); M. Sanford, Making It in Graduate School (Berkeley, Calif.: Moutaigne Publishing Company, 1976), are examples of such an approach.

access to relevant data literature, family obligations, the parity or disparity between previous and present education); (6) human interaction in academic related matters; and (7) the anticipated usefulness of current education on re-entering one's own society.

The theme(s) outlined in part two, as listed above, were expanded in part three. An attempt was made to examine how the two major variables, namely the academic level, (i.e., masters' and doctoral) and the area of specialization (i.e., social sciences, physical sciences, and life sciences) affected the respondents' experience and their perceptions regarding their graduate level education. For the sake of brevity, this comparison was limited to those responses obtained through the 19 quantitative (rank-order) questions where the students were asked to evaluate the level of their satisfaction with their educational experience in a given sub-area (e.g., research methods of acquiring knowledge) under investigation.⁴

The research questions listed under each section and the sub-topics therein, as presented in Chapter I (pp. 14-18), were designed to guide the study.

After a careful survey of the related literature on the topic, it was determined that this study would not duplicate the efforts of previous researchers. Instead, it is hoped that it will contribute to the literature which relates to the dynamics of processing foreign scholars in American higher education.

⁴For the quantitative questions, please see pp. 174 and 175.

Population

The universe selected for this study was composed of African graduate students enrolled at Michigan State University at the time of the study. Of the 96 African students pursuing graduate studies at the time, a half (47) were randomly selected as the sample.

There were three prime reasons for excluding undergraduate students for consideration in this research project:

1. The undergraduate segment of the African student population enrolled at Michigan State University at the time of the study was relatively small (about 20) when compared with that of the graduate African students (more than 100).

2. The academic orientation in undergraduate programs differs substantially from that of the graduate programs, and the same is true regarding the students involved in these academic activities.

3. Review of the literature indicates that the overwhelming number of studies done on foreign students in the United States lump together undergraduate and graduate students. Thus, the decision to limit the universe of the study was partially based on the objective of this research to investigate the academic experience peculiar to graduate foreign students.

The population was segmented into two basic cohorts according to the level of vertical academic hierarchy.

Cohort I. The first group was composed of those graduate students who were enrolled for a Master's program.

Cohort II. The second cohort was composed of graduate students who were enrolled in a doctoral program.

Initially, at the proposal stage, it was intended that the population would be divided into four cohorts, namely: Cohort I--those who had been enrolled for one to three terms in a Master's program; Cohort II--those who were at the final stage of their Master's program (perhaps the last two terms); Cohort III--students who had been enrolled in a doctoral program for at least two terms; and Cohort IV--those at the final stage of doctoral study. However, since most of the subjects had been in the program more than three terms and did not fit the characteristics outlined for Cohort I and Cohort III, the original plan had to be abandoned and a new grouping devised.

Rationale for segmenting the population in this manner:

1. Since the prime objective of the study was to investigate the academic experience of selected graduate students, it was necessary to include all stages of academic activities--commencing with the first term to the last term.
2. The nature of academic programs and activities entailed in pursuing Master's and doctorate degrees differ substantially from each other in emphasis and intensity.

Categorization of Academic Fields

For the purposes of this research, "academic field of study" included the following categories:

The social sciences referred to sociology, economics, agricultural economics, anthropology, education, home economics, psychology, communications, social work, science education, public administration, business administration, music, history, language, political science, and geography.

The physical sciences included scientific disciplines such as physics, chemistry, mathematics, engineering, geology, and metallurgy.

The life sciences included agriculturally-related disciplines such as agronomy, plant physiology, plant pathology, agricultural botany, animal husbandry, animal nutrition, agricultural engineering, agricultural chemistry, and also some nonagriculturally related disciplines such as botany, zoology, marine biology, and biology. The sample did not include those in medical sciences since there were only two Africans enrolled in those fields and neither of them was on campus during the time of this field work.

Mode of Inquiry

Interview

The choice of method(s) was intimately tied to the nature of the problem under investigation. Since the information needed to answer the inquiries in the proposed study had to be derived from subjects selected for the study, the method which could maximize the level and amount of information had to be considered first.

The interview, one of three widely used techniques of gathering information⁵ in behavioral related research⁶ was chosen as the preferred method of investigation. It obtains higher response rates than mail surveys, has a better chance of decreasing the number of "don't knows" and "no answers," offers the interviewer an opportunity to explain confusing questions and/or items, and enables behavioral observation during questioning.⁷

More specifically, the structured interview was deemed the most useful technique of inquiry for the major section of this study. Taking into consideration an extensive literature review of studies in related areas, and information based on the researcher's own personal experience and observations of the academic experience of foreign students, particularly those who originate from the Third World countries, a comprehensive interview schedule was constructed.⁸ The interview schedule was composed of both closed-ended questions and open-ended questions. The main reason for selecting interviews as a mode of inquiry for the project was the desire to make the collection of the data as thorough and as inclusive as possible. Consistent with that aim, the participants were provided with the

⁵Stephen A. Richardson et al., Interviewing: Its Forms and Functions (New York: Basic Books, Inc., 1965), p. 8.

⁶Max D. Englehart, Methods of Educational Research (Chicago: Rand McNally and Company, 1972), p. 108.

⁷Earl R. Babbie, Survey Research Method (Belmont, Ca.: Wadsworth Publishing Co., 1973), pp. 171-87.

⁸For a copy of the Interview Schedule, please see Appendix C.

opportunity to include all other experiences which the closed-ended questions did not encompass. The open-ended questions were included for the purpose of probing more deeply into selected aspects of the study.

Questionnaire

In addition to the interview mode of inquiry, a self-administered questionnaire⁹ was developed to collect information pertinent to the personal background of each respondent. This tool helped to limit the time the researcher had to spend in the physical presence of each respondent, so that more time could be allocated to data collection pertaining to the central thrust of the research. Although the self-administered questionnaire has low fidelity as a research tool, it is assumed that its use for gathering data on the subject's background was justified.

Development of Instruments

The two instruments employed in conducting this research were the result of numerous hours of work by many individuals, and their valuable contributions in deleting the irrelevant and inappropriate materials, and in adding pertinent material in the refining process.

When the focus of the study was still at the developmental stage, a rough outline of the sub-topics (divisions) to be included for the inquiry was reviewed by Dr. John Useem of the Department of Sociology, a pioneer scholar in the area of the dynamics involved in

⁹For a copy of the Questionnaire, please see Appendix B.

cultural exchange. He examined each area and the research questions raised, and made several useful suggestions as to what areas should be included, and where the central thrust should be focused.

Then a series of questions were constructed around the research questions developed under each sub-topic. Miss Norma Niles, a native of Barbados, and a candidate in two Ph.D. programs, sociolinguistics at the University of Michigan, and International and comparative education at Michigan State University, read each question and critiqued the clarity of thought, and the appropriateness of each question for the topic under investigation. After the questions were revised as the result of this interaction, the two instruments were presented to Dr. Walter F. Johnson, the director of the study, for his review. He spent numerous hours examining the two instruments and offered suggestions which were adopted. Following this revision, Dr. Useem again read the questions and made valuable suggestions.

They were then reviewed by Miss Diana Zirnosky, one of the research consultants in the Educational Research Center of College of Education, to ensure that each question in the two instruments was consistent with current assumptions held in educational research. After the questions were rewritten, incorporating her valuable suggestions, they were reviewed by Dr. Johnson once again before beginning pretesting.¹⁰

¹⁰For the copies, please see Appendix B and C.

Pretesting

Both instruments were pretested on three graduate students from the Middle East and Asia. Since the study was more of an in-depth inquiry than a survey, with a thrust toward measuring a given phenomenon quantitatively, it was deemed that a small number of participants for the pilot study would serve the purpose.

The participants for this exercise (the pretest) were selected on the basis of four major criteria: (1) that they be foreign graduates from developing countries; (2) that the group include persons engaged in graduate programs representing three major broadly categorized academic fields of specialization (i.e., physical and hard sciences, social sciences and life science); (3) that they represent different socio-economic backgrounds in their societies; and (4) that both academic levels of graduate work (master's and doctoral) be reflected in the composition of the participants.

The following graduate students were deemed fitting of these four criteria, and were thus elected: a Jordanian, a Ph.D. candidate in higher education with a cognate in sociology, originally from the lower class, but having moved into the middle class; a Palestinian refugee who was working for his Ph.D. in microbiology; and a Pakistan, M.S.C. candidate in Electrical Engineering, who came from a prominent and education-oriented family of his society.

The Length of the Instruments

Undoubtedly, both instruments at first appearance, look rather lengthy. A comment or two is appropriate as to why such length was deemed necessary. First, since the nature of the sample was heterogeneous in terms of area of academic specialization (i.e., social sciences, physical and life sciences) and the academic level (i.e., master's and doctoral), and other areas as well, it was imperative that a great number of contingency questions be included in this interview schedule in order to reach a substantial number of segments of the respondents which, of course, increased the length. However, when the nature and the role of those questions which precede the contingent questions are examined, in either the interviews or the questionnaire, the inevitability of lengthy instruments in such cases can be appreciated. Briefly stated, the purpose of those questions preceding the contingent question is not to find answers in the major questions raised in the research in the strictest sense, but rather to prepare the way for the questions to follow which are "relevant only to a subset of the respondents."¹¹

Secondly, as indicated previously,¹² it was the intent of this researcher, in terms of scope, to incorporate a holistic approach, rather than to limit the study to one dimension of the students' educational experience in graduate school. It was in this context that the seven major areas related to the academic experience

¹¹See E. R. Rabbie, op. cit., pp. 146-147.

¹²See Chapter I, p. 14-18, and Chapter III, p. 155.

of the student were selected for this research. Inevitably, this decision created the necessity to construct sufficient questions to cover each sub-topic, in order to find answers to the major research questions raised under each sub-topic in the first chapter.¹³

Thirdly, consistent with the projection stated in the preceding paragraphs, the pre-test experience proved the necessity of including sufficient questions to gain enough information to accomplish the objectives that the study was designed to achieve. That is, in the process of the pilot study, it was felt that more questions were needed in some areas, in order to provide a stronger basis for discussion and analysis in formulating answers to the research questions stated under given sub-areas selected for the study.

Finally, a statement or two particularly relevant to the length of the questionnaire utilized in gathering personal data, is appropriate since it is longer than most used to collect demographic information when writing theses or dissertations. Two reasons can be advanced for this case.

1. To the extent that the educational and cultural background of African graduate students is substantially different from those of their American counterparts, any attempt to explore this realm of African graduate students must take this fact into consideration, and must include those questions which have more pertinence to their background and experience. Related to this is the fact, which should

¹³See Chapter I, pp. 14-18.

not be ignored, that most African graduate students will have crossed more cultural and educational boundaries by the time they reach graduate school in their academic journey, than most Americans perse, and consequently this reality makes imperative the inclusion of more relevant questions to cover their background meaningfully.

2. It is intended and hoped that the personal background data obtained through the questionnaire can be used for the purpose of developing a detailed profile of Africans who manage to climb to the pinnacle of the academic pyramid, namely, the pursuit of graduate education in one of the large, reputable, public universities in the United States, such as Michigan State University.

Procedures for Collecting the Data

Preliminary Arrangements

The preliminary procedure for gathering the data for this study entailed the following arrangements:

1. Due to University policy with respect to releasing confidential information regarding its students for the purpose of research (a requirement to secure written authorization for the appropriate university authority in such matters), a letter of request seeking permission for the release of such information was submitted to Dr. Paul Dressel, Chairperson of the Committee for the release of confidential information.

2. After considering the request, Dr. Dressel wrote a memorandum to the University offices where such information is stored.

3. As the result of the memorandum, a list containing the names, addresses, and telephone number of all African graduate students from the south of the Sahara, with the exclusion of those from the Republic of South Africa, was obtained.

4. Forty-seven names, 50 percent of the total population of African graduate students at Michigan State University at the time of the study, were randomly selected by the aid of random table from the list of names obtained.

5. Each African graduate student selected from this geographical area was contacted by telephone to set up an interview at his/her convenience. In some cases, the introduction of the researcher and the research project, and the appointment with the prospective participants was made by meeting with them at their work/study places, or meeting them anywhere on the campus.

Anonymity

A study of this nature is certain to create some apprehension regarding confidentiality among those chosen to participate in this research project. To ensure complete anonymity, each subject was advised not to write his/her name on the self-administered personal data questionnaire. Subjects were assured that names would not appear on the interview schedule either.

Field Work Setting

The field work was carried out during the Summer and Fall of 1978. Most of the data gathering activities were done in the participants' work or study offices. Two participants offered to come

to Owen Graduate Center and the interviews for them were done in one of the small study lounges.

With regard to actually gathering the data, it was originally planned to send out the questionnaire designed to extract personal data from each sample member, accompanied by a letter of introduction co-signed by the thesis director and the researcher, and then to follow up by a phone call to each participant to arrange a convenient time for an interview session. However, this strategy had to be altered, due to circumstances which arose in the meantime. It was learned that there were two other dissertation studies using foreign students on the University campus in progress at the time. Several African graduate students at whom this project was aimed had been selected to participate in these studies by responding to mailed questionnaires. In view of the general attitude of African students toward mailed questionnaires based on the past experience of other researchers, and of the concern that introducing the third study in this manner (i.e., by mailing them the questionnaire) while the other two similar studies were being circulated among them would evoke negative reactions, it was deemed better to introduce the whole project to the participants when meeting with them face to face for the interview, rather than sending out the questionnaire (the first instrument) with the letter of introduction as initially had been planned.¹⁴ Thus, during the meeting with each sample member, the letter of introduction was presented to each, so that he/she could

¹⁴Please see Appendix A.

see what procedures were being utilized, the purpose of study, and additional details. Furthermore, verbal explanations of these matters were offered during the same occasions.

Two methods were employed to carry out the interview. First, a copy of the interview schedule was placed in the hands of each participant, so that he/she could read the questions for his/her self. In the case of "closed" questions, respondents were instructed to answer on the spaces provided for such a purpose in front of the questions in the schedule. This was done to avoid using cards, another method which is often utilized for interviews, in an effort to minimize confusion and to avoid the waste of time usually incurred in the use of cards. However, the participants were provided the opportunity to add information, to challenge questions, or to express any other idea(s) which the question(s) in one way or another failed to encompass, and with their permission, this discussion was recorded. The second aspect entailed the participants responding to the open-ended questions, and the researcher applying a probing process to obtain more complete information whenever it was deemed necessary. With the permission of the participants, all the responses for the open-ended questions of the interviews were recorded.

After the completion of the interview, the personal data questionnaire--the second instrument for the project--was presented to each sample member with two options. The respondent could fill it out while the researcher was there so that he could take it with him, or the questionnaire could be left with the respondents, so that he/she could fill it out and sent it to the researcher in a

stamped, self-addressed envelope. However, the overwhelming majority preferred the former. The actual interview took two to five hours. The questionnaire took 10 minutes only.

Reception and Reaction

The study was well-received by the participants in general. Forty-five (96 percent) of the 47 randomly-selected sample participated. The participants were generally polite, cooperative, thoughtful, and fair. The reasons given for such a favorable reception of the study can be categorized into three, namely: (1) the mode of inquiry was the interview, which they felt provided more opportunity for contextual explanations with respect to the items of information sought than a mailed-out questionnaire would have done; (2) the study was comprehensive, (i.e., included most areas of their concern, and "the questions went to the heart of the issue" as some aptly stated); (3) the researcher was a fellow African graduate student, a factor which helped in building trust and appreciation of his interest in their academic experience in "a strange environment." As a matter of fact, several participants suggested that the study should be expanded to other institutions in the United States in order to include a larger representation of African graduate students' academic experiences, and should be published. Many thought the publication of such research would serve as a means of presenting the experiences and views of African graduate students to American professors, institutional administrators, African educational planners, and prospective African students who cross the Atlantic to pursue higher education in

this land. Some went out of their way to make suggestions as to what should be incorporated into such a future study.

On the negative side, some (albeit a very small minority) felt the interview was too long. One participant would not provide personal background information as sought through the questionnaire. Assurances by the researcher that the information solicited would be absolutely confidential, and various methods of persuasion employed to try to convince the respondent of the importance of incorporating background information into the responses he had provided on the interview, so that it could be included in the study, were to no avail. He cited a variety of reasons for his unwillingness to provide the information, including cultural taboos, political considerations, and the lack of necessity of such data for the main study, each time giving a different set of reasons. It was not possible to reach two sample members, therefore, they were not included in the study as intended.

Methods of Analysis

The Need to Use Different Modes of Analysis for Various Sets of Questions

Since the techniques of investigation (i.e., the types of questions) utilized in this research were varied in nature, as previously indicated, it was necessary to apply an appropriate mode of analysis for each group of questions.

TABLE 4.1.--The list of the interview schedule questions under the appropriate sub-topic by their cardinal number and nature

Closed-Ended		Quantitative (Rank-Order)	Open-Ended
I. The Development of Academic Curriculum Required for Graduation			
16	1		2
17	4		3
19	5		8
20	6		10
	7	←————→ 7	
	9		
	11	11	
II. The Process of Acquiring Knowledge			
	12	←————→ 12	
	13		
	14		
	15	←————→ 15	
	18	←————→ 18	
22	21	←————→ 21	21
22	23	←————→ 24	24
25			
26			
27			
28			
III. Evaluation			
30	37	←————→ 37	32
31	38	←————→ 38	
33	39	←————→ 39	35
34	40	←————→ 40	
	41	←————→ 41	36
IV. Research			
42	50	49 ←————→ 49	
43	52	54 ←————→ 54	46a
44			
45			48b
46a			51
47			53
48a			

TABLE 4.1.--Continued

Closed-Ended			Quantitative (Rank-Order)	Open-Ended
V. Critical Factors				
65	55	70	←————→ 70	61
	56			
66	57			67
	58			
68	59			71
	60			
	62			72
	63			
	64			
VI. Human Interaction in Academically Related Matters				
86	78	74	←————→ 74	73
	80	76	←————→ 76	75
87	81	82	←————→ 82	77
	85	89	←————→ 89	79
				83
				84
119	98	91		88
120	99	92		90
121	100	93		102
122	101	94		104
123	103	95		126
124	105	96		
125	106	97		
	107			
	108			
	109			
	110			
	111			
	112			
	113			
	114			
	116			
	117			
	118			
VII. The Usefulness of the Education				
		130	←————→ 130	131

Analysis of the Questionnaire Data

The responses to the 43 closed-ended questions designed for collecting personal background data were coded and transferred to Fortain Coding Form by the researcher, and then card-punched and double-checked by a professional computer analyst in the Michigan State University computer center. Then frequencies and percentages were computed for the responses to the above-indicated group questions.

Analysis of the Interview Data

The interviewed schedule questions were classified into three types, and three different methods of analysis were utilized depending on these classifications.

1. The closed-ended question.--The 101 closed-ended questions on the interview schedule were analyzed in the same manner utilized for those questions in the questionnaire data as described in the previous section.¹⁵ The raw scores were computed in addition to the percentages, in the consideration of the fact that the sample used for the project was so small, and when segmented into the selected various variables, as listed previously in this chapter, the number of subjects responding to a given question or a part thereof, was usually even smaller, and presenting the results in percentages could only be misleading.

¹⁵For the classifications of the questions in the Interview Schedule, see Table 4.1, pp. 174 and 175.

2. The quantitative questions.¹⁶--Within the closed-ended questions, there were some 19 quantitative (rank-order) questions included under each sub-area¹⁷ selected for the investigation. A two-way analysis of variance (ANOVA)--the nested model--was used to determine if there were significant differences, if any, in the responses of the sample to these questions when they were segmented according to their academic level (i.e., master's and doctorate) and fields of specialization (i.e., social sciences, physical sciences, and life sciences).¹⁸ The nested model was preferred because it has the capacity to take into account the occurrence of empty cells, as was the case with respect to physical sciences, master's sample members, in the computation of the effects of several independent variables on given dependent variables. Stated differently, it (the model) treats one of the independent variables as if its levels were nested within the levels of the other independent variables.¹⁹ In this case the area of specialization is nested in with the academic level.²⁰ Before leaving this section, a statement of caution might

¹⁶For the listings of these questions, please see Table 4.1, p. 174, 175.

¹⁷Please see Appendix C.

¹⁸For the broad categorization (i.e., as to which disciplines were included in each of these three areas of specialization), please see Chapter IV, pp. 160 and 161.

¹⁹H. J. Teitelbaum, et al., "Education 969B Notes, College of Education, Michigan State University, Winter 1979, p. 100 (mimeographed); D. T. Campbell and J. C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally College Publishing Company, 1963), pp. 29-31.

²⁰For this practical computation the statistical package for the Social Sciences (SPSS) Supplement No. 6-83, put out by Computer-Laboratory Bureau was used.

be useful regarding the results of the analysis of these questions. Given the nature of this study (i.e., exploratory and qualitative) and the smallness of the size of the sample, the accuracy of these statistical results and their interpretations must be regarded as tentative.

3. The open-ended questions.--The response to the 32 open-ended questions were transcribed verbatim from the tapes to regular writing paper by hand by the researcher. After reading the transcribed narration of the responses to each question at a time, the researcher categorized the responses according to major patterns of focal points which evolved. In order to establish a degree of consistency in classifying the responses to the open-ended interview questions, a panel of qualified judges was selected to participate in the categorization process. Two judges, Crissy Katerengga of Uganda, a Ph.D. candidate in continuing education, and Godfrey Tibuah-Ansah of Ghana, a Ph.D. candidate in higher education, were recruited to assist in this endeavor. Each judge was supplied with a copy of the transcribed interview narration. Each was specifically instructed to read the randomly selected subject responses, to categorize them according to the main, common themes of emphasis (concerns) or areas, and to tally them in the manner of such of classifications. The same procedure was followed by the researcher himself, and the results compared with those done by the two judges. This process involved the responses of 25 percent (11) of the sample.

Upon determining the reasonable comparability (similarities) of the results of categorization, it was decided that the researcher

should proceed with the categorization of the responses of the remaining data. The data for this section have been tabulated in frequencies and percentages.²¹ Whenever it was felt appropriate and illustrative in illuminating some facet(s) of a given phenomenon or issue under examination, selected comment(s) from the responses have been incorporated in the descriptive analysis.

²¹For the compilation of African graduate students' responses to the open-ended interview questions, please see Appendix D.

CHAPTER V

A PROFILE OF AFRICAN GRADUATE STUDENTS AT MICHIGAN STATE UNIVERSITY

Introduction

Before delving into an examination of the academic experience of African graduate students at a big, midwestern university, it may be useful to take a look backward and describe who these Africans are. In this chapter an attempt will be made to do just that by using information from the responses elicited from the Personal Background Information Questionnaire.¹ The provision of such information serves three related purposes: First, it is aimed at developing a profile of African graduate students at Michigan State University who participated in the current study. Since the sample of this project constituted one-half of the total African graduate student population, and since the participants were randomly selected, it can be safely assumed that the profile description which follows accurately reflects the background of the African graduate student population at Michigan State University at the time of the study. Secondly, by providing an overview of the backgrounds, it is hoped that the reader will keep in mind that the responses which will be analyzed in Chapter IV will be influenced by the students' social and educational

¹Please see Appendix B.

backgrounds and by their past work experience, and that the results should be viewed in that light. Thirdly, the two sets of variables, namely, the student's academic level (i.e., master's, doctoral) and his/her area of specialization (i.e., social sciences)² which will be used to analyze the 19 quantitative questions to see if any of these variables will have significant differences on the responses, will be presented along with other factors.

Personal Characteristics

The data relative to the personal characteristics of African graduate students at Michigan State University has been presented in Table 5.1.

Gender

As observed in the analysis of the history of flow of African students to American colleges and universities, the staggering preponderance of the male ratio over female was evident through the years.³ The situation with respect to African graduate students at Michigan State University at the time of the study, relative to gender ratio, was no exception. In this population, 38 (84.5 percent) of the sample were male, while only 7 (15.6 percent) were female. In fact, more than half of these females were married women who accompanied their husbands when they came for education, but who were studying in the meantime.

²See Chapter IV, pp. 160 and 161.

³Chapter II, pp. 84-87.

TABLE 5.1.--Personal characteristics

	Number	Percent
<u>Age Range</u>		
23 - 29	21	46.7
30 - 36	22	48.9
37 - over	<u>2</u>	<u>4.0</u>
TOTAL	45	100.0
<u>Gender</u>		
Male	38	84.4
Female	<u>7</u>	<u>15.6</u>
TOTAL	45	100.0
<u>Marital Status</u>		
Single	18	40.0
Married	<u>27</u>	<u>60.0</u>
TOTAL	45	100.0
<u>Current Residence of Husband/Wife</u>		
Michigan State University	23	85.2
Home (Africa)	<u>4</u>	<u>16.8</u>
TOTAL	27	100.0
<u>Children</u>		
Have no children	6	22.2
Have children	<u>21</u>	<u>77.8</u>
TOTAL	27	100.0
<u>Current Residence of Children</u>		
In Africa with one parent	4	19.0
At Michigan State University	16	76.2
Some in Africa, some at Michigan State University	<u>1</u>	<u>4.8</u>
TOTAL	21	100.0

Age

The majority fell in the age range between the mid-20s and the mid-30s. Historically, Africans who have come to American campuses for the purpose of education have tended to be a bit older than their American counterparts and than other foreign students, and thus to look somewhat odd in the academic student community.⁴ However, with the changing pattern of college population in American society, that is with older persons coming back to continue education in increasing proportions, the age range of African graduate students in this study may not appear out of place in the graduate school student populations.

Marital and Family Status

Over half of the numbers of the sample population were married. Of those who were married, the majority were accompanied by their spouses. Over two-thirds of those who were married had children. The highest number of children any family had was three. More than two-thirds of the couples who had children had all of their children with them at the university. The relevance of the factors highlighted above with respect to marital and family status lies in the fact that they have significant implications for the graduate students in terms of emotional capacity, time, and financial responsibilities which could have impact on his/her graduate education experience. However, it should be noted that the majority of this

⁴See James M. Davis, et al., I.I.E., Survey of the African Students, op. cit., p. 8.

group is in a relatively advantageous position in regard to these responsibilities while pursuing graduate education, since most of the students have enabling factors such as sponsorships, as will be noted later. The fact that most of the married students have been accompanied by their spouses, and that among the majority who had children, most of their children were residing with them at the university, can be attributed to their having such financial support. Otherwise, they would have been forced to come alone, leaving their families behind. This is the situation which prevails among most unsponsored foreign students who study in the United States.

Regional Origins

When the origins of the African graduate students at this large midwest public university is viewed from the regional standpoint of the African continent (see Table 5.2), it becomes evident that the historical pattern of the African students' flow to the United States relative to the proportion of regional representation is reflected. That is, just as the historical pattern of African students analysis indicated (with respect to the pattern of the flow from Black Africa), Western African states were represented by higher proportions (almost by two-thirds) followed by the Eastern African countries (about one-third). About equal proportion of the women came from either of these two regions (i.e., Western Africa or Eastern Africa).

TABLE 5.2.--Regional origins of the African graduate students by gender

Region	Gender		Total
	Male	Female	
Western Africa	25 (55.56)	3 (6.67)	28 (62.22)
Eastern Africa	12 (26.67)	4 (8.89)	16 (35.56)
Middle Africa	1 (2.22)	0	1 (2.22)
TOTAL	38 (84.44)	7 (15.56)	45 (100.0)

The Ecological Origins

Ecological origins, as it is used here, means the type of socio-economic setting (i.e., whether rural or urban) in which the individual was born and reared. Generally, it is estimated that over 80 percent of the African population resides in rural areas. However, the distribution of modern facilities and services, including educational institutions, has been disproportionately concentrated in favor of the urban centers vis-à-vis the rural areas.⁵ Consequently, those who had access to the benefits of higher education have been the children of the early urban elite who captured political, civil service, commercial, or military positions during the post

⁵See M. Eliou, "Educational Inequality in Africa: An Analysis," Prospects 6 (4) (1976): 558-570.

independence era.⁶ The only option left for the children of the rural settlers was to compete in securing access to higher education and to migrate to urban areas, but they still experienced enormous disadvantages in such endeavors.⁷ Thus, it is fitting and appropriate to include a brief examination of the ecological origins of the African graduate students at Michigan State University.

In order to make a sharper distinction in terms of origins, each respondent was asked to indicate the place of his/her origin under the following three ecological classifications: "country side/village," "small town," and "big city" (see Table 5.3). Only two in five were from "country/village." The remaining members of the sample came from either small towns or big cities.

TABLE 5.3.--Ecological origins

	Number	Percent
Country/Village Side	18	40.0
Big City	14	31.1
A Small Town	11	24.4
No Answer	2	4.4
TOTAL	45	100.0

⁶See V. Gupta, "Dynamics of Educational Change in Africa," Horn of Africa 2 (July/September 1979): 67-76; Eliou, op. cit., p. 565.

⁷Gupta, op. cit., p. 69.

Educational Background

The past educational experience of these African graduate students places them on a threshold in the history of modern education in the sub-Sahara Africa. It represents several competing forces which historically shaped the pattern of modern education on that continent.

For most of them, their high school and college education years fall within the post-independence period and because of that they have become the "first" product of the African education industry. However, for those few who are older, their educational experience overlaps the two educational systems, colonial, and independent African.

Most of them attended either public high school or mission high schools. However, both of these groups had similar experiences in one respect--most of these high schools were boarding schools where the students lived, dined, and went to school apart from the larger society, in a pattern reminiscent from the colonial era (see Table 5.4).

All of them are bilingual or multilingual. For most of them the language of instruction from high school to college level was other than their mother tongue. It was usually one of the European languages, and most of them had to learn the language in school (Table 5.4). Since most of these students originate from former British colonies, and since English is still the lingua franca in most of these countries, pursuing graduate work in English is not a problem for them, as it would have otherwise been.

TABLE 5.4.--Educational background

	Number	Percent
<u>High School</u>		
Country of High School Education	41	91.1
Own Country	3	6.7
Outside of One's Country	<u>1</u>	<u>2.2</u>
No Answer		
TOTAL	45	100.0
<u>Type of High School</u>		
Public High School	22	48.9
Mission	19	42.2
Private (owned by foreign agency)	2	4.4
No Answer	<u>2</u>	<u>4.4</u>
TOTAL	45	100.0
<u>Type of High School (Boarding or Day)</u>		
Boarding	35	77.8
Day	1	2.2
No Answer	9	20.0
TOTAL	<u>45</u>	<u>100.0</u>
<u>Ecological Location of High School</u>		
In a Small Town	20	44.0
In a Big Town	17	37.8
In a Countryside/Village	6	13.3
No Answer	2	4.4
TOTAL	<u>45</u>	<u>100.0</u>
<u>Higher Education</u>		
(Country of Undergraduate Education)		
One Country	35	77.8
United States	7	11.1
One of African Countries (not his/her own)	1	2.2
Middle East	1	2.2
Asia	1	2.2
Eastern Block	1	2.2
Western Block	1	2.2
No Answer	<u>1</u>	<u>2.2</u>
TOTAL	45	100.0
<u>Country of Master's Education</u>		
United States	19	67.9
Own Country	7	25.0
Eastern Block	1	3.6
Western Europe	<u>1</u>	<u>3.6</u>
TOTAL	28	100.0
<u>Language of Instruction at College</u>		
Not spoken at home but learned in school	36	80.0
Spoken at Home	7	15.6
No Answer	<u>2</u>	<u>4.4</u>
TOTAL	45	100.0

Work Experience

Going to graduate school marks a significant step forward in one's educational journey and one's career goals and preparation for them. It imposes the need to focus on much narrower areas of knowledge, to specialize in certain selected areas in order to become competent and productive in them. If one assumes the relationship of one's sphere of academic specialization to his/her career goals, as should be done, then graduate education represents entering into the professional field of a future career. Possessing some practical experience in the field of work in which the student hopes to specialize should provide an important perspective, one could argue, to his/her planning of graduate education. Indeed the educated elite from third world societies, including Africa, have been criticized harshly in recent years for lacking experience in the larger reality within their societies. Thus, it is useful to include in this section the work experience of this graduate population. Their work experience by the number of years and ecological place has been presented in Table 5.5. As the table reveals, 34 (75.6 percent) had worked prior to commencing a graduate program at Michigan State University. For about two-thirds, the average period of work was one and one-half years. The other one-third had an average of three and a half years of work experience. For the majority, the years of work were undertaken subsequent to their undergraduate education. The ecological place of work was in the urban centers for the majority, while the rest had worked either in rural or in both urban and rural areas.

TABLE 5.5.--Work experience

	Number	Percent
<u>After Bachelor's</u>		
Has Worked	34	75.6
Has Not Worked	9	20.0
No Answer	<u>2</u>	<u>4.4</u>
TOTAL	45	100.0
<u>Number of Years Worked</u>		
1 year	11	32.6
2 years	10	29.4
3 years	6	17.6
4 years	6	17.6
8 years	<u>1</u>	<u>2.9</u>
TOTAL	34	100.0
<u>Place of Work After Under-Graduate Education</u>		
Urban	16	47.1
Rural	10	29.4
Both	<u>8</u>	<u>25.5</u>
TOTAL	34	100.0
<u>After Master's Education</u>		
Has Worked	6	20.7
Has Not Worked	<u>23</u>	<u>79.3</u>
TOTAL	29	100.0
<u>Number of Years Worked</u>		
1 year	1	16.7
3 years	3	50.0
4 years	1	16.7
9 years	<u>1</u>	<u>16.7</u>
TOTAL	6	100.0
<u>Place of Work After Master's Education</u>		
Rural	3	50.0
Urban	<u>3</u>	<u>50.0</u>
TOTAL	6	100.0

Current Education and Length of
Sojourn Experience

In Chapter IV, in describing the population selected for this study, the rationale for segmenting it into academic levels and fields of specialization was briefly presented. Also mention was made of the need to segment the population according to the relative length of experience in the new culture in which the students are studying, and the stage at which their academic progress at the time of the study. Briefly stated, it was noted that these variables might have had different impacts in terms of their academic experiences.⁸ The data in Table 5.6 show the proportions of the sample under these categories.

Highlighting in brief the major categories of the sample according to the above-listed variables, all three areas of specialization are represented. The majority of students are from the social sciences, followed by the life science majors. Slightly more than one-half had been pursuing their graduate education at Michigan State University for two or more years, and more than two-thirds had completed about 75 percent of the academic requirements for graduation.

Thus, it can be assumed that most of the sample members had already passed through the first phase of the adaptive process which most individuals experience when placed in alien culture, as discussed when presenting the U-curve theory in Chapter I of this dissertation.⁹

⁸See Chapter I, pp. 43-45.

⁹Ibid.

TABLE 5.6.--Current educational levels; fields and enrollment and level of progress

	Number	Percent
<u>Level</u>		
Master's	17	37.8
Doctoral	<u>28</u>	<u>62.2</u>
TOTAL	45	100.0
<u>Fields of Specialization</u>		
Social Sciences	21	46.7
Life Sciences	16	35.6
Physical Sciences	<u>8</u>	<u>17.8</u>
TOTAL	45	100.0
<u>Length of Sojourn Experience at Michigan State University</u>		
Two or more academic years	26	57.8
More than three terms but less than two academic years	13	28.9
Three terms or less	<u>6</u>	<u>13.3</u>
TOTAL	45	100.0
<u>Level of Progress</u>		
Has completed more than 75 percent	19	42.2
Has completed about 75 percent	12	26.7
Has completed about 50 percent	6	13.3
Has completed about 25 percent	<u>8</u>	<u>17.8</u>
TOTAL	45	100.0

Sources of Financial Support

In Chapter II a brief history of the patterns of financial support of African students in the United States has been presented.¹⁰ In that section, it was pointed out that historically most Africans who studied in American colleges and universities were fully or partially dependent on organizations, primarily on Christian missions during the early period, and on philanthropic foundations during a later time, and on home country governments, and the United States government during the African post-independence era. Furthermore, it was noted that this dependence on organizations had significant implications for these Africans' academic experiences, especially with respect to area of specializations, the types of institutions attended, and the length of their sojourns, all of which were determined by the sponsoring agencies. It was also observed that since the rich Africans sent their children to Europe for education, the Africans who arrived in the United States for education were from the peripheral strata economically, and they had been severely affected by a lack of financial security during the pursuit of their studies.

The African graduate student population in this study fits into the patterns briefly referred to with respect to the sources of financial support. Their sources of financial support and the levels of their dependence on a given source has been presented in Table 5.7. As can be observed from the table just introduced, the overwhelming

¹⁰See Chapter II, pp. 106-123.

TABLE 5.7.--Source of financial support and the level of students' dependence on each source

	Total		Partial	
	No.	Percent	No.	Percent
Home Government	12	26.7	15	33.3
MSU Assistantship	2	4.4	11	24.4
Foreign Agencies (e.g., Ford Foundation)	3	6.7	9	20.0
International Agencies (e.g., FAO)	1	2.2	2	4.4
Others	1	2.2	5	11.1
Personal Finances	0	0	7	15.6
Personal Friends/Relatives	0	0	4	8.9

majority had some kind of financial support, either total or partial. "Home Government" was the single largest source of financial support, followed by income procured from Michigan State University graduate assistantships and external agencies (external to respective African home countries) respectively. It should be pointed out even those who indicated that they were receiving financial assistance from external agencies are still tied to their home governments in two respects. First, they are subjected to the same specifications regarding their majors, time schedule for completion, etc. Secondly, they are nominated through the competition process set up by the home government. As it was pointed out in Chapter II, this collaboration between external sponsoring agencies and the home government is

a pattern which has evolved since the late 1960s as a way of concentrating more efforts on educating those individuals who fit into the national manpower needs in developing countries.¹¹

Future Plans and Commitment
to Home Country

The exploration relative to the above topic centers around responses derived from three main factual questions, namely: Does the graduate plan to return to his/her home country following his/her completion of the training? Is there a job waiting for him/her in the home country which the graduate would go back to? and, Is the graduate student on leave from a position previously held?

The great majority of the individuals questioned expressed an intention to return to their respective home countries. Five (11.1 percent) had not made up their minds with respect to this item. One (2.2 percent) indicated the desire to seek employment in another African country (see Table 5.8).

The fact that such a high proportion had a commitment to going home to their respective countries is not surprising when viewed in the context of the established fact that the majority had professional jobs waiting for them to which they could enter upon return after an educational sojourn. More than two-thirds (33, 73.3 percent) said they had a job waiting for them, and 27 (60.0 percent), or more than

¹¹See Chapter II, pp. 99-105.

TABLE 5.8.--Future plans and commitment to home country

	Number	Percent
Will go back to own country	37	82.2
Has not made up his/her mind	5	11.1
Will seek employment in another African country	1	2.2
No Answer	<u>2</u>	<u>4.4</u>
TOTAL	45	100.0
<u>Job is Waiting</u>		
Has a job waiting in the home country	33	73.3
Has no job waiting in the home country	5	11.1
No Answer	<u>7</u>	<u>15.6</u>
TOTAL	45	100.0
<u>Leave of Absence</u>		
Currently on leave from a job to which he/she will return	27	60.0
Not on leave from a job which he/she could return	11	24.4
No answer	<u>7</u>	<u>15.6</u>
TOTAL	45	100.0

one-half, were on leave from a professional job to which they expected to return.¹²

Personal Position in the Family History

The concept of one's position in one's own family history in the discussion which follows refers to two important variables which could have significant relevance to an individual's educational career. The first of these variables is one's birth position in the family (i.e., whether he/she is the first child, the last child, or somewhere in the middle). The importance of this factor stems from the fact that in most traditional sectors of African societies, the cultural norms prescribe the roles, rights, and responsibilities of the children differentially, depending on their places in the birthplace. For example, the first male child is the person on whom the mantle of the family leadership falls in the absence of the father, the recipient of higher proportions of the family wealth, and the one who is expected to get married early to ensure the continuity of the family line. All of these factors have potential implications for the education of the first male child in terms of the chance of attending school, how long he can stay in school to advance in his educational endeavors in the face of family pressures which usually demand his abandonment of schooling and his paying uninterrupted attention to family affairs, and his expected roles and responsibilities to the rest of the family members if he succeeds in the pursuit

¹²The figure could have been higher had it not been for students from Ethiopia and Uganda, the two African countries where the political turmoil was broiling and to which their citizens abroad were hesitant to return.

of educational advancement. Conversely, the factors listed above also have implications, in varying degrees, for the education of the children who fall in other positions in the family birth spacings, depending on the roles and expectations the local culture assigns to the respective positions of the birth in the family space.

The second variable is related to the place of the student in relation to the introduction of modern education to the family. This variable could be embodied within two possible events in the family, and the position of the individual in relation to these events. Stating the question differently, is the graduate student the first in the family to have attended a modern school? Is he/she the first in the family to have attained a high level of education? The relative importance of these two elements is one's family history with regard to modern education lies in the fact they impose considerable responsibility for leadership in providing education for the rest of the family members (siblings and extended family members) and in other spheres of family affairs as well.

Thus it is with this background in view that the factors of the individual's position in the family birth space, and his/her own record in the history of the introduction of modern education into the family, were enlisted (see Table 5.9).

Almost two-thirds of the sample members reported that they were neither the first nor last child in the family history birth space, that they came somewhere in the middle range between the first and

TABLE 5.9.--Personal position in the family history in birth and attaining modern education

	Number	Percent
Firstborn	13	28.9
Born somewhere in the middle	28	62.6
Last born	2	4.4
No answer	<u>2</u>	<u>4.4</u>
TOTAL	45	100.0
<u>Personal Place in Attaining Modern Education</u>		
First to be schooled	15	33.3
No first to be schooled	28	62.2
No answer	<u>2</u>	<u>4.4</u>
TOTAL	45	100.0
<u>Personal Place in the Family in Attaining the Highest Level of Education</u>		
First in attaining highest level of education	34	75.6
Not the first in the family to attain the highest level of education	8	17.8
No answer	<u>3</u>	<u>6.6</u>
TOTAL	45	100.0

the last. The next sizeable proportion, 13 (28.9 percent) were the "first borns," and only two (4.4 percent) were the last children in the family.

As to their own position in the history of introduction of modern education to the family, about one-third made history in their family in that they were the first person to have attended modern schools. The proportion of the "firsts" is even much larger when it comes to attaining the highest level of education in the family. Thirty-four (75.6 percent) fall into this category--of the "first" attaining the highest level of education in the family.

Family Background

The family backgrounds will be viewed with the implicit intention of suggesting the individual's socio-economic status or class in their respective societies. Attempts to categorize Africans into neatly discernible class strata have never been precise. However, in the face of the fast collapsing of traditional elite social structures, due to the change within African societies and the introduction of modern education, and the resultant high social prestige and material rewards accorded those who secure it, vis-à-vis an average African without a modern education, the burgeoning of class stratification based on modern educational values is evident.¹³ A tangible consequence of this newly emerging education-based status is often manifested in the level and quality of education which the

¹³See P. C. Lloyd, Africa in Social Change (Baltimore: Penguin Books, 1972), pp. 127-153; Odenyo, *op. cit.*, pp. 16 and 18.

offspring of the members of the new elite class receive vis-a-vis the rest of the population. Indeed, empirical evidence attesting to this fact is being gathered.¹⁴ Therefore, in order to formulate some sense of the socio-economic background of the members of the sample, it was deemed appropriate to establish the level of education attained by their parents and the nature of the occupations in which their parents were engaged.

As Table 5.10 indicates, more than one-third, 14 (31.1 percent) originated from homes where the fathers did not have any formal education, and the proportion of mothers in this regard is even higher--more than half, 25 (55.6 percent). Of those whose parents had had formal schooling, the greater proportion was at elementary levels.

The majority of the members of the sample originated from homes where parents were self-employed in some type of activity in the traditional sector of the economy. Slightly more than one-half said that their fathers were engaged in traditional farming. About two in five indicated that their fathers had jobs which fall within the modern sector of the economy, with varying degrees of power, prestige, and economic remuneration. Thirty-seven (90.2 percent) said their mothers were self-employed in one of the traditional occupations (see Table 5.10).

¹⁴Tina Wallace, "Educational Opportunities and the Role of Family Background Factors in Rural Buganda," Rural Africana 25 (Fall 1974): 29-46; L. Brownstein, "Education and Development in Kenya: The Case of the Primary School Lever" (Ph.D. dissertation, Johns Hopkins University, Baltimore, 1970); and P. Foster, Education and Social Change in Ghana (Chicago: University of Chicago Press, 1965) are representative of such works.

TABLE 5.10.--Family background

	Father		Mother	
	No.	Percent	No.	Percent
<u>Level of Parental Formal Education</u>				
No formal education	14	31.1	25	55.6
Elementary education	12	26.7	8	17.8
Some high school	2	4.4	3	6.7
High school	3	6.7	1	2.2
Post secondary education	5	11.1	4	8.9
Bachelor's	4	8.9	1	2.2
Master's	2	4.4	0	0
Doctoral	0	0	0	0
No Answer	3		3	6.7
<u>Parents' Occupation</u>				
Traditional farmer	22	53.7		
Civil servant	6	14.6		
Educational officer for Federal Government	3	7.3		
Clergyman	1	2.4		
Policeman	3	4.9		
Police commissioner	3	4.9		
Businessman	1	2.4		
Court registrar	1	2.4		
Dispensary worker	1	2.4		
School superintendent	1	2.4		
Orchestra conductor	1	2.4		
Housewife			16	39.0
Traditional farmer			15	36.6
Traditional merchant			6	14.6
Nurse			2	4.9
Teacher			1	2.4
Elementary school principal			1	2.4

From this brief examination of parental education and the occupations of parents, a few cautious observations can be made relative to the socio-economic backgrounds of this group of African graduate students. The 22 (53.7 percent) who said their fathers were traditional farmers can safely be categorized as originating from an ordinary African home, which could mean coming from the destitute poor to having just enough to eat, and having enough to eat plus living comfortably by local standards, but not enough to compete with the income in the modern sector. It is useful to note that the number of those whose fathers are listed as traditional farmers is almost equal to the number of those whose fathers had "no formal education" and "had elementary education" combined. It can be safely concluded that the traditional farmers were those who had no formal schooling or those who had only elementary education, because those fathers who were employed in the modern sector, particularly the professional ones, had to have attained much higher educational levels than elementary schooling. It can also be concluded that the mothers who had some level of education, and who were employed in the modern sector, were usually married to those men who had levels of education equal to that of their wives or even higher. Next to the group just described are those whose fathers were engaged in some kind of employment in the modern sector, but in jobs which paid at the lower level. Included in this category are policemen, dispensary worker(s), clergyman(men), and civil servant(s). Ten of the sample came from such backgrounds. The third group is composed of those

whose fathers had a higher education and were employed in those professions which had a higher and stable income. About six had such fathers.

Summary

In this chapter a profile of African graduate students at Michigan State University was presented. Included in it were the descriptions of the following aspects of their backgrounds: personal characteristics; regional origins; ecological origins; educational backgrounds; work experiences; current education (at Michigan State University); sources of financial support; future plans and commitments to home countries; personal positions in family histories relative to birth and education; and family backgrounds.

CHAPTER VI

ANALYSIS OF RESULTS

Introduction

This chapter will present the findings of the research relative to the academic experience of African graduate students in the seven dimensions selected for the investigation, namely: (1) the development of individualized academic programs required for graduation; (2) the processes involved in acquiring knowledge (i.e., methods of teaching, class participation, etc.); (3) evaluation; (4) research; (5) critical factors (i.e., access to relevant data literature, family obligations, the parity or disparity between previous and present education and how these have affected a student's educational experience); (6) human interaction in academically related matters; and (7) the anticipated usefulness of current education upon re-entering one's own society.

The Development of the Academic Program--Procedures and Process

The inquiry into this dimension included the examination of the following factors: sources of information for the student with regard to his/her academic programs (i.e., courses, research requirements, etc.); sources of input and their relative weights in the decision-making process for the approval of the academic program; factors considered when planning the program; and the student's own

assessment (i.e., of his/her level of participation in the development of the program, whether the program had incorporated the basic "ingredient" to prepare for his/her future work, and his/her satisfaction with the planning and selection procedures followed in the development of the academic program).

Sources of Information

Becoming acquainted with reliable and efficient source(s) of the basic information pertinent to the decision at hand and obtaining that information successfully is essential to an intelligent decision-making process. This consideration takes on even more importance when considering the procedures and processes of decision-making in planning individualized graduate programs for persons to whom the general academic environment is substantially unfamiliar, as is the case with the population selected for this investigation.

The responses to this inquiry generated the following four major sources as having supplied information for students' academic programs (see Interview Question 4). Almost half, 22 (50.0 percent) received that information from their academic advisors, while about another one in four obtained it from departmental catalogues. The other two sources were students in the department and the academic committee members, with each of these sources providing information for one in nine students, 5 (11.4 percent) (see Table 6.1).

TABLE 6.1.--Distribution of responses according to the sources which provided the most information for students' academic programs^a

	Number	Percent
Academic Advisor	22	50.0
Departmental Catalogue	12	27.3
Students in the Department	5	11.4
Academic Committee Members	<u>5</u>	<u>11.4</u>
TOTALS	44	100.0

^aOne sample member did not answer this question

Sources of Input and Their Relative Weight

The next factor in this inquiry on the processes in decision-making in planning individualized academic programs for African graduate students concerns the various sources of input and their relative weight in the final outcome (i.e., approval of the program). In particular, the inquiry is concerned with how planning is conducted given the unusual circumstances. This question becomes relevant when an alien student prepares to undertake an intensive enterprise in a situation where the committee members may not be sufficiently versed in his/her prospective functioning environment, and where the graduate student may be relatively more mature in chronological age than his American counterparts, and may possess some work experience as well. In order to establish the sources of input and their relative weight in shaping the development of the individualized graduate program, the graduate students were presented with five possible sources of input,

three of them listed as single sources, namely, the academic advisor, the graduate student himself, and the committee members, and two of the sources listed as combined, namely, the academic advisor and the graduate student, and the graduate student and the academic advisor. (The latter sources were arranged by assigning a weight to each one according to the order in which the name was placed--with more weight assigned to the source first named and less to one individual last named.) Then each participant was asked to indicate whose recommendations became the major basis for his/her graduate program (see Interview Question 5).

The pattern of responses, as assembled in Table 6.2, indicates that the following four sets of sources of inputs and their relative weights in shaping the individualized academic graduate programs were major influences in their relative rank order.

Almost one-half, 21 (46.7 percent) indicated that most of their suggestions and some of their advisor's recommendations were accepted, and then became the main part of their individualized academic graduate program. The next most popular pattern involved situations in which most of the advisor's recommendations and the graduate student's suggestions were accepted and then became the main part of the program.

For approximately one in four, 12 (26.7 percent) this was the pattern. The acceptance of most of the graduate student's suggestions and placing them in the core of the program was the third most popular pattern. Ten (22 percent) reported this to be the

TABLE 6.2.--The distribution of the responses in percentages and raw figures, indicating the sources of input and their relative weights in shaping the final outcome of the decision on the individualized graduate academic program

The Main Sources of Input and Their Relative Weights	Number	Percent
Most of the student's suggestions and some of his/her advisor's recommendations were accepted and then became the main part of his/her program.	21	46.7
Most of his/her advisor's recommendations and some of the graduate student's suggestions were accepted and then became the main part of the student's program.	12	26.7
Most of the graduate student's suggestions became the major part of the program.	10	22.2
The committee members had many suggestions which became the main part of the program.	2	4.4
Most of the advisor's recommendations were accepted and then became the main part of the student's program.	<u>0</u>	<u>0</u>
TOTAL	45	100.0

approach utilized in developing their program. Suggestions of the committee members playing a major role in the decision of program development were reported by only two (4.4 percent) individuals.

In addition to providing the answers to the question(s) raised regarding the sources of input and their relative weights in influencing the graduate academic programs of African students at Michigan State University, the results of the findings just described present another pattern of inputs and its relative weight in affecting decisions on the matter which is noteworthy. Among the three single (noncombined) sources of input, namely the academic advisor, the graduate student and the committee members, only the suggestions of the graduate student himself and their relative weight were a force in shaping the nature of the program, in that the pattern was used for two in nine cases. The inputs from the academic advisor and their relative weights, generating from a single source, were not reported to have influenced the shape of any program.

As has been already reported, and also as a single source, committee members' inputs and their relative weight influenced in the program in a major way for two (4.4 percent). Putting it differently the role of the academic advisor in the decision-making process in planning individualized academic programs for this group, his/her inputs and their relative weights in shaping the outcome, is significant, but only when combined with the inputs of the graduate students.

Factors Considered in Planning
the Academic Program and
Their Rank Order

The third element in the decision-making process in the development of individualized academic programs examined in the current study is that of the factors taken into consideration when constructing this academic "menu," so to speak. Five such factors deemed essential in any effort(s) to construct of a meaningful and relatively "healthy" graduate program were selected, and the graduate students were asked to arrange these factors in the rank order of 1-5 (one being the highest) in terms of the relative priority in which they considered them when developing their individualized graduate programs. The five factors suggested for such consideration were: (1) primarily meeting the academic requirements of the department; (2) the student's personal academic needs; (3) his/her future professional aspirations; (4) the cultural and environmental conditions of his/her future field of professional work; and (5) the student's past professional experience (see Interview Question 6).

The results of the responses have been tabulated in Table 6.3, in raw numbers and percentages indicating the size of plurality each rank scored for each factor, and then the factors have been arranged from first to fifth place according to the relative plurality each received. As is evident from the pattern of the responses indicated in the table mentioned above, the graduate student's future professional aspirations, the student's academic needs, the cultural and environmental conditions of the student's future field of professional

TABLE 6.3.--The distribution of the responses in percentages and raw numbers indicating the ranks of relative priorities given to each of the five factors in planning his/her academic program^a

	1st His/Her Future Professional Aspirations		2nd His/Her Per- sonal Academic Needs		3rd The Cultural and Environmental Con- ditions of Student's Future Field of Pro- fessional Work		4th Meeting the Departmental Academic Require- ments		5th His/Her Past-Profes- sional Experience	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
First Priority	22	50.0	9	20.9	5	11.6	4	9.3	4	9.3
Second Priority	16	36.4	11	25.6	6	14.0	7	16.3	3	7.0
Third Priority	3	6.8	9	20.9	10	23.3	14	32.6	7	16.3
Fourth Priority	2	4.5	10	23.3	8	18.6	6	14.0	17	39.5
Fifth Priority	<u>1</u>	<u>2.3</u>	<u>4</u>	<u>9.3</u>	<u>14</u>	<u>32.6</u>	<u>12</u>	<u>27.9</u>	<u>12</u>	<u>27.9</u>
TOTAL	43	100.0	43	100.0	43	100.0	43	100.0	43	100.0

^aTwo sample members did not respond to this aspect of the inquiry.

work, meeting the departmental academic requirement and the student's past professional experience were reported to have received the relative priority in that order. One-half of the respondents 22 (50 percent) said their future professional aspirations were their first priority, and 16 (26.4 percent) indicated that they were their second level of priority concern. For another nine (20 percent), his/her personal academic needs was the consideration of first priority, while 11 (25.6 percent) indicated this factor to be the second issue of priority in their planning of their academic program. Only five (11.6 percent) and six (14.0 percent) reported the cultural and environmental conditions of their future field of professional work as their first and second concerns respectively.

Perhaps the most surprising result in the pattern of the responses was the fact that "primarily meeting the departmental academic requirement" fell into fourth place in the aggregate tally of rank-order as an issue of concern when constructing the individualized academic program. Given the disparity between the academic environment of an American university and African reality, it was suspected that primarily meeting the departmental academic requirements would occupy a much higher rank among the five listed factors as an issue of priority in constructing the individualized academic programs.

Persistence in Original Majors

An examination of the rate of persistence in the original major (i.e., sticking with the area of specialization indicated at

the time of admission) was another component in the current exploration of the procedures entailed in the development of individualized academic programs for African graduate students selected for this study. The expression "persistence" is not employed here in the sense commonly used in academic achievement related literature, with reference to the psychological strength required to prevail in a pursuit of completion of a given educational level (e.g., high school, college, etc.), as opposed to quitting or dropping out. In the context of the discussion which follows, it is employed in reference to whether the graduate student in this study has continued or changed the major he/she applied for at the time of admission to the graduate school at Michigan State University. This aspect of the inquiry has been included in the study with two related purposes in mind: first, to establish the volume of turnover and of persistence in the originally sought academic major, and secondly, to examine the reasons for a change and the process entailed for those who had to switch majors in the cases of those who might have done so. Thus the African graduate students were asked if they were pursuing the same specific major they had applied for at the time of admission (see Interview Question 1). As Table 6.4 reveals, the overwhelming majority, 38 (86.4 percent) had persisted and were pursuing the same major of graduate study they had indicated at the time of their admission. Only 6 (13.6 percent) had changed their major while pursuing graduate studies at Michigan State University.

Of those who had switched their majors, most involved changing the area of focus within the same field. For example, one doctoral

TABLE 6.4.--The distribution of responses of percents and raw numbers indicating proportions of persistence and switches of majors in graduate schools^a

	Number	Percent
Have not changed majors	38	86.4
Have changed majors	<u>6</u>	<u>13.6</u>
TOTAL	44	100.0

^aOne sample member did not respond to this question.

graduate student who enrolled in order to specialize in pure mathematics changed to mathematics education in the consideration of his future environment, work, and career. In his view, "math education" has more practical appeal and a larger scope for potential service in this country. Another changed from agricultural engineering to mechanical engineering. Originally, he intended to specialize in solar energy in his doctoral program, with special emphasis on developing technological models suitable in African rural settings. However, his interest in this particular area evaporated when his home government insisted on his return home after his completion of his master's degree and his stipend was severed by the agency for International Development (AID) in keeping with its contractual agreement with the home government of the student. This particular graduate student found assistantships and funds to conduct his doctoral research in a different department to which he subsequently applied. For another student, in a rather unusual case, a change of major was necessary because he was assigned to the wrong department, due to a

misunderstanding about his desired major which occurred between him and the university official who interviewed him in the student's home country. The remaining three had reasons and circumstances similar to those described earlier when they discussed the reasons for changing their majors.

The procedure of switching majors, for those for whom this has been the experience, involved the concerned graduate negotiating with the new academic advisor under whom he/she wished to study, the advisor's determinations of the viability of such a proposition to his/her own satisfaction consistent with the advisor's roles and capacity, and the initiation of administrative action to enroll the student in the new major.

The high rate of persistence of the graduate students in the original major which they had indicated at the time of admission, and the fact that even the minority who had to switch their majors after beginning their graduate study here at Michigan State University did not attribute the causes which compelled them to change their particular majors to the procedures and processes of planning their graduate academic program, may be interpreted in part, at least, as a reflection of the efficiency of the academic program development system.

The Graduate's Assessment

The last part of the examination of this section was concerned with eliciting the African graduate students' assessment of the procedures and processes followed in developing their respective individualized graduate academic programs from their own perspectives.

They were asked to assess three aspects of this enterprise. First, did the graduate think his/her other graduate "academic program" had which might be considered the basic "ingredients" for preparing him/her for future work (see Interview Question 9). This question was asked with the assumption that the student's perception of whether the individualized graduate academic program contained what might be considered the basic "ingredients" for preparing the student concerned for his/her future work would reflect upon the capacity of the procedures and processes followed in the construction of such programs to assemble the kind of programs that could satisfy the graduate student. The responses as presented in Table 6.5 shows that all but one

TABLE 6.5.--The distribution of responses in raw number and percentages indicating the sample's assessment of their graduate academic programs in terms of containing the basic "ingredients" for preparing for future work

	Number	Percent
The graduate academic program had basic "ingredients" which could prepare him/her for future work.	44	97.8
The graduate academic program did not have the basic "ingredients" which could prepare him/her for future work.	<u>1</u>	<u>2.2</u>
TOTAL	45	100.0

were in the affirmative. The only one who responded in the negative stated that the entire program lacked relevance to the cultural and

environmental field of work related to his/her professional goals.

The second aspect of the graduate student's assessment was concerned with his/her level of participation in the construction of his/her own graduate academic program. Thus, the graduate students were asked to indicate this in the rank-order "more than adequately," as the highest level, to "not adequately" as the lowest rank (see Interview Question 7). As can be noted in Table 6.6, slightly more

TABLE 6.6.--The distribution of responses in raw numbers and percentages indicating the sample's level of participation in the construction of their individualized graduate academic program

Level of Participation	Number	Percent
More than adequately	17	37.8
Adequately	25	55.6
Not Adequately	<u>3</u>	<u>6.7</u>
TOTAL	45	100.0

than one-third thought the level of their participation was "more than adequate," while slightly more than one-half gave a more modest assessment of "adequate." One out of 15, rather a small minority, felt that his/her level of participation was "not adequate."

When the latter group was asked what factors militated against their meaningful participation in planning their own academic program (see Interview Question 8), a variety of reasons were cited.

Nevertheless, all of the students shared a common concern which seemed to underpin their experience in this regard--a wide disparity of perception between graduate student's academic needs and the academic advisor's experience as it relates to the social and environmental dynamics operating in Africa. References to a specific point of view might elucidate this concern. For instance, one sociology major graduate student commented: "He (the advisor) treats me mechanically, and administratively, rather than entering with me in the exploration of some new approaches of viewing knowledge and reality in the African context which I was proposing for my program. But for him, the graduate program meant just making me take those required courses and do those other things everyone else does, then that is it. For him, I was just another student who had to get a degree, that was all. Furthermore, the relationship was a one-way affair--he told me what I should take."

The final element designed to study the graduate student's assessment of their academic programs involved seeking their views regarding the selection and planning procedures followed in the development of their individualized academic programs. They were asked to indicate their level of satisfaction in the rank-order from "very satisfactory," as the highest, to "very unsatisfactory," as the lowest level (see Interview Question 11).

The pattern of the responses, as assembled in Table 6.7, duplicates the one recorded regarding their level of participation in planning their own academic programs. About one-third expressed their

TABLE 6.7.--The distribution of responses in raw number and percentages indicating the sample's level of satisfaction with the procedures and selections followed in the development of the individualized academic program

Level of Satisfaction	Number	Percent
Very Satisfactory	17	37.8
Satisfactory	25	55.6
Unsatisfactory	1	2.2
Very Unsatisfactory	<u>2</u>	<u>4.4</u>
TOTALS	45	100.0

level of satisfaction with the procedures and planning followed in the construction of their individualized academic program as "very satisfactory," slightly over one-half said it was just "satisfactory." Again, one in 15 recorded their level of satisfaction from "unsatisfactory," to "very satisfactory."

The Process of Acquiring Knowledge

An important aspect of any formal education is the process of acquiring knowledge. Indeed, this is one of the major specifications taken for granted in formal education model, and one of the characteristics distinguishing formal education from some other type of learning environments.¹ Putting it differently, a pedagogical transaction in covering some specified content is a pervasive feature

¹The exception to this is where external degrees are offered as done in London, England. However, this is not a common practice in American institutions of higher learning.

of the enterprise. It is inextricably intertwined with the whole process of "certification."² It was due to the recognition of such a reality that the decision was made to include the examination of the African graduate students' academic experience with respect to the institutionally formalized process of acquiring knowledge.³ The present exploration is limited to five such mediums of acquiring knowledge, namely: (1) lectures, (2) group interaction discussions (as in seminars), (3) films and other audio/visual presentations, (4) class reports, and (5) class participation.

This aspect of the inquiry entailed two or three sets of procedures depending on a student's reaction to the first phase of the exercise. Using their experience at Michigan State University as a basis for making a judgment, the graduate students were asked to rate the effectiveness of each of the above-listed methods as a mode of acquiring knowledge on a scale ranging from "very effective" (as

²For a more full discussion on the distinguishing features of formal education, please see M. Grandstaff, et al., Alternatives in Education: A Summary View of Research and Analysis on the Concept of Non-Formal Education (East Lansing, Mi.: State University, IISE, Programs of Studies in Non-Formal Education, 1974), pp. 26-27; M. Grandstaff, "Systemic Capacity as a Problem in the Design of Alternatives to Formal Education," in Non-Formal Education As An Alternative To Schooling, ed.: C. S. Brembeck and M. Grandstaff, Program of Studies in Non-Formal Education Discussion Papers No. 4 (East Lansing, Mi.: Michigan State University, IISE, Programs of Studies in Non-Formal Education, 1974), pp. 8-25.

³One of the reasons for limiting this inquiry to the formal aspects of the graduate students' academic experience has been stated previously (see Chapter I, p. 15 (footnote 36). Here it may be necessary to note that their experience with research and writing, other institutionalized components of the process of acquiring knowledge, will be examined in a later section of this chapter.

to the highest level) to "very ineffective" (as the lowest).

Secondly, they were presented with a list of two sets of statements describing possible virtues and weaknesses of each method, depending on the rating scale they had indicated for each. That is, those who rated a given method as a "very effective" were asked to indicate why they thought so by picking those strengths from the list of the virtues which fitted their description of that particular method.

The same was done by those who ranked a given method as "ineffective" or "very ineffective," by using the list of possible weaknesses.

However, those who rated a given method as "effective" were asked to do both of these exercises, but to limit the matching of the characteristics (whether strengths or weaknesses) to those methods which represented to them a particular quality which they had ascribed to it (i.e., "effective," or "ineffective," and "very ineffective"). This was done to accommodate those whose judgment relative to their experience about a given method was on the "borderline" (i.e., positive and negative) and their rating as "effective" was accepted as a qualified ranking⁴ (see Interview Questions 12-26).

Lecture

In Tables 6.8, 6.9, and 6.10 information on students' responses to the use of the lecture method is presented. Indicated in the tables are responses concerning the level of effectiveness of

⁴This approach was adopted as the result of early detection of such a pattern of responses, and the vocally expressed preferences for such an approach during the early stages of the field work.

TABLE 6.8.--The distribution of responses in raw number and percentages indicating the sample's rating the effectiveness of the lecture as a mode of acquiring knowledge^a

Level of Effectiveness	Number	Percent
Very Effective	9	22.5
Effective	34	77.3
Ineffective	0	0
Very Effective	<u>1</u>	<u>2.3</u>
TOTAL	44	100.0

^aOne sample member did not respond to this question.

TABLE 6.9.--The distribution of responses in raw number and percentages indicating the sample's selection of the characteristics (qualities) of "effective lectures" in the order of the plurality received^a

The Characteristics of Effective and Very Effective Lectures	Number	Percent
Well Prepared	30	66.7
Well Delivered	30	66.7
Well Structured	29	64.4
Lecture's Wealth of Experience	26	57.8
Unstructured	4	8.9

^aThe respondents were allowed to select as many items as fit their description of a particular quality of method under consideration.

TABLE 6.10.--The distribution of the responses in raw numbers and percentages indicating the sample's selection of the characteristics of the "ineffective" and "very ineffective" lectures in the order of the plurality received^a

The Characteristics of the "Ineffective" and "Very Ineffective"	Number	Percent
Not well delivered	23	51.1
Not well developed and prepared	18	40.0
Language problem	7	15.6
Unfamiliar illustrations were used	7	15.6
Too unstructured	7	15.6
Too structured	5	11.1

^aThe respondents were allowed to choose as many items as fit their description of particular qualities of the method under consideration.

the method, the strengths of the lectures they considered "very effective," and "effective," and the weaknesses of those lectures which they considered "ineffective" and "very ineffective" respectively.

Only about one-fifth, 9 (20.5 percent) found lectures "very effective" as a mode of acquiring knowledge in their Michigan State University experience. The large majority, 34 (77.3 percent) felt their experience had been "mixed" regarding lectures and gave a qualified evaluation as to the effectiveness of this method, which had been recorded under "effective." Only one (2.3 percent) put its

level of "effectiveness" at the bottom of the scale as "very ineffective."

When the students were asked to select those characteristics (factors) which contributed to the level of effectiveness which they had indicated regarding the lecture method from a list of five such descriptions, the following three emerged at the top of the list: well-prepared, well-delivered, and well-structured. Although "lecturer's wealth of experience" received enthusiastic vocal support during the interview, it rated a strong fourth in receiving plurality in the students' selection on paper (see Table 6.10). However, during the interview, many graduate students in the study did bring out other dimensions relative to qualities of lecturers which made the lecture method effective for them at Michigan State University. The major points can be summarized as the lecturer's ability and willingness to sense class atmosphere to check if he/she is communicating, and to adjust to reach that goal if need be; strong commitment to make sure students understand the subject presented, in preference to preoccupation with covering specific topics within specific class period; and his/her ability to relate the subject matter to specific examples in real life.

The factors which contributed to the lectures which the students rated "ineffective" or "very ineffective," included "not well devliered and "not well developed and prepared," which made the top of the list in that order (see Table 6.10). It will be recalled that these two concerns, "well-delivered" and "well prepared" were the two highest rated items with reference to the qualities of the

lectures the students found "effective" to "very effective." This pattern of selection in both cases seems to reveal some level of consistency of the students' perceptions with respect to the qualities effective and ineffective lectures. It is rather interesting to note that the following three items, which ranked next in importance, namely, "language problem," "unfamiliar illustrations," and "too unstructured," were selected by the same number of respondents--seven (15.6 percent) each. Given the fact that the respondents were in an American university, and the fact that most of the knowledge taught was based on the experience of the industrialized nations, as their responses and comments will reveal later on in the chapter, it was expected that the use of unfamiliar illustrations in lectures would appear on the top of the list in this exercise, but the responses proved otherwise.

Group Discussion

One in five of the 35 graduate students who participated in answering the questions regarding their experience with Group Discussion as a mode of acquiring knowledge said it was "very effective." About two-thirds marked it as "effective," staying on the borderline as was observed in the case of examining their experience with lectures. Another one-seventh rated it as being "ineffective" to "very ineffective" (see Table 6.11).

As to the qualities (factors) which the students thought contributed to the effectiveness of group discussion, the capacity of discussion to facilitate the exchange of varied views came way ahead

TABLE 6.11.--The distribution of the responses in raw numbers and percentages indicating the sample's rating of the effectiveness of group discussion as a mode of acquiring knowledge^a

Level of Effectiveness	Number	Percent
Very Effective	7	20.0
Effective	23	65.7
Ineffective	3	8.6
Very Ineffective	<u>2</u>	<u>5.7</u>
TOTAL	35	100.0

of the rest in plurality (see Table 6.12). The next item was the capacity to make learning less boring. This factor was selected by fewer than half the number of students than those who selected the former one. It is interesting to note that the quality of structuredness and unstructuredness has been consistently rated at the bottom of both lists (qualities contributing to effectiveness or ineffectiveness). It was at the bottom of the list here too.

Those who rated this pedagogical mode "ineffective" or "very ineffective" selected "the tendency to encourage diversion to irrelevant discussions" as the top factor (for the rest of their selection see Table 6.13).

In addition to the selection of those items from the listed factors which the respondents thought contributed to the ineffectiveness of this particular pedagogical mode, some other problems which they deemed had similar effects were brought out during the interview.

TABLE 6.12.--The distribution of the responses in raw numbers and percents indicating the sample's selection of the characteristics of the effectiveness of the group discussion method in the order of plurality received^a

The Characteristics of Effective Group Discussions	Number	Percent
They generally facilitated the exchange of varied views	30	66.7
They were less boring	15	33.3
Learning was easier under such conditions	14	31.1
They were unstructured	2	4.4

^aThe respondents were allowed to select as many items as fit their description of a particular quality of method under consideration.

TABLE 6.13.--The distribution of the responses in raw numbers and percentages indicating the sample's selection of the characteristics of the "ineffective" and "very ineffective" group discussion method^a

Characteristics of the Ineffective and Very Ineffective Group Discussion Method	Number	Percent
They tended to encourage diversion to irrelevant discussion	11	24.4
They encouraged professor(s) not to make adequate preparation	8	17.6
They were unstructured and tended to be unorganized	6	13.3
They tended to contribute to wasting time	6	13.3

^aThe respondents were allowed to select as many items as fit their description of a particular quality (in this case negative) of the method under consideration.

One such concern deserves notice. A number of the respondents observed that this method was open to abuse by those individuals who wish to engage in "classroom politics" and by others who tend to dominate discussions, although with no particular goal in mind. According to their observations, the phenomenon involves both professors and students with certain characteristics. Such students are usually Americans who are engaged in the game of impressing the instructor(s), or who wish to control the speed of class session (to impede the speed of the class so that the professor will not cover more material in a given session or course).⁵

Then there are others who mean well, and are just enthusiastic about the subject under discussion, and dominate the discussions. Conversely, on the instructor(s) side, such classroom behavior develops in instances where the instructor wishes to reward those students whom he/she considers the top in class, and potentially promising in a given field of studies or subject, and usually the discussion method boils down to a sort of colloquy between him/her and such students. It also occurs when an instructor is incompetent in the mastery of the knowledge, in preparation, "leadership in classroom government," or in all of these in a given subject.

⁵The occurrence of such behavior on the part of graduate students is consistent with Sanford's findings regarding graduate students' strategies at Berkeley. Sanford called such individuals the "gamesmen" who attempt to perform fewer tasks than others for their rewards. Such efforts include actively and deliberately cultivating the professor's opinion in their favor without expending commensurate energy on the actual academic task to be accomplished. The other group who fall on the other end of the continuum he calls them, the "Grinds." These are the graduate students who perform all of the tasks expected of them for the rewards already promised. Please see Sanford, op. cit., pp. 1-51.

Films and Other Audio/Visual
Presentations

Table 6.14 presents the distribution of the responses indicating the respondents' rating relative to the effectiveness of films/other audio/visual presentations as a mode of acquiring knowledge. As the table just introduced reveals, while the proportion of those who thought this method was "very effective" is still smaller than those who rates it as just "effective," the margin which separated the two levels is relatively slimmer than the margins which occurred when rating the other two pedagogical formats discussed previously (for comparison, see Tables 6.8 and 6.11). However, the percentages of the respondents who thought the format was "ineffective" to "very ineffective" was comparable to those who gave the same range of rating to Group Discussion (for comparison, please see Tables 6.11 and 6.12).

TABLE 6.14.--The distribution of the responses to raw numbers and percentages indicating the sample's rating of the effectiveness of films/other audio/visual presentations as a mode of acquiring knowledge^a

Level of Effectiveness	Number	Percent
Very Effective	14	41.2
Effective	16	47.1
Ineffective	3	8.8
Very Ineffective	<u>1</u>	<u>2.9</u>
TOTAL	34	100.0

^aEleven sample members did not respond to this question due to the fact they never experienced this method of learning in their classes while pursuing their graduate studies at Michigan State University.

Tables 6.15 and 6.16 present the distribution of the responses indicating the sample's selection of the factors contributing to effectiveness and ineffectiveness of the films/other audio/visual presentations respectively. Their ability to make learning easier was on the top of the list of those who considered these presentations "effective" or "very effective." One more important advantage of such teaching aids, outside of the list of factors presented to them, was strongly appreciated by a number of students. The main advantage was that some of those gadgets, such as slides, had the capacity to bring to class the actual physical appearance of certain objects, and thus to simplify comprehension of them, in comparison to verbal descriptions.

TABLE 6.15.--The distribution of the responses in raw numbers and percentages indicating the sample's selection of the factors contributing to effectiveness of the films/other audio/visual presentations in the order of the plurality/received^a

Reasons Why They Were Effective	Number	Percent
Makes learning easier	25	73.5
Were well selected for the topics	14	41.1

^aThe respondents were allowed to select as many items as fit their description of a particular quality (in this case positive) of the method under consideration.

Lack of relevance to the assigned topic was on the top of the list among those who thought the presentations by the use of such

TABLE 6.16.--The distribution of the responses in raw numbers and percentages indicating the sample's selection of the factors contributing to the ineffectiveness of the films/other audio/visual presentations in the order of plurality received^a

Factors Contributing to Ineffectiveness	Number	Percent
Usually they were not really relevant to the assigned topic	6	17.6
Usually the professors could not relate to and discuss the audio/visual material effectively	4	11.8
Not Well Presented	3	8.8

^aThe respondents were allowed to select as many items as fit their description of a particular quality (in this case negative) of the method under consideration.

aids were not effective (see Table 6.16). When they were asked to make other observations regarding this topic, as they were given an opportunity to do in every case, some cited illustrations from their own experiences of the fact that too many instructors depend on these gadgets, regardless of whether they are necessary and useful and appropriate for a given topic. As one put it, "The use of such instruments takes on importance, rather than their effectiveness."

Class Reports

The results of the respondents' rating of the effectiveness and ineffectiveness of this method have been reported in Table 6.17. Here again, as was the case in rating the effectiveness and ineffectiveness of the films/other audio/visual presentations as models of

TABLE 6.17.--The distribution of responses in raw numbers and percentages indicating the sample's rating of the effectiveness of class report as a mode of acquiring knowledge^a

Level of Effectiveness	Number	Percent
Very Effective	12	32.4
Effective	14	37.8
Ineffective	11	29.7
Very Ineffective	<u>0</u>	<u>0</u>
TOTAL	37	100.0

^aEight sample members did not respond to this question due to the fact this particular method was not applicable to their experience.

acquiring knowledge, the proportion of the respondents who evaluated it as "very effective" and "effective" is very close, albeit a slight majority rated it as the latter. However, the proportions of the respondents who thought that this mode of teaching was not effective is much larger, both in actual number and relative ratio, than it was for any other mode of teaching examined in this section. Almost one-third of those who had this pedagogical format at Michigan State University felt that was "generally ineffective." However, none put it down at the lowest end of the scale.

When asked to select those factors which contributed to the effectiveness of this method from a list of three such items, the capacity to encourage personal involvement in preparation for class,

and the nature of the format allowed for class participation, were mentioned by 20 (54.1 percent) and 15 (40.5 percent) respectively (see Table 6.18).

TABLE 6.18.--The distribution of responses in raw numbers and percentages indicating the sample's selection of the factors contributing to the effectiveness of class reports as mode of acquiring knowledge^a

Factors Contributing to Effectiveness	Number	Percent
They generally encourage my personal involvement in preparation for the class	20	54.1
They generally allowed for my participation in class	15	40.5
They were generally less restricting for information gathering	8	21.6

^aThe respondents were allowed to select as many items as fit their description of a particular quality (in this case positive) of the method under consideration.

Among those who thought that class reports were not as effective in their learning experience, a number of respondents, nine (24.3 percent) indicated that reports consumed too much time in relation to the amount of learning actually attained (see Table 6.19). As can be observed from the same table, the tendency of this method to result in fragmentation of information, and its unsuitability for the students as adult learners were also selected in that order.

When the respondents (who rated class reports low as formats for learning) were invited to elicit some other factors not listed

TABLE 6.19.--The distribution of responses in raw numbers and percentages indicating the sample's selection of the factors contributing to the ineffectiveness of class reports as a mode of acquiring knowledge^a

Factors Contributing to Ineffectiveness	Number	Percent
They were usually too time-consuming for the amount of learning actually attained	9	24.3
They were generally too fragmented	7	18.9
They were generally not suitable for me as an adult learner	4	10.8

^aThe respondents were allowed to select as many items as fit their description of a particular quality (in this case negative) of the method under consideration.

which they thought contributed to the ineffectiveness of class reports, two other major issues surfaced. The first problem they observed regarding this method centers around the ability of the student presentors (those who give class reports) to treat the topic under consideration with appropriate balance and a sense of proportion, both in the preparation and in the actual presentation in class. More specifically, this group of participants observed that students often over-prepare one section of a report at the cost of neglecting some other equally significant sections or sub-topics. With respect to the problems associated with the actual class report presentations, according to the respondents' opinions (presumably based on their observations) students could not even present what they had prepared with a reasonable level of competence and confidence.

Related to this is the phenomenon of a strongly established perception regarding class members' ability to "dig out" facts and provide well-synthesized information on a subject. This is based on the respondents' observation (according to their own reports), that most students do not regard with seriousness what their fellow class members give in class on such occasions. Some respondents (incidentally more than one or two) even used such dramatic expressions such as "how can a blind person lead another blind person?"

Class Participation

While class participation is not a pedagogical mode of the "stature" similar to those just examined relative to African graduate students' academic experience per se, it is, nevertheless, a unique and vital format which can be an integral part of the learning process in formal class settings. In fact, it is one of the few avenues available to date with the capacity to elevate the student from the role of a passive recipient to that of an active participant as a member of the learning team. It is with this assumption in mind that the African graduate student's experience with class participation at Michigan State University will be reviewed. Here the notion of class participation refers to spontaneous and uninhibited interaction on the part of the individual graduate student with his/her class environment, when academic activities are being conducted live in a formal setting (i.e., when instructors disseminate information or preside over activities such as class presentations), conceivably using one of the pedagogical formats examined earlier in reference to

the experience of this population with each of them. Such interaction on the part of a class member should manifest itself in the individual engaging in asking questions, raising issues, making observations, or sharing incidents and insights relative to the topic under consideration in class while academic activities are still in progress. It is also commonly referred to as "class contributions."

Unlike the approach utilized in studying academic experience with the other four pedagogical formats, as presented in the preceding paragraphs, where the thrust of the inquiry was how students rated particular modes of learning in their role as passive participants, the focus here will be to investigate whether they had such interaction (class participation).

They were asked to answer this question by indicating frequency on a scale from "very frequent" to "not at all." (See Interview Question 24.) Then those who had participated, or had such interaction, were asked to select factors which facilitated their class participation from a list of five such factors (see Interview Question 25). Inhibiting factors were indicated in a similar manner by those who did not participate in class or who could not participate as much (Interview Question 26).

The respondents' reactions with respect to the frequency of class participation are presented in Table 6.20. About one in five said their class participation was "very frequent," while another one-third (approximately) reported it as "frequent." However, about four in nine indicated that they did not participate much in class.

TABLE 6.20.--The distribution of responses in raw numbers and percentages indicating the sample's frequency of class participation^a

Frequency of Participation	Number	Percent
Very Frequent	8	18.6
Frequent	17	39.5
Not Much	18	41.9
Not at All	<u>0</u>	<u>0</u>
TOTAL	43	100.0

^aTwo sample members did not respond to this question.

Tables 6.21 and 6.22 present the results of their selections of facilitating factors (for those who participated or in those classes in which they participated) and of inhibiting factors (for those who did not participate or in those classes in which they could not participate) respectively.

Personal determination to participate, irrespective of encouragement from the professors and classmates, and the fact that the discussions were usually relevant were selected in nearly equal proportions (see Table 6.21). The surprisingly low showing among the factors tabulated in the above-mentioned table was "participation was a requirement for passing the course." Since instructors usually attach some reward in the final grade for class participation, it was suspected that it would be selected by higher proportions, but it was not.

TABLE 6.21.--The distribution of responses in raw numbers and percentages indicating the sample's selection of factors facilitating their class participation^a

Facilitating Factors	Number	Percent
I was determined to participate, no matter what the professor and classmates thought	16	37.2
There was usually encouragement from the professor	15	34.9
The discussions were usually relevant	15	34.9
Participation was a requirement for passing the course	7	16.3
There was usually encouragement from classmates	1	2.3

^aThe respondents were asked to pick as many factors as fit their experience.

TABLE 6.22.--The distribution of responses in raw numbers and percentages indicating the sample's selection of factors inhibiting factors from class participation^a

Inhibiting Factors	Number	Percent
Fear of making language error or over-consciousness of my foreign accent	11	25.9
Class environment did not encourage the class members to participate	10	23.3
Lack of relevance to topics under discussion	7	16.3
Lack of relevance to my personal interest	7	16.3
No encouragement from the professors	6	14.0

^aThe respondents were asked to pick as many factors as fit their experiences.

On the other hand, for those who did not participate in class as much, and in the classes where they could not participate, the following two items were selected as inhibiting factors by higher proportions, fear of making language errors or overconsciousness of student's foreign accent, and the lack of encouragement. Eleven (25.9 percent) and ten (33.3 percent) selected these respectively (see Table 6.22).

As can be observed from the same table, "lack of relevance to the topic under discussion," "lack of relevance to my personal interest," and lack of encouragement were selected by the same percentages.

In addition to those items which the respondents selected as inhibiting factors with reference to class participation, some of the graduate students' observations regarding certain classroom dynamics provide more insight as to how these factors operate as negative elements, in terms of the foreign students' class participation. For instance, in the course of discussing why language and having a foreign accent becomes a negative factor, a number of respondents cited humiliating feelings which they experienced when the professors said to them, "I beg your pardon, could you repeat what you just said?" two to three times, every time they made a comment on a given topic in class. "Some come to you and bend down on your desk, as though they are talking to someone with a speech impediment or to a child," one respondent commented. Some described the occasional times of frowning expressions and bewilderment on the faces of the professors in such cases. They further observed such

behaviors (reactions) on the part of the professors in contrast to those times when the American students asked questions or made comments in class. As one respondent put it, "It almost looks like your participation disrupts the normal flow of class activities. Therefore, why bother?" For students who come from former British colonies where English is still the lingua franca (indeed, many of these students speak English very well, although they speak with foreign accents) such an experience is undoubtedly more frustrating. It should be pointed out that most such incidents, and the whole general pattern described above, occur mostly in those classes where the instructors have never been outside their own country, and among those who are not used to having foreign students in their classes. Class member ratio (i.e., American vs. foreigners) is also another variable. That is, where there are only a few foreigners like one or two), such dynamics operate. Naturally, the course and the topic area covered in class are important. If the discussions are based exclusively on the experiences developed in the United States or in mostly industrialized societies, it may be too tempting to conclude that students from the Third World countries do not have much to offer. (These views were also expressed by some respondents.)

Another dynamic was brought out during the interview. It develops in classes where the professor(s) give recognition, both covertly and overtly, almost exclusively to a few students who dominate the participation, and "the whole affair operates on a sort of buddy system," as one respondent described it. They further noted

that these students are usually Americans, and a foreigner is taking a long-shot in social distance to be engaging in that kind of "classroom politics" as another participant remarked.⁶

Of course, there are some factors which affect class participation by graduate students, of any kind, whether citizens or foreigners. One of these, as observed by some participants, has to do with the nature of the discipline, and the informally presumed appropriate model to be used for disseminating knowledge in classroom settings, and what such assumptions and practices imply for the whole notion of student participation. Putting it differently, as viewed from the traditionally practiced pedagogical standpoint, some disciplines lend themselves more easily to student participation than do others. For instance, in disciplines like mathematics, the assumption is that the information disseminated to students at graduate level is so precise and advanced that there is no need to provide time for participation by students. The standard pedagogical function in class in such a discipline is for the instructor to dish out the prepared information with deliberation, and for the students to copy it down as rapidly as possible. Furthermore, the student has to be fairly advanced and to know nearly as much as the instructor, in order to be able to discuss the points he/she is concerned about, to make any challenge, or to explore different angles of a given topic. Thus, due to such disparity between the level of knowledge and competence

⁶It will be recalled that this dynamic has been described earlier when analyzing the respondents' experience with respect to Group Discussion (see p. 229).

of the instructor(s) and the students, it is reasoned that class participation is not a useful exercise. Therefore, there is not much class participation in such cases.⁷

Evaluation

The evaluation of student's performance is one of the stable features of formal education.⁸ Graduate education is not excepted from this process.⁹ Evaluation plays a prominent role in education as a tool which is used to expose the student's weakness in a given academic area. As such, it is an organizationally recognized mechanism which is used to uphold departmental and institutional policies related to academic standards.¹⁰ It functions not only as a quality control device, but as a social control (limiting of output in a given professional field) as well.¹¹

On the student's side the stakes are high in the process of evaluation. It is an avenue for feedback for self-assurance about his/her perception of the self relative to his/her progress, competence, and talents. The student's promotion to the next stage of his/her academic work curriculum is based on evaluation of his/her

⁷The assumption in such cases is that students should see the instructors in their offices in case of questions.

⁸See Grandstaff, "Systematic Capacity as a Problem in the Design of Alternatives to Formal Education," op. cit., pp. 13-15.

⁹See P. L. Dressel, Handbook of Academic Evaluation (San Francisco: Jossey-Bass Publishers, 1976), p. 324.

¹⁰Ibid., p. 326.

¹¹Sanford, op. cit., p. 19.

previous work. Rewards for the students in graduate schools for enabling factors such as assistantships, fellowships, scholarships, etc., depend on it. More importantly, it is a matter of survival in the most basic sense, for it is the vehicle through which his/her certification is granted or rejected, and ultimately it is the basis upon which acceptance or denial of the student's entrance into a selected profession rests.¹²

Given the intensity involved in pursuing graduate studies and the stiff competition associated with them, the lack of precision in the currently available methods of academic evaluation, and the resultant ambiguities and potential inconsistencies between merit and reward, anxiety and some level of mistrust toward academic evaluation generally exist on the part of graduate students.¹³

Thus because of the significance of evaluation in this crucial training process, faculty and graduate students share a deep concern about the need for it to be done in a fair and accurate manner, as Harnett found in his examination of "Environments for Advanced Learning."¹⁴

When the evaluation of foreign students enters into the picture, with all the accompanying factors emanating from cultural

¹²See Lozoff, "Interpersonal Relations and Autonomy," in Scholars in the Making: The Development of Graduate and Professional Students, op. cit., pp. 141-159).

¹³Ibid.; and Sanford, op. cit., pp. 80-97.

¹⁴R. T. Hartnett, "Environment for Advanced Learning," in Scholars in the Making: The Development of Graduate and Professional Students, op. cit., p. 79.

linguistic skills and orientations, and academic traditions, the evaluation process takes on even more complex dimensions. The review of literature presented in Chapter III has already borne out one of the concerns with reference to the academic performance and evaluation of foreign students in American colleges and universities, namely the deep suspicion that some American professors may be handing out "courtesy grades" to foreign students. This concern involves potential implications for academic standards, and for the detrimental effect with such a situation could cast upon the image of American higher education abroad, and of course, for the academic competence of the foreign students who are involved.¹⁵

Thus it is viewed as appropriate that this inquiry include/encompass the African graduates' experience with the process of evaluation. Interview Questions 27-41 were designed to accomplish this task.

At this juncture it is useful to point out that evaluation of graduate students takes various forms, ranging from admission to graduate school, to letters of recommendation, awarding grants, fellowships or assistant ships. However, this section will be limited in its exploration to the sample's experience with those aspects of evaluation activities which are executed to measure the students' academic performance in their graduate studies at Michigan State University. Putting it differently, an attempt will be made to study

¹⁵ See Chapter III, pp. 2-4; also John Henderson and Margaret Henderson, "The African Image of Higher Education in America," Exchange (Spring 1967): 45-56.

their experience with the process of evaluation which is based on some content knowledge. This will be done from three-dimensional evaluation typologies.

The first dimension is the scope and weight-based, progressively sequential evaluation. Under this category can be listed the following: (1) quizzes (announced, unannounced, daily, weekly, etc.); (2) mid-term examinations; (3) final examinations; and (4) comprehensive preliminary examinations.¹⁶

The second dimension is the physical environment (i.e., in class under supervision or take-home tests). The third dimension is the format of the evaluation under this typology. Included are: (1) essays (subjective); (2) objective (true and false, multiple choice, etc.); (3) laboratory tests (practical); (4) applied questions where the answering requires the employment of mathematical or statistical exercises); and (5) experimental tests (in case of

¹⁶A word or two may be useful with reference to the use of these two terms, and also to the type of examinations required in evaluating graduate students. The terms "preliminary" and "comprehensive" are used interchangeably in some academic departments of graduate schools in the United States, meaning the major assessment process given at the end of course work for the doctoral program. In some disciplines, master's candidates are also required to take this type of evaluation exercise. Professor Paul Dressel, an authority on American higher education, reports that there are three to four major examinations required of doctoral students in formal education in the U.S. Please see Dressel, *Handbook in Academic Evaluation*, op. cit., p. 325. However, for the purpose of this study of the African graduate student's experience, the use of the term will be limited to the one referred to as preliminary/comprehensive.

This decision is based on the reports of the doctoral students that this was the only final assessment which they had at Michigan State University. Dissertation defense, which has a comparable status in terms of the evaluative value placed upon it, was not included due to the fact that there were not sufficient sample members who had passed through that exercise at the time of the study.

life sciences). The respondents' experiences will be examined in three stages: first, to establish if they have had the evaluation exercises under typologies outlined above, and approximately how often they have had them; secondly, to establish if they had any problems with any evaluation exercises as taken under these typologies; and thirdly, to explore the nature of the problems for those who indicate that they have had difficulty.¹⁷

The Scope, Progressively Weight-Based Sequential Evaluation

It is evident from the data on Table 6.23 that most of the students interviewed at Michigan State University have very frequently had all three types of evaluation described under this typology.

TABLE 6.23.--The distribution of responses in raw figures and percentages indicating the types of testing taken at Michigan State University

Types	Number	Percentages
Quizzes	34	75.6
Mid-Term Examination	44	97.8
Final Term Examination	44	97.8

¹⁷An analysis of the sample's experience with the comprehensive/preliminary will be done later in this section.

As to the physical conditions, a clear majority, 35 (79.5 percent) reported that they took most of these in class under supervision. Only one (2.3 percent) did most of these evaluations at home, while the remaining did some in class and some at home (see Table 6.24).

TABLE 6.24.--The distribution of responses in raw figures and percentages indicating the physical conditions under which the evaluation exercises (i.e., quizzes, mid-term and final examinations) were taken^a

Physical Conditions Under the Tests Were Taken	Number	Percentages
Most of them in class	35	79.5
Most of them at home	1	2.3
Some in class and some at home	<u>8</u>	<u>18.2</u>
TOTAL	44	100.0

Problems and Their Nature

In response to the question about whether they had any problems (i.e., inconveniences, difficulties, etc.) with the evaluation features covered above (see Interview Question 29). Thirty (66.7 percent) indicated having some difficulty with one or more of the features. The concerns expressed fall into both the progressively weight-based sequential evaluation exercises, and the physical environment under which they were taken. On the progressively weight-based sequential written academic evaluation exercises, there were such

complaints in varying degrees and nature regarding quizzes and mid-term examinations.

As to complaints relative to the actual physical settings (i.e., classroom vs. take-home), all of the respondents (actually only two persons) had some problems with take-home examinations. In the succeeding paragraphs the main thrusts of the issues addressed by the respondents will be discussed, first beginning with those related to the nature of the progressively weight-based sequential evaluation exercises (i.e., quizzes, mid-term, and final examinations).

As can be observed from the category of responses to Interview Question 29 (see Appendix D), quizzes evoked more concerns than any other type of evaluations exercises under this category in which their experience was examined. The issues relative to quizzes are deeply felt in that the African graduate students who responded to the question on quizzes during the interview revealed concerns which were limited not only to the actual problems or difficulties they encountered in taking quizzes (i.e., preparing for them and actually sitting for them), but which encompassed their philosophical inclinations relative to the nature of evaluation in graduate studies with reference to quizzes. Thus it is logical to discuss their responses under these two aspects (see Appendix D, Responses to Interview Question 29).

Viewing the issue from the aspect of inconvenience or difficulties encountered in taking quizzes, their responses can be categorized into six major themes. Of those who responded to Interview

Question 29, 11 (36.7 percent) thought that emphasis on speed, rather than on depth of knowledge in the given topic, as demanded by such testing in the academic environment, made the situation more difficult for them. Seven (23.3 percent) found it difficult to digest the required information for quizzes in such a short time. Six (20 percent) found that studying for quizzes became a sort of hindrance to their own academic programming and activities. Related to the two complaints just reported was the feeling that quizzes were sources of pressure. Five (16.7 percent) felt this way. In fact, this group of the sample emphasized the point that quizzes were an unnecessary bother. Four (13.3 percent) thought that quizzes required rote memory, and were disappointing to them, and finally another four (13.3 percent) felt that studying for quizzes limited the sources of expanding their knowledge in given subjects where quizzes were given.

On the philosophical aspect, four main points emerged. Practically all the respondents put forth the view that quizzes are not an appropriate evaluation exercise in graduate school. For instance, six (20.0 percent) felt that in evaluating students in graduate school, professors need to emphasize original thinking, instead of the ability to reproduce spit-back facts. Five (16.7 percent) expressed the view that quizzes are irrelevant as evaluative tools in graduate school, and that graduate students should be allowed more freedom to plan their own academic programs. The other two philosophical themes relative to the inappropriateness of quizzes in graduate school were expressed by a fewer number of respondents. They were that there is no relationship between the marks received

in quizzes and the level of (or amount) of learning, and that quizzes have minimal impact upon the learner in terms of motivation for studying the subject under consideration (for more information, see Appendix D, Interview Question 29). An excerpt from a Ph.D. candidate in Agricultural Economics describes this attitude in more depth. "Quizzes may motivate students who are not interested in the course, who study just to pass the course, but the learning which comes from such motivation will evaporate after the course is over."

A substantial number of respondents indicated that their experience with scheduled evaluative exercises (i.e., mid-term and final examinations), which were more encompassing in scope, had been better than their experiences in taking quizzes. However, some did indicate their dissatisfaction with these types of evaluations, particularly with mid-term examinations.

Incidentally, most of the complaints were similar to those expressed in regard to their experience with quizzes. These concerns can be organized into five separate, albeit not entirely exclusive points. Five (16.5 percent) found speed, rather than actual knowledge, to be the major factor in taking these examinations. Two (6.7 percent) found that not enough time was given to prepare for them. The following three other points were cited by one (3.3 percent) persons each: the fact that the mid-term was given and he/she had to prepare for it limited the students' freedom to organize and execute academic activities; these exams made the learning process more mechanical (no time to think, reflect and develop central

themes), but only to react; and they encouraged memorization (see Appendix D, responses to Interview Question 29).

As to the concerns related to the physical environment in which these evaluation exercises were performed, as observed previously, only two participants indicated dissatisfaction with take-home examinations, and both of these complaints were related to the fact that they usually required more time to complete (see Appendix D, Interview Question 29).

The Format of Evaluation Exercises

To refresh the reader's memory as to what is meant by the expression "format of evaluation exercise," it will be recalled that it was decided to view the academic experience of African graduate students with academic evaluation under three typologies, and that the third was termed the Format of Evaluation Exercises, meaning the nature of questions utilized in the tests (e.g., essay, objective tests). Again, the procedure was first to establish the types of formats which were used in the tests and with what degrees of frequency the participants had been asked to respond to the five formats of the questions, namely, essays (subjective), objective, lab tests (practical), applied questions, and experimental reports, in their academic evaluation exercises while pursuing graduate studies at Michigan State University (Interview Question 30). Table 6.24 presents the distribution of their responses in answering this question. Surprisingly, there is a relatively large proportion and high

frequency of sample members whose experience in academic evaluation exercises has been in the use of objective (e.g., multiple choice, true and false) format. Given the pervasive notion which permeates the academic community about the commitment to train students to think creatively in graduate school, and the contrasting wide use of such mechanical formats in evaluation exercises, such use may be evidence of a contradiction of a sort in this respect. However, the use of essays as a format for testing was next highest, both in frequency and in the proportion of the sample who experienced it. To the extent that the sample for the study was comprised of various subgroups specializing in the three broad different fields of studies, and to the extent that teachers in each discipline tended to prefer using some formats over others, the proportions of the respondents reporting having had the five formats in their academic evaluation exercises as reflected in Table 6.25 are only natural.

Problems and Their Nature

When asked if they had any problems (difficulties, inconveniences, etc.), emanating from the format (e.g., essays, objective tests, etc.), see Interview Question 31, more than two-thirds of the respondents replied in the affirmative (see Table 6.26). Then in Interview Question 32, they were asked to describe the nature of the problems or complaints centered around their experience with taking examinations in which objective and essay questions were used as the format. However, by far the most complaints sprung up in their responses to the question about their experiences with objective

TABLE 6.25.--The distribution of responses in raw figures and percentages indicating the format of the question in frequency used in the respondents' academic evaluation exercises at Michigan State University^a

The Format of the Question	Frequencies				
	Very Often	Often	Some-times	Rare	Total
Essay	17 37.8	10 22.2	5 11.1	5 11.1	37 82.2
Objective	10 22.2	9 20.0	12 26.7	7 15.6	38 84.4
Lab Test (Practical)	6 13.3	2 4.4	6 13.3	4 8.9	18 40.0
Applied Questions	11 31.1	6 13.3	6 13.3	3 6.7	26 57.8
Experimental Reports	4 8.9	3 6.7	3 6.7	0 0	10 22.2

^aThe respondents were asked to pick as many factors as fit their experiences.

TABLE 6.26.--The distribution of responses in raw figures and percentages indicating the proportion of the sample who had some problems and those who did not, within the nature of the format(s) utilized in the questions of the academic evaluation exercises^a

	Number	Percentage
Had some problem(s) with the format of the question	33	78.6
Had no problem with the format of the questions	9	21.4
TOTAL	42	100.0

^aThree sample members did not participate in this question.

format. Again, the participant's responses are categorized into six broad areas as indicated in Appendix D, under Interview Question 32.

In some respects, some of the complaints are similar to those put forth with reference to their experience with quizzes. For example, in the case of their experience with objective test formats, the highest number, 19 (45.2 percent) indicated that their difficulty with these formats stemmed from the fact that preparation for such tests required memory and reproduction of what was heard and said, instead of reflective thinking and a higher level of internalization of new knowledge. Seventeen (40.8 percent) expressed the opinion that the questions were structurally ambiguous (could be true under one circumstance and the opposite under another), thus creating unnecessary confusion.

Similar to the complaints reported first with reference to the participants' problems in taking objective tests, was the fact that the nature of these tests profoundly affect, and in fact effectively dictate, the method through which one acquires knowledge. More specifically, the students are forced to study sentences and certain detailed facts instead of the broader themes. Eleven (26.2 percent) noted this feature as one of their disappointments in regard to the use of this format. And finally, the fact that the format itself (i.e., objective questions) is exclusively indigenous to the American academic evaluation mechanism,¹⁸ and the fact that

¹⁸See T. A. Ashford, "A Brief History of Objective Tests," Journal of Chemical Education 49 (June 1972): 420-422.

taking objective tests is usually part of the cognitive skills acquired by the host country students by the time they attain the graduate school level, naturally imposes considerable differences with respect to the level of efficiency in preparing for them, and the necessary skills and mental framework required to take them successfully. Ten (23.8 percent) pointed out this as a factor which weighed against them taking tests of this nature.

Related to the foreign students' familiarity with the evaluation format and the mechanics of taking objective tests is the factor of language. Five (11.9 percent) indicated this as one of the sources of problems in taking objective tests.¹⁹ And finally, some eight (19.0 percent) indicated that a frustrating experience for them in taking objective tests was the fact that the style of the objective

¹⁹The fact that language is an intervening variable in successfully passing objective tests has been observed when there is disparity between the standard language which is used in the test and the standard used by individuals who take the test. For the experience of American minorities in this regard, please see B. V. Thurmond, "The Effect of Black English on the Reading Test Performance of High School Students," The Journal of Educational Research 70 (3) (January/February 1977): 160-163; L. Quay, "Language Dialect, Reinforcement and the Intelligence Tests Performance of Negro Children," Child Development 42 (1971): 5-15; N. R. Bartel and J. J. Grill, "Language Bias in Tests: ITPN Gramatic Closure," Journal of Learning Disability 10 (4) (April 1977): 229-235; "Comprehension of Children from Different Ethnic Groups," paper presented at the Annual Meeting of the American Education Researcher Association, Chicago, April 1972.

On the subject of foreign students' experiences with respect to language as a factor in their performance in objective tests, please see A. Ali, "The Problems Encountered by Arab Students with Objective Tests at Michigan State University," unpublished manuscript, Department of Educational Psychology Department, College of Education, Michigan State University, East Lansing, Winter 1980; P. Brevic, "Objective-Type Examination and the International Student," Journal of Education Library 10 (Spring 1970).

test is extremely structured and mechanized. This format reduces issues which encompass a wide breadth of subject matter into simple factual statements and forces students to respond to them in a mechanical manner, thus contributing to distortion of a wide perspective which needs to be developed by students.

Essays Format

While several respondents discussed the virtues of essay questions in academic evaluation at some length, in terms of the encouragement which they provide for the student to develop ideas, expressive skills, and reflective thinking, and of their provision of opportunities for the students to personally interpret new knowledge, a relatively small number did indicate having difficulties with the essay format during their graduate studies at Michigan State University. Again, the central thrust of their responses has been synthesized into four main themes (see Appendix D, Interview Question 32, Essays).

Three (9.1 percent) felt that the American professors have a superficial approach to addressing essay questions. The experience of one of the Ph.D. candidates in life science, who had come to this conclusion, illustrates the point. "The essay type of questions they give here are not the same type of questions I know in the British system. Here they give an essay question which you can write 20 pages, and they expect you to answer in 10 lines. In the questions

where you would write five pages under the British system, they want you to do in five lines. When I was first confronted with the situation, I sat there for 10 minutes just figuring out what does he mean and how should I approach it, how can I write in five lines? When the professor brought back the tests and went through all possible answers and said, 'If you gave any of these answers, you get full marks.' But I did not get a full mark. But one time I asked the professor about it, and he said, 'come on! Writing what you know would not be written in five lines.'" Then the student gave his verdict regarding the matter: "The essay questions here are misleading, they should be called short answers."

This problem emanates from the fact that, in general anyway, differences in assumptions and expectations exist in the two academic traditions with respect to evaluation using essay questions, and these differences in orientations seem to be in collision. Central to the clashes of viewpoints is the question: What should, or how much should, responses to essay questions encompass in terms of scope and depth of the topic(s) under consideration? In the European academic evaluation tradition, the system in which an African graduate's past academic experience is deeply rooted, where essay questions are pervasive in the format of evaluations, a question with a simple appearance may signal an implicit invitation to write many pages of exposition on a given topic over which the student is being tested. On the other hand, the American notion of essay questions is relatively simple, depending, of course, upon the individual professor and the discipline. Usually, American professors'

expectations are limited to brief, to-the-point, type of prose responses. This apparent collision of unstated, but implicitly established expectations relative to the scope and depth of coverage of the topic or subject in the answers to essay questions is not only a practical inconvenience, but touches on the deepest nerve of cognitive value(s) as to how students should be tested in graduate school.

Three (9.1 percent) indicated that they had difficulties in handling essay questions due to the fact that their English was not proficient enough and, of course, answering essay questions adequately requires some level of competence in the language in which the courses are conducted. These individuals originate mainly from former non-British colonies (i.e., FrancoAfrican countries).

For some, the complaints are not in regard to essay questions as a format per se (of course they might have some concerns regarding the format too), but are in regard to their disappointment with their grades in relation to the content they wrote. Here again, one should observe the collision of values and outlook which emanates from the difference in environmental background and ideological exposure, and the resultant orientations in interpreting realities between the professor and the African graduate student. Two (6.1 percent) reported this to be their experience. More specifically, they thought that the professors were not able to respond intelligently (i.e., to accommodate) to views differing from their own.²⁰

²⁰Such experience occurred mostly in the instances where the instructors involved have never been outside the United States, and thus lacked international exposure.

A statement from a master's candidate in journalism who had problems with her instructors in writing essays about issues relative to women in Africa provides some examples of the collision. "American professors suffer from a chronic fear. In other words, he/she cannot see any issue except as it relates to his/her own experience. Furthermore, the status assigned to us vis-à-vis them is predicated on the notion that they are better, or superior, and we are inferior. This situation starts with them. So this makes it difficult to try to write essays because my professor is unable to respond to differences of opinion intelligently. I am willing to discuss and explore these issues from the perspective of my experience and exposure, but it is extremely hard to discuss these things with my professors. For example, I think my grades do not reflect my intellectual ability; they reflect more accurately the biases of my instructors. Again, in keeping with their tradition, they are more inclined to deal superficially with the issues."

One (3.0 percent) observed that there was cultural bias in the questions and assumptions which permeated the development of essay questions.

Preliminary/Comprehensive Examinations

It will be recalled that earlier in this section comprehensive/preliminary examinations were listed under the typology of academic evaluation which was termed in this analysis as "weight-based progressively sequential evaluation."²¹ It was suggested that

²¹See page 246.

for the sake of convenience in arrangement, the analysis of the results with respect to their experience would be presented separately later.²²

Here again, the same approach will be used as that which was utilized in analyzing the results relative to the African graduate's experience with respect to those academic evaluation exercises categorized under this typology.²³ Thus to pin down the sub-group which had passed this stage of their graduate studies at Michigan State University, the respondents were asked in Interview Question 33, whether they had taken doctoral comprehensive/preliminary examinations, and it was established that only 13 (44.8 percent) of these doctoral students had gone through this exercise.

In answering the question of whether they had encountered any problems either in the process of preparing for them or of taking them (Interview Question 34), nine (69.2 percent) responded in the affirmative (see Table 6.27).

In response to the question, "What was the nature of the problem?" (Interview Question 36), their answers covered several areas. The major points of concern relative to their experiences in their preparation for the examinations, and in actually taking them have been categorized into six discernable themes. Two of these areas are related to the participants' experiences in the preparation.

²²See p. 247; footnote 17.

²³See pages 246-249.

TABLE 6.27.--The distribution of responses in raw figures and percentages indicating the proportion of doctoral candidates who had passed comprehensive/preliminary exams who had encountered problems, and those who had not, either in the preparation of actual taking

The Nature of the Experience	Number	Percentage
Had encountered problems either in the preparation or taking	9	69.2
Had not encountered problems either in preparation or taking	<u>4</u>	<u>30.8</u>
TOTAL	13	100.0

Inadequate guidance in preparation for them and the fact that the preparation itself was time-consuming were commented on by two (15.4 percent) each.

Two other concerns expressed were related to the nature and the size of the examinations themselves. Five (38.5 percent) felt that there were too many questions included in their examinations, and further, they thought that such a practice was unnecessary. Two (15.4 percent) felt that most of the questions were based on American experience and put them at disadvantages, both in handling them in the actual evaluation exercise, and in relevance in terms of cognitive value.

It will be recalled that this concern was previously noted by the respondents albeit by a small proportion, when analyzing their experience with the objective²⁴ and essay questions²⁵ format. Thus

²⁴See pp. 255 and 256.

²⁵See p. 260.

providng a concrete example highlighting the magnitude of the problem may be appropriate. The following comment is what one Ph.D. candidate in Agricultural Economics reported regarding this matter: "Some of the questions are relevant to American experience only. For example, they give questions which are concerned with writing a contract with baseball players with one of the major baseball leagues in the United States. The moment you see that in your comprehensive examination, you are frightened, intimidated."

Three (23.1 percent) observed the existence of goal conflict between the African graduate students and some departments with their experience with comprehensive/preliminary examinations. Such goal conflict develops in the cases of some academic departments where their goal is to be number "one" in the country. In such cases, these respondents reported that the professors demand too much, and thus torture students with comprehensive examinations. As one graduate student aptly noted, "It may be useful to American students to graduate from an academic department rated number one in the nation in order to find a high paying position, but this has no relevance for an African student." And finally, the issue of too much stress on theory in relation to the need to have a broader consideration of African reality was mentioned by two (15.4 percent) sample members. That is, it was felt on the part of these respondents that the thrust of emphasis in preparing these examinations is on the intense absorption of theories (i.e., in the given discipline) and these theories may have little relevance to African problems.

Since the passage of this phase of graduate students' academic endeavor represents the culmination of one's level of mastering knowledge content in his/her major and requires extensive preparation both in scope and skills in synthesizing new knowledge, it was judged that an extra question should be included: How does the graduate student view such intense academic endeavor in terms of educational values apart from its function of fulfilling academic requirements for "certification?" (See Interview Question 37.)

The responses to this question have been presented in Table 6.28. The table just introduced indicates that seven (53.8 percent) thought that the experience was "very useful," and on the other end of the continuum of the scale only two (15.4 percent) rated it as "not so useful."

TABLE 6.28.--The distribution of responses in raw figures and percentages indicating the samples' rating of the educational value of comprehensive/preliminary examinations

The Level of Rating	Number	Percentage
Very useful	7	53.8
Useful	4	30.8
Not so useful	2	15.4
Not at all useful	0	0
TOTAL	13	100.0

The Human Factor in
Academic Evaluation

It has already been previously noted, regarding the pervasive notion which permeates academic institutions relative to evaluation of the learner's achievement, particularly at the graduate school level, that it should be based on objective and fair assessment of the actual performance of the student in any given area at all levels of evaluation exercises, whether they are quizzes or comprehensives. It was further observed that the whole legacy of academic evaluation is deeply anchored in a fundamental assumption which regards evaluations as a necessary exercise which should serve both the institutional academic system(s) and the students enrolled therein, in an objective and fair manner.

However, due to the presence of less than absolute rationality in human behavior toward one's fellow human beings, in this case the behavior of the instructor toward his/her students, and given the current state of the art of academic evaluation (i.e., its imprecision, its lack of absolute reliability as a mechanism which provides an accurate measurement of academic performance), the issue of the "human factor" (i.e., the instructor's latent biases, either pro- or anti-student) is an ever-present element in the education industry.

More specifically, this element of bias could operate in a manner which would appear to be to the advantage of the trainee, resulting in the bending of institutionally, departmentally, and professionally operating principles, and of criteria for evaluating students' performance, and generously rewarding a particular

individual or group(s) vis-à-vis the rest, or it could operate equally on the opposite axis, depriving individual(s) or group(s) of that which they have rightfully earned.

The motives for violating the accepted norms of evaluation and for generously rewarding a particular individual(s) or group(s) could be based on numerous reasons, and could stem from sympathy for individual(s) or group(s) for a presumed disadvantaged position vis-à-vis the rest of the students in a class academic activities. Concerned American professors and administrators have alleged that these motives are precisely the ones which compel some American professors to hand out what has been commonly referred to as "courtesy grades" to foreign students, thus causing serious injury to the academic standards and the image of American higher education,²⁶ and to the involved foreign students.²⁷ The concern has been so deeply pervasive that at least one study was initiated by professors at the University of Illinois to establish if the professors were grading foreign students differentially vis-à-vis the host country students, thus rewarding the former more generously.²⁸

²⁶This suspicion is not limited to American professors and administrators, but it is a pervasive attitude among many American students as well. In fact, when a foreign student receives a higher mark than American students, or even one as high as theirs, it is not uncommon to hear some American students remark that they (foreigners) were rewarded a high mark because they come from such poor countries or educational backgrounds.

²⁷See Margaret Y. and John P. Henderson, op. cit., pp. 52 and 53; see also Chapter III, pp. 133-135.

²⁸J. Paraskevopoulos and R. Dremuk, "Grading Patterns for Foreign Students: A Faculty Survey," International Education and Cultural Exchange 4 (Winter 1967): 55-60.

Conversely, there would be numerous reasons for assigning foreign students low grades, ranging from malice to an innocent but equally harmful assumption that some individuals are not capable of attaining high levels of academic achievement in certain fields or in any field, and therefore, that there is no purpose in expecting them to do as well as others, and of assigning grades to such people accordingly. The latter phenomenon has more relevance to this part of the inquiry. It is a phenomenon which has precedence in educational institutions.²⁹ This is what sociologists term "lower expectations." It usually occurs when there is disparity between the background, class, and values of the instructor(s) and the dominant group of students in the institution, and the students in lower social stratum.³⁰

It manifests itself in a variety of patterns in interaction between the instructors and such students, ranging from differential

²⁹N. B. Brookover, et al., Elementary School Social Environment and School Achievement (East Lansing, Mi.: College of Urban Development, Michigan State University, 1973), pp. 30-31.

³⁰W. B. Brookover and E. L. Erickson, Society, Schools and Learning (East Lansing, Mi.: Michigan State University Press, 1969), pp. 94-97; F. C. Howe, "Teachers Perceptions Toward the Learning Ability of Students from Differing Racial and Socio-Economic Backgrounds" (Ph.D. dissertation, Michigan State University, 1970); and R. C. Rist, "Student Social Class and Teacher Expectations: The Self-Fulfilling Prophecy in Ghetto Education," Harvard Educational Review 49 (August 1970): 411-451.

responses to different students, depending on the teacher's differing expectations, to assigning different grades based on the same assumption.³¹

The relevant point in briefly discussing this phenomenon (i.e., the phenomenon of lower expectations) lies in the fact that the population whose academic experience at Michigan State University is being examined originates from the region of the globe which has been known to the Western mind as the "Dark Continent." This stereotype permeates American perception of Africa and its people.³²

Tying this in with the concept of the human factor in academic evaluation, it is reasonable to suspect that the African from the "Dark Continent" may evoke some sympathy from his/her American professor, which might result in the latter to grading the former leniently. It is just as reasonable to suspect that students coming from Africa could evoke an equally strong negative attitude which could affect the grading. Thus, it is being argued here that the

³¹W. B. Brookover, et al., p. 31; R. J. Giliotti, "The Expectation Pattern: An Analysis of Elementary School Social Environments" (Ph.D. dissertation, Michigan State University, 1972); C. Cornbleth, et al., "Teacher-Pupil Interaction for Pupil Achievement in Secondary Social Studies Classes," paper presented at Annual Meeting of the American Educational Research Association, Chicago, Illinois, 1972; and S. Metzner, "Teacher Bias in Pupil Evaluation: A Critical Analysis," The Journal of Teacher Education 22 (Spring 1971): 40-43.

³²See Harold R. Issacs, The New World of Negro Americans (New York: The John Bay Company, 1903); F. O. A. Okedi, "Strangers and Social Amusement on College Campuses: A Study of African Students in Two-Mid-Western Universities" (Ph.D. dissertation, Indiana University, 1964), pp. 111-116.

issue of the human factor in academic evaluation as it concerns foreign students in the United States should encompass both of these spectrums.

It is with this background in mind that Interview Questions 38-41 were designed to explore the sample's experience with the "human factor" in academic evaluation from both of the angles discussed above. Stating it differently, these questions were designed to query how the "human factor" has affected the respondents' academic evaluations if, in fact, it has affected them at all.

In Interview Question 38, the respondents were asked if they thought the professors graded them leniently vis-à-vis the host country students because the respondents were foreigners. In Interview Question 39, the same question was posed to them, except in this case they were asked if they thought they were graded more leniently than other foreign students. In both questions they were asked to respond by indicating on the scale of volume the professors "who do" and "do not" do, from "most do" as the greatest to "none do" as the lowest.

The responses indicating the relative volume of professors who graded the respondents leniently because they were foreigners, or who did not, are presented in Table 6.29, and the responses indicating the relative volume of professors who have graded the respondents differentially or not in comparison to other foreign students are presented in Table 6.30. As it can be seen from both tables, the overwhelming majority of the respondents marked their answers in the "none do" slot. However, a very few did think that they were graded more leniently because they were foreigners, and an even smaller

TABLE 6.29.--The distribution of responses in raw figures and percentages indicating the sample's view of whether the professors have graded them leniently because they were foreigners

The Size of Professors	Number	Percentages
Most do	0	0
Some do	3	6.7
Very few do	2	4.4
None do	<u>40</u>	<u>88.9</u>
TOTAL	45	100.0

TABLE 6.30.--The distribution of responses in raw figures and percentages indicating the sample's view of whether the professor graded them more leniently than other foreign students

The Size of Professors	Number	Percentage
Most do	0	0
Some do	1	2.3
Very few do	1	2.3
None do	<u>41</u>	<u>95.3</u>
TOTAL	43	100.0

proportion felt that they were graded more leniently than other foreign students. When queried during the interview about how such leniency was accorded to them, all said that it was not in actually assigning them inflated grades for relatively inferior performances. Rather, it was in the professors willingness to allow them more time to complete the academic task at hand, for instance, allowing 10 to 20 minutes extra to complete an examination, or allowing the student to bring in term papers a little bit after the deadline date, etc.³³

On the opposite spectrum, when asked if they were graded harshly because they were foreigners (Interview Question 40), about two-thirds marked "none do," but the remaining one-third (approximately) marked the slots indicating that the professors "did do" in varying relative degrees, ranging from "very few do" to "most do" (see Table 6.31).

Pursuing the same vein of inquiry, the respondents were asked if they had received more harsh grading vis-à-vis other foreign (non-African) students (interview Question 41). Table 6.32 contains the responses. A slightly higher proportion responded "none do." However, almost one in four thought that they had received some treatment to that effect (i.e., harsher grading vis-à-vis other foreign groups). As the table further reveals, the relative proportion of those who thought so diminishes in relation to the progressive increase

³³It will be recalled that the Illinois study also found similar considerations accorded foreign students by the professors, particularly those teaching in the social sciences.

TABLE 6.31.--The distribution of responses in raw figures and percentages indicating the sample's view of whether the professors have graded them more harshly because they were foreigners^a

The Relative Size of Professors	Number	Percentage
Most do	2	4.5
Some do	5	11.4
Very few do	8	18.2
None do	<u>29</u>	<u>65.9</u>
TOTAL	44	100.0

TABLE 6.32.--The distribution of responses in raw figures and percentages indicating the sample's view of whether the professors have graded them (as African students) more harshly than other foreign students^a

The Relative Number of Professors	Number	Percentage
Most do	1	2.3
Some do	4	9.1
Very few do	5	11.4
None do	<u>34</u>	<u>77.3</u>
TOTAL	44	100.0

^aOne sample member did not participate in answering this question.

in numbers of the professors on the scale who did this (i.e., graded them more harshly vis-à-vis other foreign groups).

The proportion of the respondents who reported having had such experience (i.e., the tendency to receive negative evaluation) is not large in relation to those who indicated the nonoccurrence of such incidents, as revealed in Tables 6.31 and 6.32, unless it is viewed in the context of larger prevailing concerns among African students which seem to be pervasive. It is what one Ph.D. candidate in Criminal Justice expressed as "latently present," in referring to his suspicion of the Western mind about African intelligence (i.e., the notion that Africans are less intelligent). An observation by a sociology graduate provides some more insight into how such attitude may operate:

They think that African students generally have limited backgrounds. This is erroneous by any stretch of imagination. Therefore, professors feel that African students must put in more effort in order to reach the same intellectual levels as American students. Essentially, this is based on the ethnocentric views inherent in American structure.

Another master's candidate in Journalism commented: "They certainly try to find more to criticize to confirm their own prejudices."

Another said, "They keep on poking until your ideas fall apart under the pressure resulting from the professor's position of power, an act normally not directed at Americans."

And finally it is useful to point out that most of the incidents of negative grading received by the respondents took place during the initial encounters between the students and such professors. Once the student proved himself/herself to the particular

professor, in most cases, the professor's attitude toward the particular respondent improved. The respondents reported incidents supporting this conclusion, incidents in which grades had been changed from "C" to "A" and, in some instance, confessions uttered by professors who were deeply suspicious about the capability of a given African student, but who had been persuaded to regard him/her positively as the result of the student's complaints and explanation of his/her position, or of the indisputably convincing performance of such students in his/her class.³⁴

Research

The term research, as it is used here, means those activities (i.e., both the content and the procedures) entailed in writing term papers, major papers, master's projects/thesis and doctoral dissertations submitted as partial fulfillment of courses, and degrees respectively.

Research activities, both those which are limited and those which are extensive in scope, are integral parts of academic training. A prevailing notion with respect to graduate education in particular is that such experiences are sine quanon for the development of communication skills in academic writing and reporting, and for the development of skills in academic inquiries. They provide a means of forcing the trainees to integrate the new knowledge with

³⁴ Respondents who indicated negative or positive grading were asked to cite specific incident(s) to support their views that they had been graded either more leniently or more harshly than American students, or other groups of foreign students.

with the old. Above all, they provide avenues for focusing on selected content and exploring areas of potentially useful knowledge which merit the student's attention. It was in the light of this fact that it was deemed fitting in this study that an examination of African graduate students; experience with respect to this aspect of their academic training at Michigan State University be included. Given the fact that these graduate students were being trained with the explicit goal of returning to their respective societies with the expectation of applying new knowledge as their contribution toward national development and betterment of the lives of their fellow people, this segment of the inquiry will attempt to view the respondents' experience in that context. In this context the pertinent issue for inquiry is to what degree the process(es) and the academic environmental conditions provided the necessary exposure to, and allowed for their research activities in areas related to African concerns. Interview Questions 42-54 were developed to serve this purpose.

Papers

Under this sub-topic any research activity presented in a written vehicle, but granted a status below Master's projects/thesis and doctoral dissertation, will be treated as papers.

The first necessity is to establish whether indeed the students' academic programs included assignments which involved writing papers and, if they did, for what proportions of credit within their courses. Thus, it was felt essential, in order to establish a point

of reference for the discussion, and then to proceed to the other aspect of the inquiry (i.e., if the students were able to write on issues related to Africa, etc.).

The data derived in the participants' responses to Interview Question 42, in which they were asked to indicate the relative proportion of courses in which they wrote papers in their graduate studies at Michigan State University, is presented in Table 6.33.

TABLE 6.33.--The distribution of responses in raw figures and percentages indicating the relative proportion of courses for which students wrote papers for partial fulfillment of the course requirements while pursuing graduate studies

Relative Proportion of Courses	Number	Percent
For every course	7	15.6
For many courses	17	37.8
For a few Courses	17	37.8
Not at all	<u>4</u>	<u>8.9</u>
TOTAL	45	100.0

As can be seen in the table, only four (8.9 percent) indicated that they had not written papers in any course at all. Slightly over one-half reported having written "for many courses" or "for every course," and another group of just over one-third said "for a few courses." Those who did not write any papers at all, and those who had to write "for a few courses," included only those who were enrolled in physical and life sciences.

As indicated earlier, the question more pertinent to the topic under consideration is whether or not the African graduate student participating in this project has written papers related to Africa (Interview Question 43). The responses have been assembled in Table 6.34. About two-thirds reported that they had such experience

TABLE 6.34.--The distribution of responses in raw figures and percentages indicating the proportions of the sample who have written papers on topics related to Africa in their graduate studies at Michigan State University^a

Relative Proportion of Courses	Number	Percent
Have written papers on topics related to Africa	30	69.8
Have not written papers on topics related to Africa	<u>13</u>	<u>30.2</u>
TOTAL	43	100.0

^aTwo sample members did not participate in answering this question.

while the remaining proportions did not. Since this piece of information tells only whether the environment was facilitative of the African trainee in undertaking such endeavors, it was deemed imperative to question the students regarding another aspect of their academic experience--their desire to write papers on African-related issues when it was possible to do so. Thus, in Interview Question 46, the participants were asked whether there were times when they wished to write the papers assigned for their courses on subjects related to Africa, but could not.

Table 6.35 shows the distribution of responses. The proportion of the sample who wanted to write their papers on issues related to African concerns but could not, and of those who did not have such an experience, was almost equal. However, the data in this table should not be construed to mean that the portion of sample members who responded to the question to the effect that there was no time when they desired to write their papers on issues pertinent to African concerns and could not write them, suggests that the academic environment of these students necessarily provided all the conditions necessary to accomplish such tasks. Some, albeit a small minority, may have experienced the conditions essential for facilitating writing on African-related issues. However, it is more likely that the greater proportion of this sub-group belongs to that group which did not write many papers, or did not write at all.

TABLE 6.35.--The distribution of responses in raw figures and percentages indicating the proportion of the sample who wanted to write their class papers on subjects related to Africa, but could not, while pursuing graduate education at Michigan State University^a

	Number	Percent
There were times when I wanted to write papers on topics related to Africa but was unable	18	46.2
There were no times when I wanted to write papers on topics related to Africa, but was unable	<u>21</u>	<u>53.8</u>
TOTAL	39	100.0

^aSix members of the sample did not participate in responding to this question.

The second part of Interview Question 46 was developed to probe into the circumstances which militated against the students (those 18 who appeared in Table 6.35) realized this wish. Again their narrative responses have been categorized into seven major, closely related, factors which militated against their wish in this regard (see Appendix D, Question 46(b)). These factors will be briefly presented in the succeeding paragraphs. Eight (44.0 percent) reported that they could not write on African-related issues due to the fact that their professors discouraged them from undertaking such endeavors. As one Ph.D. candidate in criminal justice expressed it, "They systematically maneuver you out of it." According to the students' observations, the most plausible reason (in some cases they were told this plainly), was that the instructors felt uncomfortable in having their students write on subjects or areas in which the instructors were not thoroughly versed.

Seven (38.9 percent) said that there was lack of data, both old and new, and a lack of literature as well. Among the data which they could not find on the university campus was data on national policy, professional journals, newspapers, scientific research data, etc., from their respective countries.

Five (27.8 percent) thought the fact that the entire environment was absent, that is they were physically so far removed from it through sheer distance, was one of the major factors which prevented them from accomplishing such a goal.

Two (11.1 percent) thought that most of the course content had no relevance to African situations, and thus they were not oriented to writing papers on Africa.

One (5.6 percent) participant indicated that if he had wished to have access to the data so related to African issues available elsewhere in this country, but was not available in the environs of Michigan State University, he did not have resources to go elsewhere and utilize it.

One observation may be useful here. A relatively greater proportion of respondents pursuing studies in the social sciences, than of those in the other two fields of specialization, namely physical and life sciences, reported their concerns, and expressed some level of frustration relative to these constraints in academic opportunities to write their papers on issues more relevant to Africa. Those in the physical and life sciences usually relieved themselves from such agonizing realities under the somewhat deceptive, grand claim that "science is universal and not environment related." However, when probed more deeply, they did become more amenable to reconsidering such a blanket statement regarding this issue. In fact, their experience is somewhat similar in this regard, in that their research facilities, raw material, and literature are local to the institution, and thus may be drastically different from those in the actual environment in which they will be functioning when they return home.³⁵

³⁵This point will be more lucid when their experience in conducting research for and writing thesis/dissertations is examined later in this section.

It will be recalled that the "U" curve theory was briefly presented in Chapter I for the purpose of providing for the readers some frame of reference in their attempt to interpret the analysis of the results of this dissertation.³⁶ The "U" curve construct encompasses, at least has the potential to encompass, the students' relative mental attachment or detachment (and the process as well), or their relative mental association and disassociation, regarding the important research issues deserving attention in their home society(s). Thus, it was thought that it might be interesting to examine whether their experienced patterns of actual writing, and wishing to write, papers on African-related concerns had any relationship to the different phases of their sojourn adaptive phases (see Interview Questions 44, 45, and 47).

Table 6.36 presents the frequencies of the papers written on African related issues by students who had been at Michigan State

TABLE 6.36.--The frequencies of most papers the respondents (those who had been at Michigan State University about three terms) wrote during different terms

Term	Number	Percent
Most of them during the first term	3	42.9
Most of them during the second term	2	28.6
Most of them during the third term	<u>2</u>	<u>28.6</u>
TOTAL	7	100.0

³⁶See Chapter I, pp. 43-45.

University for about three terms. Table 6.37 contains the frequencies for those who had been at Michigan State University for about two,

TABLE 6.37.--The frequencies of the most papers written by the respondents (those who had been two to three years, and more, at Michigan State University) and the frequencies of occasions when they wished to write on African related topics but could not

	Two Years Number	Three Years Number
<u>Wrote</u>		
Most of them during the first year	3	2
Most of them during the second year	2	7
Most of them during the third year		3
Evenly distributed		6
<u>Wished to Write But Could Not</u>		
Most of them during the first year		5
Most of them during the second year	4	1
Most of them during the third year	1	1

or three and more years. It also provides the frequencies of those times when they wished to write on African-related issues but could not, and the occurrence of those times according to the various periods of their sojourn.

As these tables indicate, the pattern tends to suggest that in general more wrote, and also wanted to write, but could not write, on African-related issues during their first stage of their adaptive

phase of their sojourn experience. However, the data did not provide a clear pattern. This is possibly due to the smallness of the sample size.

Then the respondents were queried about whether they had any problems in writing papers (see Interview Question, Part I, 48). This was done to include any other areas of their concerns relative to writing academic papers at Michigan State University which were not covered by the previous questions.

Of the 37 participants who responded to this question, about one in three indicated they had some kind of problems, while the remaining proportion responded they had none (see Table 6.38).

TABLE 6.38.--The distribution of responses in raw figures and percentages indicating the proportion of the sample who had and who did not have problems in writing academic papers for their graduate studies at Michigan State University

Nature Experience in Writing Papers	Number	Percent
Had problems in writing academic papers for graduate studies at MSU	13	35.1
Had no problems in writing academic papers for graduate studies at MSU	<u>24</u>	<u>64.9</u>
TOTAL	37	100.0

Then pursuing the same vein of inquiry, the participants were queried about the nature of the problems (Interview Question 48, Part II).

The content of the narration of this part of the question overlaps with those extracted in response to Interview Question 46(b).³⁷ Due to this fact, some of the respondents felt they had already covered some of the problems in writing papers when answering that question, and declined to address this question. Nevertheless, some did participate, and the content of their remarks relative to the problems they encountered in their endeavor to write academic papers in their graduate training experience at Michigan State University will be presented in the following paragraphs (see also Appendix D, Question 48(b)).

Three (23.1 percent) indicated that they did encounter problems in writing papers, but that the nature of their difficulty was technical--that it was focused on the need to write in English. Again, this group belonged to the segment comprised of the population which originated from Francophone Africa.

Two (15.4 percent) reported lack of appropriate data and literature in their areas of interest. As will be remembered, this was one of the issues of concern reported by a sizeable proportion of the respondents when analyzing their experience with respect to the reasons why they could not write their papers on African-related concerns, although they had the desire to do so.

Two (15.4 percent) said that conflict arose when the professors stipulated the topics on which the papers were to be written.

³⁷For the categorization of responses to Interview Question 46(b), please see Appendix D.

This group felt that such strict content-related direction thwarted their efforts to embark on African-related areas of concern.

Two (15.4 percent) felt that the deadline times for the submission of the completed paper interfered with their efforts to produce quality papers.

And finally, one (7.7 percent) reported that he/she encountered difficulty when the assignment was designed as a group project. The heart of the problem, according to this participant, emanated from the axis perspective. That is, the Americans wanted to write from their own perspectives, and the Africans wanted to write on something more relevant to Africa, and this difference generated some serious incompatibility in goals.

Again, as was done when examining their experience with comprehensive examinations (preparing for them and taking them), respondents were asked to indicate the educational value of writing papers (i.e., researching for them and writing them) on a scale from "very useful" to "not so useful" (see Interview Question 49).

Table 6.39 gives the distribution of responses. Slightly over half expressed the opinion that the educational value derived from the exercises in writing papers was "very useful." On the lower end, one in thirteen thought that their experience in writing those papers did not have so much educational value.

Thesis/Dissertation

According to the American academic tradition, thesis writing is an exercise done during the culmination of one's master's academic

TABLE 6.39.--The distribution of responses in raw figures and percentages indicating the sample's rating of the educational value of writing papers while in graduate school at Michigan State University^a

The Level of Rating	Number	Percent
Very Useful	22	55.0
Useful	15	37.5
Not so useful	<u>3</u>	<u>7.5</u>
TOTAL	40	100.0

^aFive sample members did not participate in answering this question. However, it must also be remembered that four members of the sample reported earlier that they never wrote papers while pursuing graduate education at Michigan State University (see Table 6.34, p. 277). Thus, it is safe to assume that these students were included in four out of the five who did not participate in this question as indicated in the table above.

curriculum,³⁷ where a dissertation is an exercise done during the culmination of a doctoral program.

The task of producing (i.e., doing the research for and the writing of) a dissertation is usually more intensive than that of

³⁷The status of the Master's degree has been greatly diminished recently in American degree status. In general, graduate schools do not require the writing of Master's thesis, but leave it as an option. In some fields such as physical and life sciences, the use of experiments for the Master's thesis is common. For a more detailed exposé on the status of Master's degrees, please see Bernard Berelson, Graduate Education in the United States (New York: McGraw Hill Book Company, 1960); Council of Graduate Schools in the United States: The Functions and Future of the Master's Degree. Panel Discussing Proceedings Third Annual Meeting, Washington, D.C., 1963, pp. 111-127; L. B. Mayew and P. F. Ford, Reform in Graduate and Professional Education (San Francisco: Jossey-Bass Publishers, 1974), p. 212.

producing a thesis, of the demand on the candidate's emotions, labors, and financial resources. It also requires more time. An independent research endeavor providing evidence of a candidate's mastery of his/her own subject, and of scholarly methods as well, is presumably the essential requirement.³⁸

The actual scope and depth of the dissertation--the orientation and the environmental context in which the approval for the research is processed and the actual research is conducted, and the format in which the findings are reported--vary from discipline to discipline, professor to professor, and in accordance with the specific subject in which the inquiry is being focused.

The most readily apparent differences pertaining to the dynamics entailed in the production of such projects can be observed in the procedures related to the academic fields of the physical and life sciences, and to those of social sciences. In the case of conducting thesis/dissertation projects in the physical and life sciences related fields, the status of the candidate and his/her role relations with the project director is very much similar to that of an apprentice with the skilled master in a trade art. In these fields, the graduate student comes into the program with full recognition of the fact that he/she will be working on the professor's research project(s). As a matter of fact, the student's admission to the

³⁸For more detailed discussion on the definition of doctoral dissertation, see C. J. Boyer, The Doctoral Dissertation as an Information Source: A Study of Scientific Information Flow (Metuchen, N.J.: The Scarecrow Press, Inc., 1973), pp. 1-6; 16-24.

program in a given department, from the logistical standpoint, is predicated on this one factor: the availability of a slot (i.e., physical space, the professor's need to use the student, and funds for research experiments).³⁹ The requirement of specified funds, whether they are acquired departmentally, institutionally, or externally, is an important variable, since the use of these funds usually requires some sort of accountability, either implicit or explicit.

Due to such structural relations between the graduate candidate, the professor and the research sponsoring agent, the professor has to supervise the experiments more closely than does a social science professor. However, the graduate student's thesis/dissertation is a byproduct and is secondary to the main goal of the research project.

In general, students in these fields take fewer courses and do more experiments, and they are usually introduced into independent graduate research earlier.⁴⁰

On the other hand, for students in the social sciences, the nature of the research for thesis/dissertation is substantially different. It is also true that there are some differences in approaches to the process of conducting research and writing thesis/dissertations in the respective disciplines within the broad field of social

³⁹An exception to this is the process entailed in the processing graduate students in mathematics.

⁴⁰See Sanford, op. cit., p. 11.

sciences. The main aspects of differences in this respect pertain to the nature and the goals of the research, and consequently the methodology appropriate for gathering the data, and the procedures used to facilitate the realization of the goal of the desired research. In some cases, the methodology may involve the development of specified instrument(s), while in other cases, it may be limited to literature. Similarly, the procedure(s) may entail field work (ranging from simple mailed questionnaires to extensive interviews and observations) or they may be limited to library work. The graduate students in these disciplines usually take more courses, and consequently their commencement on thesis/dissertation research phase is delayed.

The main features which distinguish the research between the production of a thesis/dissertation in the physical and life sciences, and in the social sciences, as briefly sketched in the preceding paragraphs, point to the fact that there are differences with respect to the processes. More specifically, procedures involved in producing a thesis/dissertation in the social science disciplines do not require a great degree of interdependence between the graduate student and the professor. Close working relations (in both physical proximity and mental processes) between the two are less common than in the physical life sciences. Less supervision is required on the part of the professor.

As a result of these structural differences in the nature of research activities, it is reasonable to expect differences in the dynamics which come into play in the selection, facilitation

(provisions of the enabling factors), and the level of involvement on the part of the professor in the physical and life sciences and social sciences.

The Research Topic and the Graduate Student's Interest.--

In Interview Question 50, the respondents were asked to indicate if the research topic they were engaged in for their thesis/dissertation was the one in which they had the greatest interest. The responses have been assembled in Table 6.40. Five in seven responded in the affirmative, while the remaining proportion, two in seven, indicated that it was not the topic in which they had the greatest interest.

TABLE 6.40.--The distribution of responses in raw figures and percentages indicating whether the topic for the student's thesis/dissertation was the one in which the student had the highest interest

	Number	Percent
The thesis/dissertation was the one in which they had greatest interest	20	71.4
The thesis/dissertations were not the ones in which they had greatest interest	<u>8</u>	<u>28.6</u>
TOTAL	28	100.0

In pursuance of the same theme, the African graduate students were asked what factors played a part in their choice of the topic they were pursuing for research (Interview Question 51). Eight

such major factors which were mentioned in the narration by the interviewees have been identified (see also Appendix D, responses to Question 51).

Two factors which emerged among the top three pertain to the decisive role which the academic advisor played in the process of selecting the research topic. Eleven (39.3 percent) reported that his/her (advisor) desired to see some breakthrough in a particular segment of knowledge of interest to him/her in his/her discipline.

This usually entailed his/her consistent encouragement to pursue that topic. In most cases, the advisor had done his/her own dissertation in the same area, and wished to expand the research in the area. In most of such instances, in either the physical or life sciences, the professor had funds to pursue further research in the area.

Eight (28.6 percent) said that one of the factors was the professor's deep knowledge of the subject, and the committee members' knowledge as well.

Ten (35.7 percent) said that the availability of resources was one of the factors. There are two sets of items which should be considered essential components in functioning as important variables for the selection of the topic for research. These are funds and appropriate research facilities. The availability of resources was a factor mainly for respondents who were in either the physical science or life sciences.

Six (21.4 percent) said that their desire to write on a topic related to African concerns, which contributed to their decisions to

do research on African-related concerns, was the result of the expressed interest of their home government in a particular topic, presumably because of its utility in national development.

Selecting a topic which encompasses one's greatest interest and is useful to his/her own society may be a desirable goal. For six (21.4 percent) of the student this was one of the factors in their desire to do research on a topic related to African concerns. Such a decision entails trying to obtain the necessary data on their own land. In most cases, gathering the pertinent data entails traveling home in order to reach the field. The success of such an endeavor hinges on the graduate student's initiatives in finding sympathetic sources for funding the project. For some international agencies such as FAO and WHO, and private foundations, such as Ford and Rockefeller, were the sources.

For some the desire to do the research on a topic relevant to one's home country was easily facilitated because of the interest expressed in their particular project by their respective home governments, presumably because of the utility of the project in contributing to national development. Five (17.9 percent) indicated this to be one of the factors.

At this juncture, it is useful to point out some more of the dynamics which operate in cases where the graduate student chooses to do his/her research project on a subject which is more relevant to African concerns. One such factor is the potential for conflict of interest between the graduate student and his/her academic advisor under such circumstances. That is, even if the graduate student

manages to secure funds to conduct his/her research on such a topic, that topic may be incompatible with his/her academic advisor's research program goal. The physical science or life science professor who might have invested in facilities and raw material experiments, and the student labor needed to complete certain projects within specific time schedules are the issues of equal importance. For those who are in the social sciences, in cases where the academic advisor might already have identified for the student an area of interest which could contribute to the advisor's own future expected publications, the issues are not of lesser concern. Furthermore, in such cases, the advisor may not possess the expertise in the social and political dynamics of the student's home country which would enable him/her to comfortably provide meaningful critiques and guidance to the students in his/her research endeavor on his selected topic. This is a consideration of paramount importance. Because of all these complex factors, it is the responsibility and role of the graduate student who chooses to embark on a relatively independent endeavor, structurally anyway, to negotiate and persuade the American professor to view such a proposition with favor, and to lend his/her professional support and accommodate the student's research activities.

The most difficult situation in accommodating and facilitating the graduate student's goal in this regard on the part of the advisor arose when the student could not secure funds to go to his/her home country to conduct the research. In some cases, the lack of funds, or lack of support from the advisor, was not the only

source of constraints in the effort to realize such a goal. Rather, constraints stemmed from the very nature of the discipline. In some cases the research could not be carried out on the premises of the department, since special instruments were required to conduct the actual research.

Notwithstanding some of these limiting environmental settings, there have been some cases where graduate students have made innovative proposals, and conversely the advisors concerned have utilized equal creativity in facilitating the realization of such goals on the part of the graduate students. For the purpose of illustrating the nature of such creative arrangements, two representative cases will be briefly mentioned.

A Ph.D. candidate in chemistry wanted to do his research on some aspects of processing of rubbers from rubber trees. This was of particular interest to him, since there are rubber trees in his country, and advancing such knowledge would contribute greatly to national development. Since it was not possible to go home and conduct the research, the nearest project he could be involved in which was available to him in his department was specializing in plastics. The advisor, who had some years of experience in one of the developing countries, responded with perceptiveness and made special arrangements to provide this student with much less sophisticated instruments for conducting the research, reasoning that training him in the use of the more sophisticated instruments would be irrelevant, a move with which the student concurred.

The experience of the other sample member whose research project will be mentioned provides an example of different dimensions of such negotiations and arrangements in the way of accommodating a student's personal interest relative to research topics.

This particular African graduate student was in Crop Soil Sciences pursuing a master's program. He wanted to do his thesis experiment(s) on something relevant to his field of work in his country. He wished to conduct two experiments to develop some principles on the effect of association culture on grain (planting different grain together in the same field). More specifically, he wanted to test the effect of the associated planting of maize with dry beans, and maize with soybeans, in terms of the yields in protein and oil.

His interest in wanting to develop such principle(s) stemmed from the fact such a practice (i.e., associated culture grains) is a pervasive practice in developing countries, including his own, and that he wanted to make some contribution in this field of knowledge.

However, this was not a concern for farmers in Michigan and in the United States in general, and the department did not have a research program to produce more knowledge in this line of science. There arose a classic conflict of research goals between the graduate student and the department. However, the student concerned was able to persuade his advisor that his (the student's) academic efforts in this area would be fruitful for his future work when he returned home, and that he should be allowed to conduct his own experiment, apart from those projects which had been designated for research on

the department's agenda. The professor agreed to this proposal and provided him with the necessary seeds, plots, and facilities.

Some students, albeit only a few, do not bother to confront the issue, but shield themselves by the rationalization which asserts that science is universal. Therefore, by implication, the environment is not limited. One example is the case of a Ph.D. candidate in agricultural engineering, who conducted an experiment for his dissertation on some aspect of solar energy with the purpose of devising a mechanism to convert solar energy to heat air from drying corn on large scales. The project cost a very large sum, which was provided by the United States federal government. When he was asked how that would help him in his work in Africa, this student vehemently dismissed the idea of the necessity of creating a different mechanism for an African situation. He said, "If I can only make the knowledge available in the market, it can be bought. My worry is how to develop a mechanism from which energy can be obtained cheaply." However, his views regarding this matter have been challenged by his African colleagues within the department.

For those who identify some projects of potential utility of significant impact, and invest some imaginative thought in it, but for whom the conditions do not facilitate the realization of such a dream, the experience can be a bitter one of lasting disappointment, and may lead to abandonment of the whole area of interest and to the charting out a different direction of specialization. For example, the experience of another engineering student involved his imaginatively studying about solar energy on his own, and developing a

simple mechanical device which could be used by an ordinary African peasant farmer. The following is an excerpt from his own account regarding this process.

My original desire was to work on designing simple systems for refrigeration. I had it planned in such a way that it could be used in rural areas in developing countries. For this, I needed funding from my government. I did not get the needed support, and on top of that, I had problems with my passport. You see, they wanted me to come home right away, so I gave it up. I could have done it in a short time, one year and one-half, if I had stayed on that program. I had the option of working on a solar energy project provided by my academic department, but I would have had to be in the area more relevant to industrialized economics systems. So I gave away my whole interest in solar energy and went into something else, which took me even longer, and which was non-relevant to developing countries."

Some derived their interest and stimulus through direct exposure to the problem to be investigated while they were working back home. Five people (17.7 percent) reported this to be the case.

Two (7.1 percent) said that the availability of relevant data was one of the major factors involved in making their decisions.

As suggested earlier, in order to promote a fruitful academic learning experience and the successful completion of the selected topic for dissertation, an advisor must allocate a sufficient amount of attention and time to a given doctoral student. Past experience shows that graduate schools have not always registered praiseworthy records in this regard.⁴¹ The respondents were also asked if they thought they had received adequate help from the advisor in conducting the research and writing the thesis/dissertation (Interview Question 52).

⁴¹See Katz and Hartnett, op. cit., Chapter II, pp. 49-84.

As Table 6.41 indicates, more than two-thirds thought that they had received adequate help from the advisor in conducting their research and writing their thesis or dissertation.

TABLE 6.41.--The distribution of responses in raw figures and percentages indicating whether they had sufficient help from the advisor in conducting and writing the thesis/dissertation

	Number	Percent
Have received adequate help in conducting the research and writing their thesis/dissertation	22	78.6
Have not received adequate help in conducting the research and writing their thesis/dissertation	6	21.4

In an attempt to more fully understand the nature of the interrelationship between the African graduate student and the academic advisor in this endeavor, students were asked what factors influenced the amount of interest exhibited by the academic advisor in the graduate student's thesis/dissertation (Interview Question 53). Six major factors emerged from the responses to the open-ended question (see also Appendix D, Question 53).

The factor reported by the highest proportion is related to the new knowledge on which the research focuses and to the value the advisor attaches to it. Three out of seven, almost one-half of those who had commenced on this phase of their academic program, indicated this to be one of the factors. This value attachment to the new

knowledge can be sub-categorized into three related areas: the professor's publication interest; the perceived potential of the research for contributing to scientific knowledge; and the advisor's sphere of specialization (e.g., having done his/her own dissertation on the related topic).

Five (28.6 percent) said the advisor's interest in their research was related to his own project. This factor operates in two related ways: the fact that he/she (the advisor) is the team leader in the project, and that he/she needs the student's labor for the project.

Two (7.1 percent) indicated that the advisor's interest in the student's academic and personal growth influenced the degree of interest exhibited by the advisor.

One (3.6 percent) said his/her confidence in the graduate student to handle the project had impact on the degree of interest shown. Two (7.1 percent) reported that the advisor's other duties affected the amount of interest he/she showed in their project (he/she was too busy with other responsibilities, and therefore could not attend to the graduate student's research).

One (3.6 percent) said that the advisor did not have much experience with African problems and, therefore, was less interested than he/she might have been otherwise.

Then the respondents were asked to assess the educational value for themselves of the total experience of conducting the thesis research and writing the dissertation (Interview Question 54). As

indicated in Table 6.42, practically all of them put the rating on the positive side of their experience. In fact, the overwhelming majority, 21 (80.8 percent) indicated that it was "very useful."

TABLE 6.42.--The distribution of responses in raw figures and percentages indicating the sample's rating of the educational value of the total experience of conducting and writing thesis/dissertation

The Level of Rating	Number	Percent
Very useful	21	80.8
Useful	5	19.2
Not so useful	0	0
Not at all useful	<u>0</u>	<u>0</u>
TOTAL	26	100.0

Some Critical Factors

Factors refer to those elements which are not part of planned academic activities as examined in the previous sections, but which have roles in affecting one's academic experience favorably or unfavorably. It is in this context that they have been referred to as critical factors. There are numerous critical factors, but for the sake of brevity, four have been selected to include in this examination. These factors are: access to relevant data/literature, reading speed and comprehension, family obligations, and the disparity between previous and current education, if any. Two central questions were pertinent in this study in regard to these four factors.

How did these factors affect the academic experience of the graduate student while he/she was pursuing his/her studies? How much did the Michigan State University experience contribute to broadening his/her knowledge about his/her country, Africa, and the Third World in general?

The previous sections of the study have touched on some of these factors in indirect ways, and it has been quite evident thus far that these factors do concern the African graduate students in varying degrees. The thrust of the following section is to focus more directly on these selected factors. Interview questions 55-72 were developed to assist in exploring this aspect of the investigation.

Access to Relevant Data/ Literature

Having access to relevant data/literature related to the student's area of interest is one of the factors which contributes to the quality of intellectual environment, and consequently to intellectual orientation. Thus it was necessary to find out whether the African graduate students had any problems in getting access to relevant data/literature related to Africa and, if so, how often they had problems (Interview Q. 55). Table 6.43 presents the frequencies of time when such problems occurred and how often.

It is evident from the data in the table just introduced that the African graduate students did encounter problems in finding relevant data and literature on African-related issues. More than two-thirds of the 35 who answered the question indicated encountering problems in varying relative frequencies--"sometimes" to "very often."

TABLE 6.43.--The distribution of the responses in raw figures and percentages indicating the relative frequencies of students' problems in getting access to relevant data/literature related to African issues^a

Relative Frequency	Number	Percent
Very Often	8	22.9
Often	6	17.1
Sometimes	9	25.7
Never	<u>12</u>	<u>34.3</u>
TOTAL	35	100.0

^aTen sample members did not respond to this question. Most of them were from the physical and life sciences.

In many ways Michigan State University is one of the unique institutions of higher learning in the United States in regard to African issues, for it has a long history of cooperation with African educational institutions and related developmental projects.⁴² The university also operates one of the best African studies centers in the country which caters to African-related scholarship.⁴³ The

⁴²It was the parent institution for the establishment and development of the University of Nigeria at Nsuka, and it has cultivated links of varying degrees with many other institutions on the continent.

⁴³The center was rated as one of the leading in the nation by United States Office of Education in 1980. (David Wiley, African Studies Center Statement release, 1/25/80.) It offers many African-related courses, and works with 50-100 Africanists in varying degrees of involvement in African-related projects. (African Studies Center, Michigan State University, 1979-1980, Brochure).

main university library and some other small libraries, together, have over 110,000 literature collections on Africa.⁴⁴

Thus it was felt useful to examine how much, and for what purpose, the graduate students use the African studies center, if they do use it at all (Interview Question 56 and 57).

As Table 6.44 shows, of the 42 who responded to the question, two-thirds had visited the center with varying frequencies. Out of those, one in four visited it "often" to "very often," the rest "sometimes only."

TABLE 6.44.--The volume and frequencies in raw figures and percentages of the respondents who visited African studies center

Frequencies	Number	Percentage
Very Often	5	11.9
Often	2	4.8
Sometimes	21	50.0
Never	<u>14</u>	<u>33.3</u>
TOTAL	42	100.0

Most visited the center to read newspaper/periodicals on Africa, and to attend lectures and seminars on issues related to the continent, which were sponsored by the center (Table 6.45).

⁴⁴Ibid.

TABLE 6.45.--Sample's responses indicating the purpose for visiting the African studies center

Frequencies	Number	Percentage
To read newspapers/periodicals about Africa	32	71.1
To attend seminars/colloquia on Africa sponsored by the center	11	24.4
To attend weekly "brown bag" lunch lectures sponsored by the center	10	22.2
To consult with professors regarding academic program (courses, research, etc.)	3	6.7
To seek employment (graduate assistantships) at MSU	2	4.4
To acquire information on scholarships or other financial assistance available to African students in the United States	2	4.4
To inquire about the courses offered under the auspices of the center	2	4.4
Others	2	4.4

Of course, regardless of the degree to which the university is equipped with the facilities and material related to Africa, supplementing the programs offered by the university with such factors (i.e., relevant data/literature and supporting programs) is not useful unless a student's degree program possesses the necessary flexibility to allow the trainee to go outside his/her department and engage in such activities to enrich his/her academic experience. Thus in Interview Question 58 the participants were asked if they found such essential flexibility, which would allow them to go outside their respective departments and enrich their programs.

As Table 6.46 indicates, the proportions of those who reported they found such flexibility, and those who did not, is almost equal, the former being slightly higher.

TABLE 6.46.--The distribution of sample's responses in numerical figures and indicating percentages, indicating whether they found flexibility in their degree program to engage in academic activities outside of their departments

	Number	Percentages
Found Flexibility	25	56.8
Found No Flexibility	<u>19</u>	<u>43.2</u>
TOTAL	44	100.0

Finally, the respondents were asked if their experience at Michigan State University had helped them to become more informed about their country, Africa, and Third World in general.

As Table 6.47 indicates, more African graduate students in the study thought the Michigan State University experience increased their knowledge about the Third World and Africa respectively, than about their own countries. Many of them expressed the opinion that the medium of such information had been their interaction with the fellow students from Third World countries and African countries.

TABLE 6.47.--The distribution of the sample's responses in raw figures and percentages indicating how much their experience at Michigan State University helped them to become more informed about below-indicated regions

The Relative Degree	Own Country		Africa		Third World	
	Number	Percent	Number	Percent	Number	Percent
Very much so	9	20.9	11	25.0	12	27.3
Somewhat	11	25.6	20	45.5	23	52.3
Not Much	10	23.3	8	18.2	4	9.1
Not at all	<u>13</u>	<u>30.2</u>	<u>5</u>	<u>11.4</u>	<u>5</u>	<u>11.4</u>
TOTAL	43	100.0	44	100.0	44	100.0

Reading Speed/Comprehension

The ability to read with reasonable speed and comprehension of content is one of the essentials for succeeding in graduate school, and thus has impact on the academic experience of the trainee. Thus, the respondents were asked to assess their own reading skills as to whether these skills were adequate to manage the tasks of covering all the material to be read (Interview Question 60).

More than two-thirds reported that their reading speed and comprehension was adequate for the tasks they had to do (see Table 6.48). Of those who found their speed/comprehension too slow, only four (11.8 percent) took courses to improve their reading skills (Table 6.49).

TABLE 6.48.--The distribution of the sample's reponses in figures and percentages indicating whether their reading speed/comprehension was adequate to do the assignments

Level	Number	Percentage
Adequate	30	68.2
Too Slow	<u>14</u>	<u>31.8</u>
TOTAL	44	100.0

TABLE 6.49.--The distribution of the sample's responses in raw figures and percentages indicating whether the students had taken courses or other exercises to improve their reading speed/comprehension

	Number	Percentages
Had taken courses or other exercises to improve reading skills	4	11.8
Had not taken any courses or other exercises to improve reading speed/comprehension	<u>30</u>	<u>88.2</u>
TOTAL	34	100.0

Many cited the reasons for not taking such courses or exercises as lack of time, and the fact that speed reading courses as offered to a United States audience did not suit their particular needs, especially since such exercises are based on thorough knowledge of lots of English vocabulary.

Family Obligations

As pointed out earlier, graduate education is more intense and demanding than regular work, thus it imposes tremendous pressures on the students. The student often finds him/herself in a role conflict between the responsibility to pay adequate attention to family needs, and the need to devote total time and energy to studies.⁴⁵ Part of such family responsibility is financial. In the extended family system, a widely spread practice in traditional societies such as in African societies, such responsibility gets expanded, and a person may have obligations not only to immediate family (i.e., spouse and children), but to other family members as well.

In this section, the point of focus is on how these family responsibilities impinge on students' graduate education at Michigan State University. In Interview Question 63 the respondents were asked what type of dependents they have.

Table 6.50 presents the types of dependents they had while studying at Michigan State University. As it is used here, dependents means the person(s) dependent on the graduate student while he/she

⁴⁵S. L. Halleck, "Emotional Problems of the Graduate Student," Scholars in the Making: The Development of Graduate and Professional Students, ed.: J. Katz and R. T. Hartnett, op. cit., pp. 161-176.

TABLE 6.50.--The distribution of the sample's responses in raw figures and percentages indicating the type of dependents they had while in graduate school at Michigan State University

Type of Dependents	Number	Percentage
Wife/Husband Here	6	13.3
Wife/Husband and Children Here	14	31.1
Wife/Husband at Home	2	4.4
Wife/Husband and Children at home	5	11.1
Parent(s)	19	42.2
Brother(s) and Sisters and other relatives	24	53.3
None	11	24.4

was pursuing graduate work at Michigan State University. As the data in this table indicate, only 11 (24.4 percent) reported having no dependent. For those who had dependents, the type of dependents ranged from nucleus family members, to parents and siblings and other relatives.

More than one-half reported that one or some of their immediate family members (spouse or child) were going to school (see Table 6.51).

The other family members (nonimmediate) depended on those graduates, either for sustenance or for education, or for both (see Table 6.52).

However, when asked if their financial obligations, both to immediate and other family members, had limited their academic activities, more students, in relative terms, indicated that their

TABLE 6.51.--The distributions of the sample's responses indicating whether an immediate family member(s) was/were attending school

	Number	Percentage
An immediate family member(s) is attending school	24	80.0
No immediate family member is attending school	<u>6</u>	<u>20.0</u>
TOTAL	30	100.0

TABLE 6.52.--The distribution of the sample's responses indicating the type of financial support which students provide for their dependents

	Number	Percentage
Financial hlep for sustenance	7	15.6
Financial help for education	4	8.9
Financial help for both	14	31.1

academic activities had been limited because of financial obligations to immediate family members than because of obligations to other family members (see Table 6.53). Even among those who had immediate family member(s) going to school, slightly less than one-half reported that such a responsibility was hampering their academic activities.

Their financial obligations both to immediate (Interview Question 67) and other family members (Interview Question 69) affected their academic activities in a number of ways (see Appendix D, Response to Interview Question 67 and 69).

TABLE 6.53.--The distribution of the sample's responses in indicating whether their financial obligations to immediate and other family members limited their academic activities

	Immediate Family Members	Other Family Members
Financial obligations have limited academic activities	13 (28.9)	4 (8.9)
Financial obligations have not limited academic activities	15 (33.3)	18 (40.0)

Four (23.5 percent) said they were unable to participate in professional conferences, and the same proportion reported that they could not afford some of the important books in their respective disciplines. One (5.9 percent) reported that he did not have enough money to pay for an editor, and was therefore, somewhat disadvantaged.

The other reasons fell into a category which affected the students indirectly rather than directly. Four (23.5 percent) felt that they had to allocate money from their meager resources to pay for their wives' school fees. Since the majority of the women came to Michigan State University, accompanying their husbands in order to have the opportunity of being here at the university and go to school, this was a common practice. Four (23.5 percent) had to send money back home which reduced the amount they had to spend on their own education-related purposes. Three (17.6 percent) reported that the fact they had to work to raise money for family needs reduced the amount of time they spent on their studies. Three (17.6 percent) felt

that since they did not have enough funds to pay for baby-sitters, they had to spend more time at home with children rather than being in the library or office.

One major reason that so few indicated having financial obligations to their other(non-nucleus) family members interfered with their academic activities is that the majority of the sample members had worked prior to their coming to Michigan State University to pursue their graduate work and were on study leave, as was evidenced in the brief review of their profiles. These students had made arrangements at home to have some portions of their salaries go to those other family members to whom they had financial obligations.

The Disparity or Nondisparity Between Previous and Current Education

The adequacy or lack of adequacy of previous education, in terms of preparing the student for current graduate degree programs, is an important factor affecting one's academic experience. Historically, this has been one of the difficulties encountered by African students.⁴⁶ Thus, the African graduate students were asked to indicate the level of adequacy of the preparation in their previous education for the graduate work in which they were engaged (Interview Question 76).

The responses are presented in Table 6.54. As can be seen from the table, only one respondent thought his previous education

⁴⁶See Clark, op. cit.

TABLE 6.54.--The distribution of the sample's responses indicating the level to which their previous education has prepared them for their current degree program

Level	Number	Percentage
More than necessary	9	20.0
Satisfactory	35	77.8
Unsatisfactory	1	2.2
Most unsatisfactory	<u>0</u>	<u>0.0</u>
TOTAL	45	100.0

did not prepare him/her satisfactorily for the degree program which he/she was pursuing at Michigan State University.

Human Interaction in Academic-Related Matters

Before advancing to the analysis of the experience of the participants in human interaction in academic-related matters, it may be useful to highlight some of the phenomena relative to human interaction in an American graduate school. The purpose of doing this is to provide a sufficient background so that the analysis at hand will be viewed in the context of a general environment.

It has been recognized that graduate school is not only a place where certain skills are transferred, and where knowledge is imparted through the milieu of structural features (i.e., selection procedures sequence of examinations, practical experiences,

individual courses, and dominant teaching methods).⁴⁷ It is also a human institution where intense socialization takes place,⁴⁸ where individuals with differentiated roles function as socializing agents, transmitting certain "professional attitudes, values, and behavioral norms, both formally and informally."⁴⁹ The basic nature of the interaction between the trainee and advisor and faculty, and the manner in which it operates in the training process, have been well summarized by Bragg as follows:

. . . The interaction between the faculty and students formally and informally serves as the basis for the transmission of attitudes and values from the professional to the neophyte. There is a variety to this interaction, each kind complementing another. The role of the sponsor or mentor is central to the socialization process, especially in the graduate school, but the faculty in the aggregate create the setting, the value climate, in which the process occurs. The most successful socialization, measured in terms of congruency between the profession's goals and the existing neophyte's identity, is a product of a successful coaching relationship, a consensus among faculty of the goals to be achieved, and a perception of collegiality or acceptance on the part of the student. Both formal and informal interactions contribute to these conditions.⁵⁰

Another important type of interaction, perhaps just as important to the quality of academic experience in the process, is the role of graduate students. Bragg states:

⁴⁷These aspects have been treated in previous sections of this study. See also A. K. Bragg, The Socialization Process in Higher Education, Eric/Higher Education, Research Report No. 7, 1976, p. 19.

⁴⁸Katz, "Development of the Mind," op. cit., p. 107.

⁴⁹Bragg, op. cit., pp. 19-20.

⁵⁰Ibid., p. 26.

They . . . interact with each other on two levels, (1) "old" students interact with "new" students as role models and information sources, and (2) students interact with each other as fellow neophytes.⁵¹

Out of such interaction many useful information systems based on peer group interaction evolve, and these systems influence the academic experience of graduate students. Such informal system(s) can provide the following services: (1) mechanisms to "beat the system;"⁵² (2) coping mechanisms for the emotional survival of the member groups;⁵³ (3) development of informally accepted performance norms and sanction for those violating them, including faculty members;⁵⁴ (4) collegueship in fulfilling the need to belong to a group;⁵⁵ (5) useful information and substantial counsel on various aspects of academic programs (how to meet the requirements, etc.), particularly by those older, experienced students for new entrants;⁵⁶

⁵¹Ibid., p. 26.

⁵²Sanford, op. cit.

⁵³C. D. Orth, III, Social Structure and Learning Climate: The First Year at the Harvard Business School (Boston: Harvard University Press, 1963), pp. 54-156; H. Mauksch, "Becoming A Nurse: A Selective View," Annual of the American Academy of Political and Social Sciences 346 (March 1963): 88-98.

⁵⁴M. J. Horowitz, Educating Tomorrow's Doctors (New York: Appleton-Century-Crofts, 1964), p. 346; Bragg, op. cit., p. 29.

⁵⁵M. C. Mix, "Toward a Theory of Socialization into the Academic Profession" (Ph.D. dissertation, State University of New York at Buffalo, 1971), p. 107.

⁵⁶A. M. Heiss, "Berkeley Doctoral Students Appraise Their Academic Programs," Educational Record 48 (1967): 30-44; J. Harvey, The Student in Graduate School, Eric/Higher-Education Research Report (Washington, D.C.: American Association for Higher Education, January 1972).

(6) role models;⁵⁷ and (7) sources of intellectual stimulation for their members.⁵⁸

However, it has also been noted that where academic competition is pervasive, and where the need to protect one's own original ideas from one's peers becomes paramount for survival and perhaps ensures higher academic "rewards," and when isolation occurs as a result, the ability of the peer groups sub-culture to provide useful services for academic purposes becomes nullified.⁵⁹ Furthermore, the existence of such conflict in the student's personal goals, and their behavior in pursuance of such goals, can even contribute to unhealthy academic experience.⁶⁰

As stated previously in this dissertation, the interjection of a sub-group from the outside, in the case of African graduate students, can be expected to add some new dimensions to the academic atmosphere because the new sub-group interacts and operates from (potentially) different sets of value systems and different academic traditions and career expectations, than do the professors and students of the host culture.

⁵⁷H. L. Hearn et al., "Identity and Institutional Imperatives: The Socialization of the Student Actress," Sociological Quarterly 9 (Winter 1968): 47-63.

⁵⁸Mix, op. cit., p. 132; Heiss, op. cit., pp. 40-41.

⁵⁹See Harvard University Report of the Committee on the Future of the Graduate School (Cambridge: Harvard University Press, 1969), H. E. 002, 549; Bragg, op. cit., p. 29.

⁶⁰See W. E. Gregg, "Several Factors Affecting Graduate Student Satisfaction," Journal of Higher Education 43 (June 1972): 483-498; Heiss, op. cit.

Presently there are not many studies on this aspect of foreign students' academic experiences. However, a few studies which have been done on the subject suggest that academic activities in the sphere where foreign students and American students interact more than in other areas. The following two studies are worth mentioning.

Judy's study on the interaction between American and Indian students indicated that they participated together in academic activities which were fairly new to both parties more than they did in social activities.⁶¹ A similar study by Terry involving Japanese students showed that academic activities were one of the areas where American and Japanese students interacted the most.⁶²

To date, not much has been done on the interaction between faculty (advisors and others) and foreign students. Even the few limited studies available did not examine the level and quality of their interaction in academic-related activities.

This section of the current investigation is designed to explore these aspects (see Interview Question 73-126). For the purpose of the current examination, the inquiry into the human interaction of African graduate students in academic-related matters will be limited to the following two major groups: faculty (i.e., advisors and other professors) and fellow graduate students (i.e., American students, international students, and African students) who are engaged

⁶¹Jerry Judy, "Interaction of American Students with Indian Students at a Midwestern University" (M.A. Thesis, Michigan State University, 1967), pp. 20-21.

⁶²Patterson A. Terry, "Relationship Across a Binational Interface: American-Japanese Interaction in a University Setting" (M.A. Thesis, Michigan State University, 1969), pp. 51-52.

in academic enterprises at Michigan State University, each of which possesses its own distinctive background, status, and roles.

Faculty

Advisor

This individual's role in affecting the nature and quality of the academic experience of graduate students has already been pointed out in the discussion of the participants' experience with respect to the process of researching and writing thesis/dissertations. Here the effort will be to examine the participant's interrelations in wider academic activities.

Frequency.--The frequency of meeting between a graduate student and his/her academic advisor depends (see Interview Question 73) on several factors: (1) the first of these is intensity of academic activity and the stage at where the graduate student is in the process of his/her academic progression. For most students, the periods of intensity are when the student engages in developing his/her individualized academic program, when preparing for comprehensive examinations, and when he/she is conducting research and writing the thesis/dissertation.

Departmental Access.--The factor of access to the department functions to facilitate interaction between the graduate students and advisor under three different ways. First, in some departments,

graduate students are provided with a desk or office.⁶³ Included in this category are students who function as graduate assistants to their advisors either as a Teacher's Aide (TAs) or as research assistants, and those who are assigned offices or desks only without employment in the department. Secondly, there are students who are involved with a given experiment or research project, but without the status of employment as graduate assistants. Thirdly, there are graduate students who are employed by the department (or sometimes by the professors) to work on a given project in which the students are able to use some data from the results for their thesis/dissertation (this may not happen in every instance per se).

In this case and in the case of graduate assistants which have been mentioned under (1), it is the structural relationship (i.e., employer vs. employee), as well as presumably common academic interests and goals, and the confines of function and space, which brings them together. The difference, perhaps more accurately the relative advantage, for those graduate students who are involved in such structural relationships, as opposed to those who are drawn to the department by virtue of merely having space in the department (or college), is that the former (by the virtues of the nature of the avenues accorded to them) have more opportunities to meet with their academic advisors frequently when interacting with them in the academic collaborative effort(s).

⁶³Mix refers to such space provision for graduate students as "a home." See Mix, op. cit., pp. 72-73.

Secondly, for those who function in such structural relationships, the interaction is frequent, and the atmosphere informal, and these factors provide a more cordial and collegial atmosphere in discussions of issues relative to their academic programs, thus contributing to the quality of the interaction. And finally, there are those who do not fall into any of these categories (i.e., they have been given neither departmental space nor employment). For them, the frequency of meeting with the academic advisor is more limited.

The responses of the participants indicating the frequencies of their meeting with their advisors (Table 6.55) reflect the patterns of contact described in the preceding paragraphs.

TABLE 6.55.--The distribution of the sample's responses indicating the frequencies of students meeting with their advisors^a

Frequencies	Number	Percent
Daily--more than once a week	9	23.7
Once a week	2	5.3
Frequently	7	18.4
Several times a term (3-5)	4	10.5
Two or three times a term	8	21.1
Once a term	5	13.2
Whenever necessary	<u>3</u>	<u>7.9</u>
TOTAL	38	100.0

^aSeven sample members did not participate in this question.

Of course, the ultimate measure of the frequency of interaction between graduate students and advisors in academic-related matters (in a practical sense) has to be the graduate student's perception of whether he/she has or not received enough time from his/her advisor.

The sample's responses to Interview Question 78 which queried them on this issue, shows that almost four in five students thought they had enough time, while the remaining proportion felt the opposite (Table 6.56).

TABLE 6.56.--The distribution of the sample's responses indicating whether students thought they had enough time or not from academic advisor for academic counseling^a

	Number	Percentage
Got enough time from the advisor for academic counseling	37	84.1
Did not get enough time from advisor for academic counseling	<u>7</u>	<u>15.9</u>
TOTAL	44	100.0

^aOne sample member did not participate in this question.

Quality of Interaction.--Quality here refers to the nature of the atmosphere present when two or more persons interact for the purpose of exchanging ideas or accomplishing given task(s). In this case it is between the "advisor" and the "student." The nature of the atmosphere (quality) can be positive, indifferent, or negative.

Under positive, the following qualities can be included: congeniality, sympathy, empathy, and enthusiasm.

Indifference.--In the context of the present discussion, indifference is present when the interaction and relationship is fairly legalistic. That is, the advisor may entertain the visits by the graduate student, and the student may make the visits, but the interaction does not generate enough enthusiasm for learning to take place in an informal way. Negative refers to situations in which atmosphere is uncongenial, and is not conducive to the development of mutual trust and appreciation for one another's concerns.

Two elements were measured, namely the level of interest shown by his/her advisor in the student's program (as perceived by the student), and the degree of comfortableness the student felt when meeting with the advisor (Interview Questions 74, 76, respectively).

Tables 6.57 and 6.58 reflect the level of interest shown by the student's advisor in his/her program, and the degree of the graduate student's comfortableness when he/she met with the advisor regarding the student's academic activities, respectively.

As Table 6.57 reveals, four in five indicated the level of their respective advisor's interest in their academic programs as being "high" to "very high." Only one in 15 marked it as "low" to "very low."

About the same proportion, four in five, showed the level of their comfortableness when meeting with their advisor as "very comfortable" (see Table 6.58).

TABLE 6.57.--The distribution of the sample's responses indicating the level of interest shown by students' advisors in their programs (as perceived by them)

Level of Interest	Number	Percentage
Very High	18	40.0
High	16	35.6
Adequate	8	17.8
Low	2	4.4
Very Low	<u>1</u>	<u>2.4</u>
TOTAL	45	100.0

TABLE 6.58.--The distribution of the sample's responses indicating the level of the students' comfortableness when meeting with the advisors for academic activities

Level of Comfortableness	Number	Percentage
Very Comfortable	37	82.2
Just Comfortable	7	15.6
Uncomfortable	1	2.2
Very Uncomfortable	<u>0</u>	<u>0.0</u>
TOTAL	45	100.0

Thus based on the majority's indication that the level of their advisor's interest in their academic program was "high" to "very high," and the level of their comfortableness when meeting with him/her for academic activities was "very comfortable," it can be inferred that the quality of the interaction with the advisor in academic-related matters was positive.

Factors Which Affect the Quality of the Interaction.--Interview Questions 75-77 (both open-ended), were designed to explore this aspect. In Interview Question 75, the participants were asked to indicate what factors they thought influenced the advisors' levels of interest in the student programs. Eight major factors emerged (see also Appendix D, Question 75). These will be cited briefly in the following paragraphs.

Fourteen (31.1 percent) reported that the advisor's interest and experience in developing countries was one of the factors. This interest could either be in the country from which the graduate student originated, or in one of the African countries, or in one of the developing countries. In either of these instances, or in all of them, they reported that he/she had been to that country.

Eleven (24.4 percent) said that he/she had interest in the graduate student's future and professional development.

Having interest in the same area (particularly an area of specialization, such as the one in which the graduate student is doing his/her thesis/dissertation) was one of the factors. Nine (20.0 percent) reported this to be a factor of importance for them.

Six (13.3 percent) indicated the fact that the advisors showed them much respect as one of the factors.

Related to this was the advisor's commitment to help foreign students. He/she demonstrated commitment by showing interest in foreign students, and exhibiting sympathy toward them. Six (13.3 percent) said this was one of the factors.

Ten (22.2 percent) indicated that good performance (competence), and the advisor's expectations that he/she would do well was one of the factors.

Related to this was the student's own confidence in himself/herself regarding academic performance. Five (11.1 percent) said this was one of the reasons why the advisor showed a high level of interest in their program.

And finally, four (8.9 percent) reported that since the advisor involved his/her in his/her research projects (they worked together), this in itself contributed to the level of the advisor's interest in their program.

In Interview Question 77, the participants were asked to indicate the factors which contributed to their level of comfortableness when meeting with the advisor for the purpose of academic-related matters. Seven such factors have been summarized from their narrations, and will be presented very briefly hereafter.

Twenty-three (51.1 percent) said they had no inhibitions when interacting with the advisor (they had good relations). Related to this was the treatment that the advisor gave to their ideas. Nine

(20.0 percent) reported that the advisor was open and was willing to accept their ideas for consideration and review. This made them comfortable.

Six (13.3 percent) thought the advisor's "open door" policy, and willingness to make himself/herself available to help in case of any problems was one of the factors which made them comfortable.

Nine (20.0 percent) felt that the advisor's interest in their personal progress was an important factor.

Seven (15.6 percent) indicated that the advisor had an interest in their country, or in Africa, and this made the comfortable.

Three (6.7 percent) felt that the advisor was generally good to foreign students (showed sympathy), and this made them comfortable with him/her.

A noteworthy pattern of the factors reported to have affected the graduate student's interrelations with their advisors is that the majority of these factors were the types of traits which foster a positive atmosphere. This should be taken into consideration together with the conclusion reached earlier regarding the quality of interaction between the graduate students in the sample and their advisors.

Other Professors

In this case, the inquiry into African graduate students' interaction with professors will be limited to those instructors from whom the sample members had taken course(s). The rationale for limiting the inquiry concerning the nature of their interactions with

professors to those with whom they had course(s) is based on the assumption that, for most of them, any meaningful contact with faculty members would be limited to those associated with their academic activities (i.e., courses, seminars, etc.).

Here again, it was necessary to establish the level of their comfortableness with their professors to infer the quality of interaction (Interview Question 82).

As Table 6.59 discloses, the majority (seven in eight) put their level in the qualified answer column, "just comfortable," while only one in six marked it in the highest column, "very comfortable."

TABLE 6.59.--The distribution of the sample's responses indicating the level of their comfortableness when meeting with professors in academic-related matters^a

Level	Number	Percentage
Very Comfortable	7	16.3
Just Comfortable	33	76.7
Uncomfortable	3	7.0
Very Uncomfortable	<u>0</u>	<u>0.0</u>
TOTAL	43	100.0

^aTwo sample members did not respond to this question.

This was a marked difference in contrast to the levels of comfortableness reported with their advisor. There the ratio of those who indicated the level of comfortableness as "very comfortable," and "just comfortable," was in reverse (see Table 6.59).

Factors Contributing to Comfortableness or Uncomfortableness.--In response to Interview Question 83 (open-ended), the following main factors were reported by the participants (see also Appendix D, Question 83).

Ten (25.0 percent) said that the professor's willingness to listen to their ideas made them comfortable.

Seven (17.5 percent) reported that the professors' interest in their academic affairs (as perceived by the participants) contributed to their feeling comfortable.

Eight (20.0 percent) thought that their own knowledge of the subject (comprehension and competence) made them feel comfortable.

The familiarity (interest) with the issues in Africa, and in developing countries in general, on the part of the professors was one of the factors reported by five (12.5 percent).

Five (12.5 percent) felt that the congeniality (friendliness) accorded them by the professors made a difference.

Personal determination to think positively on the part of the graduate students was a factor for some. This included ignoring stereotyping of them and of their kind, and being tolerant. Three (7.5 percent) indicated that this was the case in their experience.

And finally, three (7.5 percent) stated that the fact they worked with the professor on the same projects most of the time helped them to be more comfortable with him/her.

As to those factors which contributed to their feeling uncomfortable with their professors in academic settings, the respondents

commented on the following situations (see Interview Question 84--open-ended): the professors' prejudices and stereotyping (five); the professors' lack of experience abroad (three); the professors' placing the student in a lower status in their minds because of the student's foreign accent (two); the students' limited exposure to some professors (particularly those outside of their departments) (three); and having received low grade(s) in one of the earlier courses, which seemed to have precipitately lowered the student's image with the professor(s) in such cases, they were ignored, neglected, and rejected) (two).

The professor(s) international experience (i.e., whether they had worked abroad or not) has been mentioned several times as a factor affecting their human interactions in academic-related matters in the preceding analysis. Thus, it was deemed useful to examine more deeply this variable of international experience, and its effects on the training of foreign scholars at Michigan State University.

In Interview Question 85, the participants were queried as to whether they felt that those professors who had professional international experience related to them better than those who did not.

Table 6.60 summarizes their responses to this question. As the table discloses, five in six felt that the professor's international experience did make a difference, and that they had better relations with such individuals.

The participants' responses regarding this matter have more credence when they are weighed against the relative volume of professors with international experience from whom the participants had

TABLE 6.60.--The distribution of the sample's responses indicating whether they felt those professors who had professional international experience related better to them than those who did not^a

	Number	Percentage
Professors who had international experience related better to African graduate students (sample members) than those who did not	34	79.1
There was no difference	<u>9</u>	<u>20.9</u>
TOTAL	43	100.0

^aTwo sample members did not respond to this question.

taken classes. The relative volume of professors with international experience from whom the participants had taken classes has been summarized in Table 6.61, and the nature of their activities overseas has been presented in Table 6.62.

To further determine the relationship between the professors' "positive" attitudes, as demonstrated by their congeniality, enthusiasm, and empathy toward African graduate students (i.e., the sample members), and the professors' international experience, two related tests were applied successively. First, the participants were asked to consider the three professors they had (at Michigan State University) whom they thought had professionally related to them best (that is, if they had such), and to indicate whether these professors had an international experience in their professional careers or not. They were instructed to do this by indicating in which region of the globe these professors had worked (see Interview Question 86a).

TABLE 6.61.--The distribution of the sample's responses indicating the relative volume of professors with international experience (i.e., Africa and developing countries) from whom graduate classes were taken at Michigan State University

Relative Volume	Africa		Developing Countries	
	Number	Percent	Number	Percent
Most	1	2.3	3	6.8
Several	5	11.4	12	27.3
A Few	25	56.8	21	47.7
None	<u>13</u>	<u>29.5</u>	<u>8</u>	<u>18.2</u>
TOTAL	44	100.0	44	100.0

TABLE 6.62.--The distribution of the sample's responses indicating the nature of the activities in which their professors were engaged while abroad (i.e., Africa, Developing Countries, etc.)

Nature of Activities	Number	Percent
Teaching (counseling	14	43.8
Field Work, Teaching/Counseling	13	40.6
Travel, field work/teaching/ counseling	<u>5</u>	<u>15.6</u>
TOTAL	32	100.0

Then they were instructed to select one professor among the three who related to them the best in their academic activities, and likewise to indicate where that professor had worked in his/her professional career (see Interview Question 86b).

Tables 6.63 and 6.65 present the reports. These reports clearly establish the relationship. For example, while eight reported that one of the three professors chosen by them had never worked outside the United States, 37 said that at least one of the professors had worked outside the United States. Of these 37 professors who were indicated by the students, 31 had worked in one of the developing countries, and 18 of the 31 had had experience in Africa. A similar pattern, albeit with a narrower margin of difference, was reported that all three professors chosen by them had international experience (see Table 6.63).

TABLE 6.63.--The distribution of the sample's responses indicating the international scope (i.e., where they had worked abroad) of the three professors who related best professionally to participants

Global Regions Where He/ She Had Worked	One Professor	Two Professors	Three Professors
Developing Countries but not in Africa	13	3	--
Africa	12	5	5
Developed Countries	6	2	--
Developing Countries (including Africa and developed countries)	6	4	5
Never worked outside USA	<u>8</u>	<u>6</u>	<u>6</u>
TOTAL	45	20	11

Regarding the international experience of the one individual whom the participants felt related to them the best of the three professors, two in three (see Table 6.64) reported that that person had worked abroad, and of those, five in nine said that the professor's experience was in developing countries, including Africa.

TABLE 6.64.--The distribution of the sample's responses indicating the scope of international experience (locations where he worked) of the one (out of three) professors whom the participants thought related to them the best

Regional Location	Number	Percent
Has worked in Africa	12	27.9
Has worked in developing countries but not in Africa	5	11.6
Has worked in developing countries (including Africa) and developed countries	9	20.9
Has worked in developed countries	5	11.6
Has never worked outside the USA	<u>12</u>	<u>27.9</u>
TOTAL	43	100.0

The role of race (or color) as a variable affecting some aspects of the academic experience of African graduate students at Michigan State University has surfaced elsewhere in this study, namely in the areas of evaluation⁶⁴ and of factors which contributed to the level of the students' comfortableness with their professors. In

⁶⁴See Chapter VI, pp. 273-274.

Interview Question 89, the participants were given the opportunity to comment on this issue. This was done in order to observe the strength of this variable as a factor--as determined by the relative frequency with which it was reported to be an issue in their inter-relations. The participants' reactions are reported in Table 6.65.

TABLE 6.65.--The distribution of the sample's responses in raw figures and percentages indicating the relative frequency of times when race affected the working relationship between the graduate student and the professor

Relative Frequency	Number	Percent
Very often	3	6.7
Usually	7	15.6
Seldom	31	68.9
None	<u>4</u>	<u>8.9</u>
TOTAL	45	100.0

Two in nine thought that their race affected the working relationship between their professors and them from "usually" to "very often," while more than two-thirds reported that it affected the relationship "seldom."

In general, most of the participants were not at ease in discussing this issue. "Hard to tell" was a comment uttered quite frequently among the majority of sample members. As one graduate student in life science remarked, "Remember, people can hide their feelings toward others under professional behavior mechanisms."

When this relatively small proportion of the sample who definitely felt race was one of the issues in their interrelations with their professors was asked why they felt this to be true (see Interview Question 90--open-ended), the following patterns toward the African graduate's reaction to a given issue, underestimation of the quality of the student's work in grading the student, responding to the student's questions in an uneasy or an unfriendly manner (three); relegating the problems and views of the people developing societies like those in the student's country to a nonrelevant status (possible due to lack of awareness of such concerns on the part of those professors) (two); and plain stereotyping (see also Appendix D, Interview Question 90).

Professors as significant others: The final element examined regarding the African graduate students' interrelations with their advisors and professors was the level of professional intimacy that could evolve from such interaction. It will be recalled that at the beginning of the examination of this dimension of the experience of African graduate students (i.e., Human Interaction in Academic-Related Matters), the nature of socialization in graduate school was briefly described. In that brief discussion, the role of the advisors and professors as socializing agents was pointed out.⁶⁵ At this point, the thrust is to inquire as to whether a special relationship involving a professor(s) as a "significant other" evolves as the

⁶⁵See pp. 313 and 314.

result of the interaction and socialization engaged in by the African graduate students and professors.

Viewing this process from the standpoint of the individual being socialized provides an appropriate perspective. Bragg has identified five steps in the process of socialization which a person goes through in order to be socialized:

- (1) Observation--the identification of a role model(s);
- (2) imitation--the trying on of the role models behavior;
- (3) feedback--the evaluation of the "trying on" of behavior;
- (4) modification--the alteration of refinement of behavior as a result of evaluation; and (5) internalization--the incorporation of the role models' values and behavior patterns into the individual's self-image.⁶⁶

Thus, ideally, in the first step, the individual to be socialized identifies a "significant other whom he/she wishes to be like."⁶⁷

For such person(s) the socializing agent "functions both as role model and goal clarifier."⁶⁷

A potentially significant factor in these interrelations between the individual to be socialized (an African graduate student) and the socializing agent (a professor(s)) is the amount of authority as the disposal of the latter, and the role which such authority could play in adding more weight to his/her influence "in shaping the behavior of the individual through sanctions or the threat of

⁶⁶Bragg, op. cit., p. 7.

⁶⁷Ibid.

sanctions."⁶⁸ In the interrelations that are being described, professors do possess considerable authority in the procedures of training, and rewarding, and certifying of the graduate students, which in itself has the potential to affect the interplay in this process.

However, due to several factors, neither the completion of this process, nor the pattern described in the preceding paragraphs, can be taken for granted as occurring in every graduate student's educational experience. First of all, the process of professional socialization is rather complex, since other forces, such as the structural features in a given educational institution, and the fellow students in their two (potential) roles, namely, as socializing agents and fellow "appretices," have a significant impact on the experience of the trainees in the process.⁷⁰ Secondly, there are the individual differences. More specifically a trainee may conceivably reject engaging in such intimate association in a genuine fashion.⁷¹ Thirdly, the role model may "be a composite 'ideal,'" rather than a particular person.⁷² And fourthly, as has been pointed out several

⁶⁸Ibid.

⁶⁹Ibid. It is generally believed that the role models who possess authority have an advantage over the ones without such authority in impacting the process more decisively. See F. Elkin and G. Handol, The Child and Society: The Process of Socialization, 2nd ed. (New York: Random House, 1972), p. 56.

⁷⁰See Bragg, op. cit., p. 10.

⁷¹Ibid., p. 32.

⁷²Ibid., pp. 7 and 20.

times previously when examining the other dimensions of the educational experience of the sample at Michigan State University, the nature of the graduate student population whose academic experience is the subject for this study brings into the picture some new dynamics (potential).

The above-listed factors suggest that the identification and selection by graduate students of a "Significant Other" or "role model" (i.e., an individual), needs to be studied in a given environmental context, and on an individual basis. Thus, the participants were queried as to whether they had any professor(s) whom they considered and related to as "a significant other(s)" while pursuing graduate education at Michigan State University (Interview Question 91).⁷³ Then those respondents who indicated that they did have such a person(s) at Michigan State University (and those who said they had "supporters" only) were asked to provide three aspects of that persons background, namely, gender, marital status, and international experience (Interview Question 92, a to c). Table 6.66 summarizes the responses.

⁷³Since the expression, "significant other" is rather new to many, especially those who are outside of certain disciplines in the social sciences (i.e., anthropology, sociology, psychology, etc.), and of course, to those in physical and life sciences, a standard definition of the expression had to be provided for each sample member. The following contextual definition was provided. "A significant other in this context refers to a professor or professors whom you admired in your field, so much that you liked to imitate him/her--someone you have used as your model--someone who has shown interest in your well-being and professional development. It is somebody whose advice you respect and respond to--a person who entertains your ideas with respect, but who is willing to suggest alternative approaches if he/she deems them to be feasible.

TABLE 6.66.--The distribution of the sample's responses in raw figures and percentages indicating whether or not the students had a "significant other" (a professor) at MSU, and some basic characteristics of their "significant other" or "supporter," and his/her international experience

Types of Interrelations		Number		Percent	
Had a "significant other"		20		44.4	
Did not have a "significant other" but did have a consistent supporter		13		28.9	
Had neither a "significant other" nor a "supporter"		<u>12</u>		<u>26.7</u>	
TOTAL		45		100.0	
<u>Some Characteristics of "Significant Others" or "Supporters"</u>					
Gender					
Male	SO	19	} 31	57.6	} 96.3
	S	12		38.7	
Female	SO	1	} 2	3.0	} 6.0
	S	1		3.0	
Marital Status					
Married	SO	19	} 32	57.6	} 97.0
	S	13		39.4	
<u>International Experience</u>					
Has worked in Africa	SO	6	} 12	18.2	} 36.4
	S	6		18.2	
Has worked in one of the developing countries but not in Africa	SO	6	} 7	18.3	} 21.3
	S	1		3.0	
Has worked in other coun- tries, but not in one of the developing countries	SO	4	} 5	12.1	} 15.1
	S	1		3.0	
Has never worked outside the United States	SO	5	} 10	15.2	} 30.6
	S	5		15.2	

LEGEND: SO = significant others; S = Supporter.

And finally, the group members were supplied with sets of activities ranging from academic to social, and were asked to indicate which ones they did frequently with their "significant other" or "supporter," while pursuing graduate studies at Michigan State University (Interview Question 93, a to m). The patterns of the proportions indicating frequent interaction between the respondents and their "significant others" or "supporters" in the listed general areas of activities and specific activities are shown in Table 6.66.

Four out of nine reported that they had a professor whom they considered a "significant other," while one-third indicated they did not have anybody whom they regarded as a "significant other," but that they had someone who would fit "a lesser status," someone whom they regarded as "above other professors" in the levels of their interaction, interest, and mutual respect. The respondents received more consistent support (in relative terms) from this individual than from other professors; thus, such professors are referred to in this discussion as a "supporter(s)."

The remaining proportions, one in our, reported having none of the above (see Table 6.66).

A brief look into the backgrounds of those professors whom the informants identified as either their "significant other" or "supporters" is useful in order to gain a deeper understanding of the patterns of the interrelations.

The overwhelming ratio of such professors, both of "significant others" and of "supporters," were male⁷⁴ and married (Table 6.66).

The majority, about three-fourths, had some kind of international experience, most of them in developing countries, in their professional work. In general, a greater ratio of those professors whom one segment of the sample reported as their "significant others" had international experience (two in three) than did those who were identified as just "supporters" by the other sector of the participants (see Table 6.66).

Here the pattern that has been rather persistently recurrent in the findings presented in earlier sections emerges again: the apparent relationship between the professor's international experience and the type of academic experiences which the African graduate students had (for the majority anyway). That is, in general, it seems that the graduate students had more positive working relations in their academic endeavors with those professors who had worked outside the United States.

Some of the more useful learning insights and individual growth in a given profession take place during the associations, or

⁷⁴This may be due to the well-known fact that males dominate the teaching profession at the university level, particularly within the graduate sections, rather than indicating evidence of a pattern of the male sector of the professoriate extending more opportunities for intimate professional associations to African graduate students per se.

as the result of the associations between the "role model" and the student in some common activities.⁷⁵

It is evident from the data presented in Table 6.67 that the participants and their "significant others" or "supporters" did frequently engage in some common sets of activities. The general areas of such activities can be categorized as academic, personal, social, and sports. In general, greater proportions of those African graduates who had "significant others" were engaged in such common activities with their "role models" than were those who had only "supporters," especially in regard to those sets of activities generally classified as "academic" and "personal" (see Table 6.67).

African Graduate Students' Interaction with Fellow Graduate Students

There are three major conditions under which students can interact with each other in their academic activities outside the formal classrooms. These include: (1) sharing academic problems or seeking help from fellow students on a one-to-one basis; (2) joining or forming a study group on a voluntary basis; and (3) functioning/acting/participating/working with other students on the same academic project (i.e., laboratory work, field work, etc.) when teamed up by professor(s).

In the current study, the thrust was first to determine if the academic experience of African graduate students included

⁷⁵See Bragg, op. cit., pp. 20-21.

TABLE 6.67.--The distribution of the sample's responses indicating the types of activities in which students were frequently engaged with their "significant others" and "supporters" at Michigan State University

Nature of Activities		Number	Percent
<u>Academic</u>			
Exchanged literature and references in their mutual special area of academic activities	SO S	13 } 21 8	39.4 } 63.6 24.2
Did research together in the laboratory/field/library etc.	SO S	6 } 15 9	18.2 } 45.5 24.2
Went to professional meetings together	SO S	8 } 11 3	24.2 } 33.3 9.1
Taught courses together	SO S	3 } 6 3	9.1 } 18.2 9.1
<u>Personal</u>			
Talked about the students' personal problems, achievements, and activities	SO S	18 } 25 7	54.5 } 75.8 21.2
Discussed what the student should do to develop professionally	SO S	17 } 24 7	51.5 } 72.7 21.2
Talked about the students' family problems	SO S	9 } 14 5	27.3 } 42.2 15.2
<u>SOCIAL</u>			
Visited his/her home	SO S	7 } 16 9	21.2 } 48.5 27.3
Visited with his/her relatives in the area or other cities	SO S	2 } 2 0	6.1 } 6.1
Went for a drink together	SO S	2 } 2 0	6.1 } 6.1
Went to an American party	SO S	1 } 3 2	3.1 } 9.1 6.1
<u>Sports</u>			
Participated together in sports	SO S	1 } 1 0	3.1 } 3.1

Legend: Significant Other = SO; Supporter = S.

interacting with three distinct segments of their fellow graduate students, namely host country students (Americans), international students, and African students, under these three conditions as outlined earlier, and second, to examine the nature of their experience with each group listed above when working under such circumstances.

Interview Questions 94, 95, 98, and 104 were included in order to inquire about the informants' experience with Americans relative to those above outlined matters.

Table 6.68 summarizes the occurrence of such "two-way" sharing of academic problems, and the relative frequencies of such interactions between African students (sample) and each of the three groups of graduate students defined earlier. Table 6.69 presents the proportions of those Africans in the sample who had participated in voluntary study groups, and those who had not, and the relative frequency of such interactions with each sub-group of graduate students; Table 6.70 contains the proportions of those Africans (sample) whose experience included, and those whose experience did not include, working on joint academic projects in team(s) organized by the professor.

Host Country Graduate Students (Americans).--As Table 6.68 reveals, approximately similar proportions (about two-thirds) had sought this kind of two-way help in academic problems. That is, about equal proportions reported asking some help from Americans, and conversely their American counterparts doing likewise. In terms

TABLE 6.68.--The distribution of the sample's responses indicating the occurrence on a one-to-one basis on the two-way sharing of academic problems between the sample members and Americans, and international and African graduate students, and the relative frequencies of such occurrences

	Africans Sought Help from Americans		Americans Sought Help from Africans		Africans Sought Help from Internationals		Internationals Sought Help from Africans		African (sample) Sought Help from Africans		Africans Sought Help from Africans (sample)	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Yes	34	76.6	32	74.4	37	82.2	44	97.8	35	79.5	37	88.1
No	<u>11</u>	<u>24.4</u>	<u>11</u>	<u>25.6</u>	<u>8</u>	<u>17.8</u>	<u>1</u>	<u>2.2</u>	<u>9</u>	<u>20.5</u>	<u>5</u>	<u>11.9</u>
TOTAL	45	100.0	43	100.0	45	100.0	45	100.0	44	100.0	42	100.0
<u>Relative Frequency</u>												
Quite often	2	5.9	0	0	2	5.3	3	6.8	7	20.0	3	7.9
Often	18	52.9	22	64.7	18	47.4	29	65.9	18	51.4	17	44.7
Very rarely	<u>14</u>	<u>41.2</u>	<u>11</u>	<u>33.3</u>	<u>18</u>	<u>47.4</u>	<u>12</u>	<u>27.3</u>	<u>10</u>	<u>28.6</u>	<u>18</u>	<u>27.4</u>
TOTAL	34	100.0	33	100.0	38	100.0	44	100.0	35	100.0	38	100.0

TABLE 6.69.--The distribution of the sample's response indicating their participation in voluntary study groups with American, international and African graduate students, and the relative frequencies of the sample members' participation

	Africans Involved in Voluntary Study Groups--Americans		Africans Involved in Voluntary Study Groups--Internat'l's		Africans (Sample) Involved in Volun- tary Study Groups-- Other Africans	
	No.	Percent	No.	Percent	No.	Percent
Yes	32	72.7	25	55.6	25	58.1
No	<u>12</u>	<u>27.3</u>	<u>20</u>	<u>44.4</u>	<u>18</u>	<u>41.9</u>
TOTAL	44	100.0	45	100.0	43	100.0
<u>Relative Frequency</u>						
Very Often	3	12.0	1	3.8	2	8.0
Often	12	48.9	16	61.5	16	64.0
Seldom	<u>10</u>	<u>40.0</u>	<u>9</u>	<u>34.6</u>	<u>7</u>	<u>28.0</u>
TOTAL	25	100.0	26	100.0	25	100.0

TABLE 6.70.--The distribution of the sample's responses indicating the sample's participation in professor-organized teams to do academic projects with American, international, and African graduate student

	With Americans		With Internat'l's		With Africans	
	No.	Percent	No.	Percent	No.	Percent
Have been teamed by professor(s)	32	72.7	19	42.2	19	44.2
Have never been teamed by professor(s)	<u>12</u>	<u>27.3</u>	<u>26</u>	<u>57.8</u>	<u>24</u>	<u>55.8</u>
TOTALS	44	100.0	45	100.0	43	100.0

of relative frequency, the participants did this only slightly more often than their American colleagues.

When the pattern is compared with that of the interaction with the other two groups (i.e., Africans interacting with the two other subgroups under the same conditions), it seems that there were more (although only slightly more) two-way solicitations for academic help between African (sample) graduate students and the other two subgroups than between African graduate students (sample) and the Americans, both in terms of occurrences and relative frequencies. More will be said later in the way of comparing the experience of the sample with each of the three subgroups relative to the nature of the experience in the interactions.

Under the voluntary group study scheme, almost about two-thirds of the sample members indicated that there were occasions in which they engaged in such endeavors with American graduate students (see Table 6.69). Unlike the pattern of interaction noted in the case of two-way soliciting for academic help under the one-to-one scheme, more Africans reported having been involved in voluntary study groups with Americans than with internationals and other African groups (Table 6.69). However, this pattern did not hold true with respect to the relative frequency of such occurrences.

About two in three participants also indicated that they had been part of teams where such teams were organized by the professors in order to have them undertake some type of academic project (Table 6.70). As the same table reveals, 13 more sample members

reported having functioned with teams that had been organized by the professors than with either of the other subgroups. Some reasons possibly responsible for this will be suggested later in the discussion, when the participants' experience in working with the other two subgroups will be analyzed. For the present, it is sufficient simply to observe this fact.

International Graduate Students.--Before commenting on the patterns of the interactions between the informants and the international graduate students and African graduate students under the three conditions discussed so far, one simple question must be addressed in order to allay any concern that might be raised as to the validity of attempting to analyze the interaction between the participants and international and African graduate students without providing some evidence showing that the participants did have members of these two sub-groups in their classes during the course of their graduate studies at Michigan State University.

The data derived with the help of Interview Questions 105, 106, and 116, as presented in Table 6.71, disclose that the majority of the sample members did have international and African graduate students in their classes while pursuing their graduate work at Michigan State University.

Coming back to the analysis of the participants' experience with the international graduate students, it is evident from the data presented earlier that quite a sizeable proportion of the sample members did interact with the international graduate students under the

TABLE 6.71.--The distribution of the sample members who had, and who did not have, international and African graduate students in class or seminars at Michigan State University

	International Students						African Students	
	From Developing Countries		Industrialized Countries	Both				
	No.	Percent		No.	Percent	No.	Percent	
Had class with	17	37.8	1	27	60.0	42	93.3	
Did not have class with	1	2.2	0			3	<u>6.7</u>	
TOTAL			45 (100.0)				100.0	

three conditions, namely, two-way soliciting on a one-to-one basis for assistance with academic problems, studying in groups formed on voluntary basis, and functioning in a team organized by professors to do work on given academic projects (see Tables 6.68, 6.69, and 6.70).

One possible explanation as to why a smaller proportion of the sample members participated in voluntary study groups, and in the groups teamed by the professors, in contrast to those who participated in two-way, one-to-one interactions where academic problems were shared, could be that there were fewer international and African graduate students in comparison to the host country graduate students in their respective departments. This situation seemed to have reduced the frequency of opportunities for such interactions between international and African graduate students. Such opportunities were more readily available, relatively speaking, with American graduate students.

However, as evidenced in the data presented earlier with reference to the proportion of the Africans in the sample who had international and other African graduate students in their classes and seminars while pursuing graduate education at Michigan State University, the experience did provide enough opportunities for encounters with these two sub-groups for the purpose of the current study.

African Graduate Students.--What has been said regarding the participants' pattern of interaction, under the conditions discussed

earlier with the international graduate students at Michigan State University can be applied equally to the sample members' pattern in relating to African graduate students. Briefly stated, the participants interacted with other Africans who were engaged in academic activities under three conditions, namely, two-way, on a one-to-one basis in seeking academic help; in voluntary study groups; and in groups teamed up by professors to work on some academic tasks (see Tables 6.68, 6.69, and 6.70).

The Nature of the Experience.--The nature of the experience refers to the quality of the interaction of the African graduate students (sample) with each of the three sub-groups, namely, American, international, and African graduate students, while they were engaged in academic activities under the three conditions (i.e., on one-to-one in sharing academic problems, voluntary group study, and professor-sponsored group projects). For the sake of brevity and organizational convenience, the nature of the experience of the sample will be briefly discussed under sub-headings in the succeeding paragraphs.

It became quite clear from the beginning, in the course of the interviews on this subject, that there have been many instances where problems have occurred in the interrelations between the Africans (sample) and American graduate students in the process of their educational activities. However, the nature of the experience, whether positive or negative, differed from one set of circumstances to another (i.e., the three conditions under which they interacted).

For example, when interacting with the Americans on a one-to-one basis in seeking help from them in academic concerns, about half of the total sample members reported somewhat different patterns of behavior than were normally observed on the part of American students (see Interview Question 97). These patterns of behavior ranged from over-simplifying explanations, cautiousness, to avoidance (i.e., tendencies to not want to give help at all) (see Table 6.72).

TABLE 6.72.--The distribution of the sample's responses indicating the pattern of approaches used by American graduate students when assisting them (Africans) with an academic problem^a

The Pattern of Approaches	Number	Percentage
They are just normal	23	51.1
They are uptight (very careful, cautious)	10	22.2
They do not offer enough help (have a tendency to avoid you)	10	22.2
They oversimplify	6	13.3
They are too generous	4	8.9

^aThe respondents were allowed to pick as many items as fit their experiences.

The quality of the interaction under the "voluntary study group" scheme seemed, in general, to be more positive between the Africans and Americans. In responding to Interview Question 102 (open-ended), in which the participants were queried as to how their

interrelations with Americans were under this condition, 20 out of 29 reported that their working relations with American graduate students were positive.

However, even here, nine out of the 29 gave qualified answers to the question. That is, their working relations went well, but they (Africans) "had to work hard at it." According to the observations of this group of respondents, the major problem stemmed from the fact that their counterparts (Americans) tended to "doubt" and "under-estimate" their (Africans) abilities and academic levels. In fact, this seemed to be one of the persistent factors contributing to the negative experience which the participants had in dealing with Americans in academic activities. This will become more apparent later in the analysis of the sample's experience in dealing with Americans in professor-organized teams in order to accomplish given academic tasks (projects).

In the course of the interviews, two main reasons emerged as to why the Africans' interactions with Americans were relatively more positive when working under this condition (i.e., voluntary study group). First, the Africans chose to engage in study groups with Americans whom they knew and considered to be their friends, at least at a casual level. Secondly, the African students invested more energy and time in preparing themselves before coming to any voluntary study group in which a given topic was to be covered in a joint group effort. A comment by a Ph.D. candidate in one of the physical sciences on the need for such preparation and its effect

on the interaction when engaging in a "voluntary study group" provides more insight on the phenomenon. He observed: "They [Americans] tend to underestimate your intelligence, unless you work hard to convince them. Otherwise they look at you with suspicion. They do not believe that you can make similar contributions to the profession, just as you do in dealing with the professors, you have to work hard to prove yourself. Only talking is not enough; you must back it up with logic, reasoning, and substance."

Many further observed that the first impressions (i.e., their performances at first group meetings) were very crucial for the creation of a favorable image in the eyes of their American counterparts. As part of the image building process (i.e., efforts to create a favorable image), some Africans engaged in what a Ph.D. candidate in geography termed "converting them." Essentially, this entails trying to convince the "American study friends" that they (Africans) are as good and intelligent as anyone else. The following is an excerpt from his description of such efforts: "Sometimes I lectured them about Africa. You, as a graduate student, have got to realize that you are dealing with people who were brought up to think about you in certain ways. You must be able to forgive, and overlook and tell the positive side."

In asserting his own efforts in this regard he said: "I have converted some, and they have radically altered their negative opinions concerning Africa. I feed them African food, and go out drinking together with them, and I have managed to convince them. I have indoctrinated them."

When African graduate students' interaction with their American counterparts in professor-organized teams to work on academic projects is examined, the proportion of the respondents who reported having some difficulties with working with American students is larger. Twenty-three indicated that they had experienced difficulties, while 13 said they had good working relations (see also Appendix D, Interview Question 104).

Judging from the participants descriptions, they encountered two types of reactions, or two types of Americans with whom they had difficult working relations, under this arrangement. Some just did not want to work with foreigners. Six reported instances where the Americans either avoided foreigners, or told the professors in charge that they did not want to work with foreigners.

Seventeen reported that while Americans worked with them, they tended to give them minimal and dependent roles in the tasks at hand. According to this group, the assignment of less important roles was manifested in several ways, including hesitation, and sometimes refusal, to include the portions done by the Africans in the final version of the reports; tendencies to dominate the activities in projects; assigning to themselves the most important parts of the projects; and even sometimes insisting on supervising the simple activities assigned to the Africans in the labor division of the project.

There are two major factors which contribute to the tensions in the interrelations between foreigners, in this case Africans and the Americans, within the professor-organized teams in undertaking

academic projects. First, under this type of team arrangement, the students may not know each other, and the foreigners may not encounter any other students whom they consider friends. Secondly, the activities in such assignments involve a grade. So the Americans may feel that involving foreigners, whom they do not believe have a level of competence similar to theirs, in the research and report, may jeopardize their (Americans) getting high marks for the projects.

In general, under the three conditions listed, namely, two-way solicitation for assistance in academic related issues on a one-to-one basis, voluntary study groups, and teams organized by professors to undertake academic projects, the quality of interaction between the sample population and the other two sub-groups, international and African graduate students, was more positive than was the interaction of the participants with Americans.

For the majority of the sample, the interrelations with international and African graduate students were less strained. There are at least three reasons which are possibly responsible for the development of such positive working relations between the African students (sample) and the international graduate students, particularly those from developing countries. First, the similar background (i.e., the fact that both groups of students came from developing countries). More about this factor will be discussed later. Secondly, the factor of having similar status in the new society--that of being foreigners. This also will be referred to again in later discussion. Thirdly, as was pointed out earlier, international graduate students with whom the sample members interacted in academic-related concerns

originated from countries where English is not widely used, but most Africans selected for this study came from former British colonies where English is still the lingua franca.

Since English is a problem for those students who come from Asia (not withstanding those who came from former British colonies, such as India and Pakistan), and for those from Latin America and the Middle East, in pursuing their studies at Michigan State University, such students find it easier to ask for help from their fellow foreign students.

Some African graduate students reported that, in general, most international graduate students from these global regions were good in technical and mathematical skills. The Africans benefited from collaborating on their studies with such individuals. As one chemistry major put it, "They have the technical and mathematical mastery, and we have the language; therefore, we mutually benefit from the cooperation."

However, the working interrelations between the sample population and international and African graduate students did not develop as smoothly as reported above for all participants. Some, albeit a very few, did report some difficulties in working the two sub-groups. One reported that he had some difficulty in working with Asian students. He said it was very hard to penetrate their reserve.

Two indicated that they had bad experiences in working with fellow African graduate students. Both of those participants were from the same country in Africa. The complaints expressed by them,

while they were not identical, were similar, in that both respondents felt that they had been abused or misunderstood in the process of relating to their fellow African graduate students. One commented as follows in explaining some of the misunderstandings he encountered: "Africans, those from my country anyway, have peculiar egos when it comes to academic matters. They don't want to admit their ignorance. That is, they don't want to accept the fact that they don't know an area in an academic subject when they ask you for help, and then so on from there." The second graduate student made a similar observation when he remarked, "I found out that you are taken for granted when you study with Africans."

The inquiry about the African graduate students' experience in their interrelations with the three sub-groups progressed from an examination of their experience with each of the three sub-groups. Thus the informants were queried as to whether there were any differences in the way they interacted with each of these student groups--Americans, International, and African graduate students--in matters related to their academic studies (Interview Question 125).

As Table 6.73 reveals, the overwhelming majority (four in five) responded in the affirmative. Thus in Interview Question 126 (open-ended), those individuals who fell into this category were asked to describe the nature of the differences in the way they interacted with each of the three sub-groups, and the reasons for them. More specifically, they were asked to indicate the patterns of their tendencies and preferences in rank-order, in terms of their

TABLE 6.73.--The distribution of the sample's responses indicating whether or not they interacted in different ways with the three sub-groups--American, international, and African graduate students^a

Reaction	Number	Percentage
Yes	37	84.1
No	<u>7</u>	<u>15.9</u>
TOTAL	44	100.0

^aOne sample member did not participate in this question.

interactions with the three sub-groups--American, international, and African graduate students in academic-related matters while pursuing graduate studies at Michigan State University, and the reasons for such patterns.

Four such patterns of tendencies and preferences, based on rank-order, emerged (see also Appendix D, Interview Question 126).

Of the 37 who participated in the question, 28 (75.7 percent) indicated that the patterns of their tendencies and preferences in interacting in academic activities had been first to interact with Africans, next with internationals, and then American graduate students.

Seven (18.9 percent) said African, then American, and finally international graduate students.

Internationals, next Africans, and the American graduate students, and Americans then internationals, and then African graduate

students, were reported as patterns of tendencies and preferences for interactions by one respondent each respectively.

In the following paragraphs, the reasons why the respondents possessed particular patterns of tendencies and preferences in interacting with each sub-group will be briefly presented. The number of the participants will be given in raw figures (in brackets) behind each item they provided, putting Africans in the first position in the rank-order as the students with whom they had preferred to interact. They listed their reasons as: a common identity of historical, economic, and political conditions (15); mutual trust and confidence and understanding (13); similar cultural values (8); the ability to talk easily about home problems, aspirations, and experience (6); and a common identity which stems from having the same status--a foreigner (6).

The reasons for placing the international graduate students in such positions (i.e., mostly second and first) in the patterns, were similar to those cited in the preceding paragraph relative to the patterns of interaction with African graduates, notwithstanding the issue of language. Secondly, since the proportions of respondents citing each item varied, the rank-order of the item emerged differently (i.e., was altered). Thus, these reasons were ranked in the following order: common identity of historical, economic, and political conditions (12); mutual trust, confidence, and understanding (11); common identity--being fellow foreigners (7); a common problem with language (6); and the ability to talk about home problems, experience, and aspirations(4).

When asked why the American graduate students were in the last position in the rank-order in the opinion of the participants, sample members gave the following four reasons: lack of much commonality (distances in culture and experience) (13); lack of mutual trust in academic matters (they do not take you to heart, particularly those who never have been outside the United States) (7); differences in life and career expectations (6); and the tendency of American students to relate to sample members on a limited basis (i.e., academic only) (4).

The Anticipated Usefulness of Current Education

Of all the seven dimensions regarding the academic experience of African graduate students at Michigan State University selected for examination in this chapter, perhaps this aspect may draw the most questions from some quarters as to the meaningfulness of such an effort. Indeed, two questions could be raised by those who may hold some reservations on the matter.

The first one may be stated as follows: no academic curriculum can fit a working situation in the real world. Particularly with reference to the education of foreign students, it could be argued that the fact that the curriculum does not fit their particular world of work back home is not necessarily endemic to their unusual situation (i.e., that they are educated in the United States and sent to work in another society). The inference here is that the host country students face similar problems when they commence working in real life situations.

The second argument pertains to the status of the foreign students in relation to work experience: that is, since the students may not yet have worked professionally, their evaluation of the relevance of their current education may not be valid. Thus, it may be appropriate, and necessary, to include a statement or two as to the rationale for the inclusion of the inquiry relative to this dimension of the participants' academic experience--the anticipated usefulness of their current education. To be sure some of the points which will be presented in support of such opinions have already been discussed in Chapter I, in the statement of the problem for the research project and the significance of the study.⁷⁶ However, since the issue of relevance has the potential to raise such questions as were briefly presented in the preceding paragraphs, it was felt that more thorough statements on the subject were warranted prior to the presentation of the results of the findings relative to this dimension of the participants' academic experience, the anticipated usefulness of their current education.

It will be recalled that in the literature review on the topic of the relevance of American higher education for foreign students, it was noted that students from developing countries were less optimistic about the relevance of their United States education than were those from industrialized nations. Secondly, the limited, available research conducted in the experience of those individuals who had received American educations, and had returned to their respective

⁷⁶See Chapter I, pp. 27-31.

societies and were employed in various capacities, indicated similar opinions with respect to the question of relevance.⁷⁷ Furthermore, the nonempirical literature briefly surveyed on the topic indicated the concerns of administrators and intellectuals associated with cross-cultural education, who have raised similar reservations with special reference to the training process of students from the Third World countries.⁷⁸

Here two more points can be advanced in justifying the inclusion of the issue of relevance as part of academic experience of this sample--first, trainees' own concerns and preoccupation with the issue of relevance. The relevance of considering the students' own expressed and manifested concerns, with respect to the usefulness of their foreign educations upon their re-entry to their respective societies, lies in the fact that both realities and perceptions do influence human lives and activities in substantial ways. In other words, whether the issue of relevance of their current education is a valid concern or an imaginary one on their part, the fact that this issue preoccupies the thinking of the concerned students justifies an examination on the topic. Secondly, the findings of this investigation in the earlier sections indeed clearly indicated that the issue of relevance has been one of the major concerns in the educational experience of the sample members.⁷⁹ The findings to be

⁷⁷Chapter III, pp. 143-146.

⁷⁸Chapter III, 275-280.

⁷⁹See Chapter VI, pp. 290-297.

presented in the succeeding paragraphs relative to the anticipated usefulness of current education of the sample may be more appreciated if they are viewed using this discussion as their background.

The participants were asked to evaluate the courses and seminare they had taken at Michigan State University in terms of their future professional activities on the scale of "generally very useful," "generally not useful," under four categories, namely core courses (major field), cognate (minor field), elective courses, and research courses (Interview Question 130, a-d).

Table 6.74 summarized their reactions to the questions posed to them regarding the usefulness of their coursework. Each category was rated as "generally useful," by more than 40 percent and fewer than 70 percent (by those who responded to each section). Only relatively small proportions rated any of the categories as "generally not so useful."

When the participants were probed more as to why they thought each category would be either useful or not useful (Interview Question 131), much clearer pictures emerged. Their reactions are presented in the following paragraphs under each category.

Core Courses

Eighteen (40.0 percent) ranked them "generally useful" to "generally very useful," because they felt that these courses provided basic knowledge and theory, etc., in the field.

Nine (20.0 percent) felt they were useful because they related to their professional goals, but that they needed a lot of modification.

TABLE 6.74.--The distribution of the sample's responses indicating the level of perceived usefulness of the courses and seminars taken at Michigan State University in their future professional activities

	Core Courses (Major Field)		Cognate Courses (Minor Field)		Elective Courses		Research Courses	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Generally very useful	26	57.8	16	43.2	14	46.7	21	67.7
Generally useful	17	37.8	19	51.4	12	40.0	8	26.7
Generally not so useful	2	4.4	2	5.4	4	13.3	2	6.5
Generally not at all useful	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	45	100.0	37	100.0	30	100.0	31	100.0

Eight (17.8 percent) said they were useful. These courses were courses selected by the participants themselves, based on their anticipated practical application.

On the negative side, however, five (11.1 percent) felt the core courses covered many theoretical models based on American experience.

Minor/Cognate Courses

Minor/cognate courses--The freedom to select course(s) based on the knowledge that those particular courses would have more relevance to one's future work than others was an important factor in the participants' academic experience at Michigan State University. Nine (24.3 percent) reported this to be the case regarding their category of courses.

Six (16.2 percent) felt that their courses were useful because they related to their professional goals, but that they needed much modification.

Five (13.5 percent) reported that these courses were more attuned to American situations and lacked relevance to the situation back home, but that they had to take them to fulfill the requirements.

Two (5.4 percent) felt the courses were useful because they were going to teach at universities back home, and the courses dealt with fundamental sciences which are universal in university curriculums.

Elective Courses

As was the case in the students' perceptions regarding the categories of courses described earlier, the freedom to select the courses based on what they thought would be most relevant was a factor here too. Ten (33.3 percent) reported this to be the basis for believing that the elective courses were useful.

Three (10.0 percent) thought that the courses were useful because they related to their professional goals, but that they needed a lot of modification.

Five (16.7 percent) thought they were useful because they related to their future profession.

Two (6.7 percent) reported that the courses were relevant because they were going to teach in a university, and the basic courses were similar in the United States and home country.

Four (13.3 percent) indicated that the courses were less useful because they were more attuned to American conditions, but that they had to take them just to fulfill the requirements.

Research Courses

Seven (22.9 percent) reported that they found these courses useful because they could be applied to the type of research they would be doing at home.

Seven (22.9 percent) thought that they were useful because they introduced them to research technology.

Four (12.9 percent) said they found them useful because they provided practical skills for conducting research, but that they needed a lot of modification.

Six (19.4 percent) thought they were useful since they used that criterion in selecting them.

It is useful to note there the importance which the participants attached to their roles in selecting the courses within given categories of courses in their individualized academic program. For obvious reasons they were able to do more selecting of their own courses under the "cognate/minor" and "elective" categories of course arrangement. Since they had to take all those courses prescribed under the category designated as "core courses" in order to fulfill the requirements of their respective departments, they did not have much in the way of options among those courses. As a matter of fact, it was clear during the interviews that the participants exhibited more enthusiasm about the categories of "cognate/minors" and "electives" than they exhibited about the "core courses."

Summary

The purpose of this chapter was to analyze the findings of the research relative to the academic experience of African graduate students at Michigan State University in the seven dimensions chosen for the investigation, namely: (1) the development of individualized academic programs required for graduation; (2) the process involved in acquiring knowledge (i.e., method of teaching, class participation, etc); (3) evaluation; (4) research; (5) critical factors (i.e., access to relevant data, literature, family obligations, the parity or disparity between previous and present education and how these affected a student's educational experience); (6) human interaction in

academically related matters; and (7) the anticipated usefulness of current education upon re-entering one's own society.

The African graduate students in this study obtained pertinent information for the development of their individualized academic programs from four sources, namely, academic advisors, departmental catalogues, graduate students in their respective departments, and academic committee members, in that order of plurality. However, the first two--advisors and departmental catalogues, were the main sources for almost three-fourths of the sample population, advisors being the source for about the one-half.

They had four sets of sources of input which possessed varying degrees of relative weight in the shaping of the individualized academic graduate programs. These were: (1) "most of the students' suggestions and some of his/her advisor's recommendations," (2) "most of his/her advisor's recommendations and some of the graduate student's suggestions," (3) "most of the graduate students' suggestions," and (4) "the committee member's suggestions" (in that order of plurality). The first three sets of sources of input were reported by the majority. One-half indicated the first, while one in our indicated the second.

In the decision-making process in the development of individualized academic programs the following five factors were considered in the main, in the following order of priority, one to five: (1) the student's future professional aspirations, (2) his/her personal academic needs, (3) the cultural and environmental conditions

of students' future field of professional work, (4) the necessity for meeting departmental academic requirements, and (5) the students' past-professional experience (in that order of plurality).

The overwhelming majority, 38 (86.4 percent) in the sample indicated that they had persisted in the original majors they had applied for at the time of admission. Only six (13.6 percent) had switched majors since the time of admission to their graduate programs at Michigan State University. For most of those who had changed, the change involved shifting the area of focus within the same field.

Based on the African graduate students' own assessments of the procedures and processes which were followed in developing their respective individualized graduate academic programs, it seems that they had positive perceptions about those procedures and processes. Forty-four (97.8 percent) said that the graduate academic work had what could be considered the basic "ingredients" which could prepare them for future work. Only one (2.2 percent) indicated otherwise. Slightly over one-third, 17 (37.8 percent) felt the level of their participation in the development of their own individualized academic programs was "more than adequate." Slightly over one-half, 25 (55.6 percent) recorded the more modest evaluation of "adequate." Only three (6.7 percent) indicated that their participation was "not adequate."

Seventeen (37.8 percent) expressed the opinion that the procedures and planning followed in the construction of their individualized program were "very satisfactory." Twenty-five (55.6 percent)

indicated that they were "satisfactory," while only three (6.6 percent) recorded them as "unsatisfactory" to "very satisfactory."

In evaluating the effectiveness of the five selected pedagogical mediums of acquiring knowledge in the formal classroom setting, namely, (1) lectures, (2) group interaction discussions (as in seminars), (3) films and other audio-visual presentations, (4) class reports, and (5) class participation, most of the African graduate students who responded to a given item tended to rate the above-listed methods as having been just "effective." The following are the actual ratings: Lecture--nine (22.5 percent) "very effective," 34 (77.3 percent) "effective," one (2.3 percent) "very ineffective," respectively. Group discussion--seven (20.0 percent) "very effective," 23 (65.7 percent) "effective," three (8.6 percent) "ineffective," and two (5.7 percent) "very ineffective," respectively. Films and other audio/visual presentations--14 (41.2 percent) "very effective," 16 (47.1 percent) "effective," three (8.8 percent) "ineffective," and one (2.9 percent) "very ineffective," respectively. Class report--12 (32.4 percent) "very effective," 14 (27.8 percent) "effective," and 11 (29.7 percent) "ineffective," respectively. Class participation--eight (18.6 percent) "very frequent," 17 (29.7 percent) "frequent," and 18 (41.9 percent) "not much," respectively.

The following characteristics (qualities) of the "effective" and "very effective" lectures were selected: "well prepared," "well delivered," "well structured," "lecture's wealth of experience," and "unstructured" (in that order of plurality). For those lectures which were rated as "ineffective" and "very ineffective," the

qualities "not well prepared," "not well developed and prepared," "language problems," "unfamiliar illustrations," "too unstructured," and "too structured" (in that order of plurality) were selected.

Qualities of group discussions which resulted in their being noted as "very effective" and "effective" included: their capacity to facilitate the exchange of varied views; their nature, which made the presentations less boring; their fashion, which made learning easier; and their unstructuredness (in that order of plurality).

Those who marked this pedagogical mode as "ineffective" or "very ineffective" named the following factors which contributed to ineffectiveness of group discussions: their tendencies to encourage diversion to irrelevant subjects; their tendencies to encourage professor(s) not to make adequate preparation; their unstructured nature, and thus, leanings toward disorganization; and their tendencies to contribute to wasting time.

In addition to those factors listed above which the African graduate students considered to be among those contributing to the ineffectiveness of group discussion, some other problems which resulted in similar effects were reported. One major problem mentioned was the fact that group discussion was "open to abuse" by certain types of students and professors.

The qualities which were perceived as contributing to the effectiveness of films and other audio-visual presentations were the facts that they made learning easier and were appropriately selected for the topics. Factors selected as contributing to these presentations which were regarded as noneffective in general included lack of

real relevance to the topic discussed, inability on the part of the instructors to relate to and discuss the audio-visual material with effectiveness, and poor presentations.

With regard to class reports, the African graduate students chose the following elements as having contributed to their effectiveness: the capacity to encourage personal involvement in preparation for the class; the nature of the format, which allowed for class participation; and the fact that the nature of the format was less restrictive than others for information gathering. As for the factors contributing to the opposite opinion, the negative rating of ineffectiveness, the following were identified: the fact that they (class reports) consumed too much time in proportion to the amount of learning attained, their tendency to be fragmented, and their inappropriateness for the adult learner, as far as the individuals responding were concerned (in that order of plurality). In addition, two major reservations were raised by many participants: their doubts relative to the ability of class members to treat the topic under consideration with appropriate balance and a sense of proportion, both in the preparation and in the actual presentation.

Factors identified as having facilitated class participation were: personal determination to participate, regardless of what the instructors and classmates thought; encouragement from instructors; the fact that the discussions were usually relevant; the fact that participation was required for passing the course; and encouragement from classmates (in that order of plurality). Factors inhibiting

class participation (as identified by sample members) were: fear of making language errors or over-consciousness of participants' foreign accent, lack of class environment which encouraged students to participate, and lack of relevance.

Examining their educational experience from the dimension of the scope and weight-based, progressively sequential evaluations (i.e., quizzes, mid-term examinations, and final examinations), the overwhelming majority had experienced these types of evaluations.

Most had some types of problems with each of the above-listed types of evaluation exercises. However, most negative experiences in this area related to quizzes, both in actual problems or difficulties encountered in taking them (i.e., preparing for them and actually sitting for them) and in philosophical concerns. The major problems encountered in taking quizzes were: their nature, which emphasized speed rather than deeper knowledge, both in students' efforts to digest information and their actual writing of such exercises; the fact they were disruptive and were hindrances to the student's own academic programming and activities; the fact they became sources of pressure and unnecessary bother; the fact that they required rote memory; and finally, the fact that they limited the source of information to a given topic.

The major philosophical concerns with reference to quizzes centered around a view widely held among the participants, which was expressed in a "nut shell" as the idea that since they inherently lack the capacity to foster original thinking, quizzes are not appropriate evaluation exercises in graduate school.

There were also a few reports of negative experiences with respect to taking mid-term examinations, however. They were their emphasis on speed (due to their nature) rather than on actual knowledge; lack of time for preparation; the fact that they limited and disrupted the students' freedom to organize and execute their own academic activities; and the fact that such examinations contributed to making the process of learning mechanical rather than reflective; and that they encouraged rote memorization.

The examination of the graduate students' experience with the format of evaluation exercises, namely, essays, objective, lab tests, and applied and experimental reports, established that most of them had had all of these formats, although the highest proportion had had objective tests. Thirty-three out of 42 (78.6 percent) had had some type of problem(s) with the format of the questions. Most of the complaints were in regard to the objectives and essay questions, although by far the highest number of respondents complained about the former. The main issues relative to their problems were: the fact that the objective question format encouraged memory and reproduction; that the objective questions were structurally ambiguous; that the format forced students to study useless details rather than broad themes; and finally, the fact that the format (objective questions) is exclusively indigenous to the American tradition of academic evaluation, and thus, inherently favors the host country students vis-à-vis foreigners; language; and the fact that the style is so structured and mechanized that it forces the students to view the subject matter in a

mechanical fashion, thus contributing to distortion of the wider perspectives.

While essay questions as a format for evaluating learning performances in graduate school were highly commended as a more appropriate device, three concerns emerged about them, although these concerns were expressed only by a minority ratio. They were: (1) the difference, in some cases substantial, in approaches to essay questions, in terms of length and expectations, between American and African students (which rooted in European academic traditions); (2) language difficulties; (3) lack of accommodation to alternative views expressed by the students on the part of some professors; and (4) cultural biases inherent in the questions.

Of the 13 (44.8 percent) of the doctoral candidates in the sample who had taken preliminary/comprehensive examinations, nine (69.2 percent) reported having some problems, either in preparing for them or in the actual taking of them. The major difficulties reported were that inadequate guidance was given to preparation for the exams; that preparation was time consuming; that there were too many questions included; that most of the questions dealt with American experience; the existence of goal conflict, in some cases, between the departments and the African graduate students when a department aspired to be number one in the country. This is a legitimate goal for such a department, but one which does not take into account African realities or the fact that the Africans want to address those realities, and which leads to a tendency to demand the intense

absorption of theories when such theories have little or no relevance to African problems.

However, the majority (84.6 percent), indicated that the experience of going through them (these exams) was "very useful" to "useful."

The overwhelming majority, 40 (88.9 percent) and 41 (95.3 percent), indicated that they had not been leniently graded, either because they were foreigners or Africans, respectively. However, five (11.1 percent) and two (4.6 percent) reported having received lenient treatment in the grading procedure because they were foreigners and Africans respectively. This did not result in the actual handing out of undeserved grades, but in according those students more time to complete tests and examinations.

On the opposite spectrum of this consideration, a relatively larger ratio felt that they had experienced harsher grading by instructors because they were foreigners. Fifteen (34.1 percent) of the 44 respondents felt this way. Ten (22.8 percent) thought they received harsher gradings than other foreigners. However, even in these two lines of inquiries, over two-thirds of the 44 respondents indicated that they had not been graded more harshly because they were foreigners or Africans. In most cases where such instances were reported, the instructors were not used to foreigners, and usually had never been outside of the United States.

The majority, over two-thirds of those who had to write papers for their classes in graduate studies (41 out of 45), had written on topics related to African concerns. Eighteen (46.2 percent)

out of 39 indicated that there were times when they wished to write on topics with more relevance to Africa, but were unable to do so. There was no definite discernible pattern as to the phase their sojourn experience during which they wrote on topics with some relevance to Africa, and nor was there a discernible pattern in regard to the times when they wished to write on concerns relevant to Africa but could not do so. However, there was evidence, although it was "thin" (so to speak), suggesting that both of those occurred during the first phase of the sojourn experience.

Thirteen reported having encountered some difficulties when writing papers. The main problems reported were (1) language difficulty; (2) lack of appropriate data and literature; (3) situations where the topics were stipulated (in such cases the students could not write on African related issues); (4) deadline times for submission, which interfered with quality; and (5) situations in which the assignment was designed as a group project.

The overwhelming majority, 37 out of 40 (92.5 percent) felt that the experience of writing these papers was "useful" to "very useful."

Twenty (71.4 percent) out of the 28 who had commenced their work on thesis/dissertation indicated that it was on the topic in which they had the greatest interest, while two in seven reported otherwise.

The two factors which were reported by African graduate students as having played a part in their choice of the topics they had

selected for their thesis/dissertations pertain to the role of the advisor played in the process of selecting the topic, namely, the advisor's desire to see some breakthrough in their respective areas of knowledge and the advisor's deep knowledge of the subject. Other factors were: (1) the availability of resources; (2) the student's desire to write on an African-related topic; (3) the home country government's desire that the study be on that topic; and (4) the availability of the relevant data (in that order of plurality).

In addition to the common problem encountered by African graduate students in securing funds to go to their home country and conduct the research, quite often problems arise which stem from the conflict of interests and goals in research between the students and advisor, and the student and department. This takes place when the advisors and departments have already set goals for future research, which is common in most cases, particularly in the physical and life sciences, and the African students wish to do something different which produces a new element of conflict. There were instances where accommodations had been made to resolve such problems through creative arrangements between the students and advisors in some cases, while in others such accommodations had not been made. The majority, more than two-thirds, reported having received adequate help from the advisor in conducting the research and writing their thesis/dissertation.

The new knowledge on which the research focussed and the value the advisor attached to it were the major factors which influenced

the amount of interest exhibited by the advisor in research projects for about a half of Africans who had commenced working on their thesis/dissertation projects. Three interrelated elements were encompassed in this interest factor, namely: the professor's publication interest; the perceived potential of the research to contribute to scientific knowledge; and the advisor's sphere of specialization. The other factors which the participants thought had influenced the advisor's interest in their research projects were the fact that the advisor was the team leader and the students were needed for the labor; the advisor's interest in the student's academic and personal growth; and his/her confidence in the student's ability to handle the project (in that order of plurality). Those factors which influenced the advisors' interest in a negative way were his/her busy program (which made him/her unable to attend to the student's research concerns), and lack of experience on the part of some advisors with African problems.

Everyone in this sub-category thought the experience of doing the research and writing thesis/dissertation was "useful" to "very useful." Among the four selected "critical factors," namely, access to relevant data/literature, reading speed and comprehension, family obligations, and the disparity between previous and current education, if any, the first one (i.e., access to relevant data/literature) seemed to have caused the most problems for the African graduate students. For instance, more than two-thirds of the 35 reported having encountered problems in varying relative frequencies in finding relevant data and literature on African-related concerns.

More than one-half of the total sample had visited the African study center on campus, mostly to read newspapers and to attend seminars/colloquia or "brown bag" lectures on African-related topics sponsored by the center. This was an indication that the African students were eager to enhance their educational experience by taking advantage of the relatively informative environment at the university on issues related to Africa. However, about one-half indicated that their departmental program lacked the necessary flexibility for the students to go outside their respective departments and enrich their academic experience.

On the other hand, the majority felt that their experience at Michigan State University had helped them to become more informed about the Third World, and African countries (in that order of plurality), mostly as a result of contact with fellow graduates from these areas. Only about one-half thought it did the same regarding their own respective countries.

The majority indicated that their reading speed and comprehension was adequate to carry the graduate school load. Although the majority of the African graduate students did have dependents, both immediate family members (i.e., spouse and children), and relatives, which entailed providing financial assistance either for education or sustenance, or for both, for their dependents, these obligations did not often seem to affect their graduate education experience negatively. This was due to the fact that most of the sample members were sponsored, and the majority were on study leave, and they had made arrangements to funnel some portion of their salary

to meeting their obligations. To be sure, a substantial ratio did indicate some inconvenience and difficulties because of their financial obligations to their immediate family members, but these were not as severe as they would otherwise have been due to the external financial assistance most were receiving.

There was no apparent educational gap between their previous education and their current graduate programs. Forty-four out of 45 indicated that to be the case, which was a highly impressive level of equivalence between the African and American education in this regard.

While the intensity of academic activity and the stage where a graduate student was in the process of his/her academic progression were common factors in affecting the frequency of the African graduate students' interaction with their advisors, other factors were crucial too. Having access to the department was one such factor. That is, those who were provided a space in the form of a desk or an office, either because they worked for the department or because providing such space was part of the department's policy, met and interacted with their advisors more often than did the others. However, the majority (37 out of 44) reported that they got sufficient time from their advisors for academic counseling.

Based on the level of interest shown by their respective advisors (which was reported as "high" to "very high" by the majority), and the level of the students' comfortableness with their advisors (reported as "just comfortable" to "very comfortable" by the majority), the quality of interaction between the African graduate students and

their respective advisors was regarded as positive. That is, in general, the majority experienced an atmosphere filled with congeniality, sympathy, empathy, and enthusiasm.

Among the major factors reported as having influenced the level of the advisor's interest in the student's academic program were the advisor's interest and experience in developing countries; his/her interest in the student's own future and professional development; his/her academic interest in a common field of specialization; the student's own level of performance and competence in the field; and the advisor's attitude toward the student (i.e., whether he/she had respect for the ideas and opinions of the student).

The factors which the majority of the participants reported as having contributed to the high level of comfortableness they had felt were all associated with the advisor's past experience with foreign students, and with his/her attitudes toward the students in general and foreigners in particular. Such attitudes included the good relationship the advisor created so that the student could communicate his/her ideas, the advisor's willingness to help with any problem, his/her interest in the personal progress of the students, his/her interest in developing countries, and his/her exhibition of sympathy for foreign students.

The majority rated their level of comfortableness with their other professors as "just comfortable." However, only three of the 43 indicated their experience in this regard as "uncomfortable." The factors which they thought made them comfortable when interacting with their other professors were almost identical to those reported

when discussing the factors which had contributed to their level of comfortableness when interacting with their respective advisors. A factor which emerged as one of the most significant in the examination of the quality of the interaction between African graduate students and the advisors and other professors was the professor's international experience. Those professors who had worked abroad, particularly in developing regions, provided a better atmosphere for meaningful interaction. For example, the 34 out of 43 (79.1 percent) of professors with international experience related to African graduate students more easily than those who did not have international experience. A similar pattern was apparent in examining the background of one of the three professors with whom the Africans had the best relations.

Twenty (44.4 percent) out of 45 had at least one professor whom they considered to be a "significant other," and another 13 (28.9 percent) had one professor with whom their interrelations were not as close, but whom they considered a "supported." Most of such professors were their advisors, and these professors had had international experience. Judging from the cursory observation based on the data, the Africans and their "significant others" and "supporters" respectively frequently engaged in common activities, such as academic, personal, social. It can be suggested from this that, in general, such common activities did provide an environment conducive to professional socialization at more intimate levels than might otherwise have been possible.

The majority of the Africans interacted with three sub-groups of graduate students, namely, Americans, internationals, and other Africans, under three major conditions where they could interact with each for the purpose of academic activities outside the formal classrooms. That is, they did the following with the three sub-groups: shared academic problems in a two-way manner on a one-to-one basis, participated in voluntary study groups and functioned in student groups organized by professors to carry out some academic tasks. However, for the majority, their experience relative to the quality of the interaction varied from situation to situation, mostly when dealing with their American counterparts. In general, the quality of the interaction was more favorable under voluntary study group situations than under either of the other two. This was so, mainly because of the fact that the voluntary group organizations tended to bring together graduate students who were already acquaintances and friends. However, even under this condition, about one-third of the 29 who answered the question reported that they had to work hard at their participation in these study groups because the Americans tended to doubt the academic ability of the Africans.

When interacting with Americans on a one-to-one basis, about one-half felt their interrelations were normal, while the remaining proportions reported patterns of uneasiness of behavior, ranging from oversimplifying explanations to avoidance, on the part of their American counterparts. When interacting in groups organized by professors to carry out some academic projects, the majority reported two types of reactions from Americans: clear efforts to avoid working with

foreigners, and giving the foreigners dependent roles in the distribution of the labor at hand.

In an examination of the African graduate students' comparative patterns of inter-relations with the three sub-groups at a more general level, the data reveal that 37 (84.1 percent) out of 44 indicated that there were differences in the way they interacted with the three sub-groups. Four patterns of preferences for working with the various groups, based on rank-order, emerged: first, Africans, next Internationals, and then Americans (28--85.7 percent); Africans, Americans, and Internationals, (seven--18.9 percent); Internationals, Africans, and Americans (one); and last, Americans, Internationals, and Africans (one).

A common identity of historical, economic, and political conditions, mutual trust and confidence and understanding, similar cultural values, the ability to share common aspirations and experiences, and having the same status, that of a foreigner (in that order of plurality), were given as the reasons for their preferences for working with Africans.

Identical reasons, notwithstanding the language problem, were given by the Africans for their preferences and tendencies toward interacting with internationals.

Distances in culture and experience, lack of mutual trust in academic matters, differences in life and career expectations, and the tendency on the part of the American students to relate to Africans on a limited basis (in that order of plurality) were offered by the African graduate students as the possible reasons for the fact

that their interactions with their American counterparts had not been as positive as those with other Africans or with internationals.

The African graduate students evaluated the courses and seminars they had taken at Michigan State University in terms of potential usefulness in their future professional activities under four categories, namely, core courses (major field), cognate (minor field), elective courses, and research courses. Each category was rated as "generally useful" by more than 40 percent and fewer than 70 percent (by those who responded to each section).

The reasons offered by the participants for rating the core courses "generally useful" to "generally very useful" were their (the courses) provision of exposure to the basic knowledge and theory in the field; their direct relevance to the professional goals, though a lot of modification would be necessary; and the fact that these courses were selected by the participants themselves, based on their anticipated practical application (in that order of plurality). However, some did feel that courses under this category were too American in their theoretical orientations.

The reasons for indicating that minor/cognate courses were "generally useful" to "generally very useful" were the student's selection of the courses based on the knowledge that they would be relevant; the fact that the courses had a direct relationship to the student's professional goals with a lot of modification; and the fact that since the participants would be teaching the same courses back in their own universities, they were relevant (in that order of

plurality). Here, too, some felt that these courses/seminars were more attuned to American situations, and thus, nonrelevant for their future work.

Those who considered the elective courses in a positive light in terms of their relevance gave reasons identical to those just presented in the case of cognate/minor courses. There too, there were some who had reservations about the usefulness of those groups of courses. Slightly different sets of reasons were set forth for the positive rating of the research courses: their application to the type of research the students would be doing at home; their provision of exposure to research technology and skills; and the fact that the students selected the courses based on the criterion of their application to home country needs. Here, too, some stated that these sets of courses needed much modification prior to being applied to the situation at home.

CHAPTER VII

ANALYSIS OF RESULTS

Introduction

The purpose of this section is to present the analysis of the data derived through the quantitative (rank-order) questions described in Chapter IV, pages 174, 178. It should be noted that the African graduate students' responses to these questions were included in the general discussions presented in an aggregated fashion, in Chapter VI. In this section, the intent is to isolate their responses to the above-mentioned questions, and to analyze them to observe the possible impacts of two sets of independent variables, namely the academic level (i.e., master's and doctoral) and the area of specialization (i.e., social sciences, physical sciences and life sciences), on the educational experience of African graduate students as reflected in their responses to these questions.

At the outset, it should be pointed out that these questions were unlike the usual scale format, where several elements relative to a given topic are examined by having the subject indicate whether he/she "strongly agrees," down to "strongly disagrees," etc., and then the composite weight of the responses is measured. Instead, these questions were one-item in nature, and they were structured in rank-order, which allows the data derived through such questions to be treated statistically.

These questions were constructed to draw out the subjects' evaluations relative to each of the seven dimensions of their educational experience under review. Relative values were assigned to each level of ratings.

Two statistical methods were utilized to analyze all the responses to these questions: (1) the group mean and, (2) the two-way Analysis of Variance (ANOVA)--the Nested Model. The latter was used to test the significance of the differences.

Analysis of the Data

The results will be presented in the following manner. First the question (the individual item) will be stated. The relative value level (in number) will appear opposite each statement of value (e.g., very effective, etc.) for a given question. Following the question, the results will be presented in tables for the group mean scores, and the F-test respectively. First, the tables for the results pertaining to those items (questions) for which the F-tests yielded no significant differences will be presented (i.e., tables with Group Mean Scores, and ANOVA). Thus in Tables 7.1, 7.3, 7.5, 7.7, 7.9, 7.11, 7.13, 7.15, 7.17, 7.19, 7.21, 7.23, 7.25, and 7.27 the results of the Group Mean Score analysis are presented.¹ Conversely, the results of the ANOVA analysis are shown in Tables 7.2, 7.4, 7.6, 7.8,

¹Throughout this chapter, the term curriculum is used to encompass areas of specialization, namely, social sciences, physical sciences, and life sciences.

The term academic level refers to the academic hierarchy, namely masters and doctoral levels.

Row total indicates the Group Mean Score for the academic level and column total indicates the Group Mean Score for the curriculum.

7.10, 7.12, 7.14, 7.16, 7.18, 7.20, 7.22, 7.24, 7.26, and 7.28.

Second, the tables for the results pertaining to those items (questions) for which the F-tests yielded significant differences will be presented in the same order (i.e., first the tables with the Group Mean Scores, and then the ANOVA). Thus Tables 7.29, 7.31, 7.33, 7.35, and 7.37 will present the results of the Group Mean Score, and Tables 7.30, 7.32, 7.34, 7.36, and 7.38 for ANOVA.

Following are the results of those items (questions) for which the F-test yielded no significant differences (both the Group Mean Scores results and the F-test results).

12. From your experience at MSU, how do you view the lectures you have had as a mode of acquiring knowledge?

Relative
Value

- | | |
|---|----------------------|
| 1 | (a) Very effective |
| 2 | (b) Effective |
| 3 | (c) Ineffective |
| 4 | (d) Very ineffective |

TABLE 7.1.--Group mean scores indicating the level of effectiveness of the lecture or a mode of acquiring knowledge by the academic level and the curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.00	0	1.57	1.82
Ph.D.	2.00	1.57	1.89	1.85
Column Total	2.00	1.57	1.75	1.84

TABLE 7.2.--Results of testing variables--the level of effectiveness of the lecture as a mode of acquiring knowledge by level and curriculum by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.00837	1	.008	.032	.860*
Curriculum (V.25) with Level (V.19)	1.561	3	.520	1.966	.135*

Significance = .05

*No Significance

15. From your experience here at MSU, how do you view group discussion (as in a seminar) as a mode of your acquiring knowledge?

Relative Value

- 1 (a) Very effective
2 (b) Effective
3 (c) Ineffective
4 (d) Very ineffective

TABLE 7.3.--Group mean score indicating the level of effectiveness of group discussion as a mode of acquiring knowledge by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.00	0	2.5	2.14
Ph.D.	2.00	1.67	1.86	1.9
Column Total	2.00	1.67	2.08	2.00

TABLE 7.4.--Results of testing variable--the level of effectiveness of group discussion as a mode of acquiring knowledge by level and curriculum by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.476	1	.476	.864	.369*
Curriculum (V.25) with Level (V.19)	.982	3	.327	.594	.624*

Significance = .05

*No significance

18. From your experience here at MSU, how did you find the film and other audio/visual presentations as methods for your acquiring knowledge?

Relative Value

- 1 (a) Generally very effective
- 2 (b) Generally effective
- 3 (c) Generally ineffective
- 4 (d) Generally very ineffective

TABLE 7.5.--Group mean scores indicating the level of effectiveness of film/audio-visual presentations as a mode of acquiring knowledge by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.13	0	1.33	1.79
Ph.D.	1.67	2.00	1.56	1.70
Column Total	1.93	2.00	1.46	1.73

TABLE 7.6.--Results of testing variable--the level of effectiveness of film/audio/visual presentations as a mode of acquiring knowledge by level and curriculum by using the two-way analysis

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.061	1	.061	.111	.741*
Curriculum (V.25) with Level (V.19)	2.793	3	.931	1.712	.186*

Significance = .05

*No significance

21. Based on your experience at MSU, what is your view on class reports as a method for acquiring knowledge?

Relative Value

- 1 (a) Very effective
2 (b) Generally effective
3 (c) Generally ineffective
4 (d) Generally very ineffective

TABLE 7.7.--Group mean scores indicating the level of class reports as a method of acquiring knowledge by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
Ma/MSc	2.11	0	1.67	1.93
Ph.D.	2.00	2.00	2.00	2.00
Column Total	2.05	2.00	1.86	1.97

TABLE 7.8.--Results of testing variable--the level of effectiveness of class reports as a method of acquiring knowledge by level and curriculum by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.040	1	.040	.057	.813*
Curriculum (V.25) with Level (V.19)	.711	3	.237	.341	.800*

Significance = 105

*No significance

24. How frequent was your own class participation (discussions, asking questions, making observations on topics under consideration?

Relative Value

- | | |
|---|--------------------------|
| 1 | (a) Very frequent |
| 2 | (b) Frequent |
| 3 | (c) Not much (sometimes) |
| 4 | (d) Not at all |

TABLE 7.9.--Mean score indicating the frequency of class participation by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
Ma/MSc	2.10	0	2.71	2.35
Ph.D.	2.4	1.86	2.11	2.15
Column Total	2.25	1.86	2.38	2.33

TABLE 7.10.--Results of testing variable--the frequency of class participation by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.407	1	.407	.756	.390
Curriculum (V.25) with Level (V.19)	2.792	3	.931	1.730	.180*

Significance = .05

*No significance

37. How do you rate the comprehensive (preliminary/oral) examination in terms of its educational values, apart from its function of fulfilling academic requirements?

Relative Value

- 1 (a) Very useful
- 2 (b) Useful
- 3 (c) Not so useful
- 4 (d) Not at all useful

TABLE 7.11.--Mean score indicating the level of usefulness of the comprehensive/preliminary examination in terms of educational values, apart from its function of fulfilling academic requirements by curriculum

	Social Science	Physical Science	Life Science	Row Total
Ma/MSc	0	0	0	0
Ph.D.	1.80	1.25	1.75	1.62
Column Total	1.80	2.25	1.75	1.62

TABLE 7.12.--Results of testing variable--the level of usefulness of the comprehensive (preliminary/oral) examination in terms of its educational values, apart from its function of fulfilling academic requirements by curriculum by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Curriculum (V.25)	.777	2	.388	.617	.559*

Significance = .05

*No significance

49. How do you rate the educational values, for yourself, of term papers apart from the function of fulfilling academic requirements?

Relative Value

- 1 (a) Very useful
2 (b) Useful
3 (c) Not so useful

TABLE 7.13.--The cross-breakdown of the mean score indicating the relative educational value of term papers, apart from the function of fulfilling academic requirements by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	1.50	0	1.67	1.56
Ph.D.	1.36	1.20	1.88	1.50
Column Total	1.43	1.20	1.79	1.53

TABLE 7.14.--Results of testing variable--the relative educational value of term papers, apart from the function of fulfilling academic requirements by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Squares	F	Significance of F
Level (V.19)	.038	1	.038	.094	.763*
Curriculum (V.25) with Level (V.19)	1.883	3	.628	1.564	.216*

Significance = .05

*No significance

54. How do you rate the educational values, for yourself, of the total experience of conducting thesis research and writing the dissertation?

Relative Value

- | | |
|---|-------------------|
| 1 | (a) Very useful |
| 2 | (b) Useful |
| 3 | (c) Not so useful |

TABLE 7.15.--Mean scores cross-breakdown indicating the level of educational values (usefulness) of the total experience of conducting the thesis and dissertation research and writing the dissertation, by level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	1.33	0	1.00	1.14
Ph.D.	1.43	1.00	1.13	1.21
Column Total	1.40	1.0	1.08	1.19

TABLE 7.16.--Results of testing variable--the level of educational values (usefulness) of the total experience of conducting the thesis and dissertation research and writing the dissertation, by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.023	1	.023	.151	.701*
Curriculum (V.25) with Level (V.19)	.759	3	.253	1.632	.212*

Significance = .05

*No significance

70. Do you feel that your previous education prepared you adequately for your current degree program?

Relative
Value

- 1 (a) More than I think was needed
- 2 (b) Satisfactory
- 3 (c) Unsatisfactory
- 4 (d) Most unsatisfactory

TABLE 7.17.--Mean score cross-breakdown indicating the level of previous education preparation for the current degree program by level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	1.40	0	1.71	1.53
Ph.D.	1.27	1.57	1.33	1.37
Column Total	1.33	1.57	1.50	

TABLE 7.18.--Results of testing variable--the level of previous education preparation for the current degree program by level and curriculum by using the two way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square		Significance of F
Level (V.19)	.370	1	.370	1.865	.180*
Curriculum (V.25) with Level (V.19)	.278	3	.093	.467	.707*

Significance = .05

*No significance

76. How do you feel when you meet with your academic advisor regarding your academic activities?

Relative Value

- 1 (a) Very comfortable
- 2 (b) Just comfortable
- 3 (c) Uncomfortable
- 4 (d) Very uncomfortable

TABLE 7.19.--The mean score cross-breakdown indicating the level of comfortableness when meeting the advisor regarding academic activities by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSC	1.30	0	1.00	1.18
Ph.D.	1.27	1.25	1.11	1.21
Column Total	1.29	1.25	1.06	1.20

TABLE 7.20.--Results of testing variable--the level of comfortableness when meeting the advisor regarding academic activities by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Square	D.F.	Mean Square	F	Significance of F
Level (V.19)	.015	1	.015	.070	.793*
Curriculum (V.25) with Level (V.19)	.514	3	.171	.790	.506*

89. Do you feel that your race affects the working relationship between your professor and you?

Relative Value

- 1 (a) Very often
- 2 (b) Usually
- 3 (c) Seldom
- 4 (d) Never

TABLE 7.21.--The mean score cross-breakdown indicating the frequency of instances when the students' race affected the working relationship between the professor and African students, by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSC	2.40	0	3.29	2.77
Ph.D.	2.91	2.75	2.78	2.82
Column Total	2.67	2.75	3.00	2.80

TABLE 7.22.--Results of testing variable--frequency of instances when the students' race affected the working relationship between the professor and African students by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	.034	1	.034	.077	.784*
Curriculum (V.25) with Level (V.19)	3.373	3	1.124	2.527	.071*

130(b). How do you evaluate the courses and seminars you have taken under the following category in terms of your future professional activities?

(b) Cognate courses (minor field)

Relative
Value

- 1 (1) Generally very useful
- 2 (2) Generally useful
- 3 (3) Generally not so useful
- 4 (4) Generally not at all useful

TABLE 7.23.--Mean scores cross-breakdown indicating the perceived level of usefulness of the cognate (minor field) courses for future professional activities by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSC	1.71	0	1.80	1.75
Ph.D.	1.55	1.50	1.63	1.56
Column Total	1.61	1.50	1.69	1.62

TABLE 7.24.--Results of testing the level of usefulness of the cognate (minor field) courses for future professional activities by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Square	D.F.	Mean Square	F	Significance of F
Level (V.19)	.293	1	.293	.760	.390*
Curriculum (V.25) with Level (V.19)	.079	3	.0264	.068	.976*

Significance = .05

*No significance

130(c). How do you evaluate the courses and seminars you have taken under the following category in terms of your future professional activities?

Relative Value	(C) Elective Courses
1	(a) Generally very useful
2	(b) Generally useful
3	(c) Generally not so useful
4	(d) Generally not at all useful

TABLE 7.25.--Mean score cross-breakdown indicating the perceived level of usefulness of the elective courses for future professional activities by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	1.71	0	2.00	1.80
Ph.D.	1.60	2.50	1.38	1.60
Column Total	1.65	2.50	1.55	1.67

TABLE 7.26.--Results of testing the level of usefulness of the elective courses for future professional activities by level and curriculum by using the two-way ANOVA

Source of Variation	Sum of Square	D.F.	Mean Square	F	Significance of F
Level (V.19)	.267	1		.546	.467*
Curriculum (V.25) with Level (V.19)	2.196	3		1.500	.239*

Significance = .05

*No significance

130(d). How do you evaluate the courses and seminars you have taken under the following category in terms of your future professional activities?

Relative Value	(D) Research Courses
1	(a) Generally very useful
2	(b) Generally useful
3	(c) Generally not so useful
4	(d) Generally not at all useful

TABLE 7.27.--Mean scores cross-breakdown indicating the perceived level of usefulness of research courses for future professional activities by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	1.71	0	1.33	1.60
Ph.D.	1.11	1.20	1.57	1.29
Column Total	1.38	1.20	1.50	1.39

TABLE 7.28.--Results of testing the level of usefulness of research courses for future professional activities by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Square	D.F.	Mean Square	F	Significance of F
Level (V.19)	.669	1	.669	1.832	.188*
Curriculum (V.25) with Level (V.19)	1.187	3	.396	1.083	.374*

Significance = .05

*No significance

As indicated earlier, the results of those computations where the F-test yielded significant differences are presented in Tables 7.30, 7.32, 7.34, 7.36, and 7.38. Conversely, the results of the Group Mean Score of the same items will be presented in Tables 7.29, 7.31, 7.33, 7.35, and 7.37. (Each of these tables will appear preceding each of those containing F-tests on the same item.)

As was done in the presentations of the results of such items as appeared in the preceding paragraphs, the questions for which the responses are to be analyzed will be stated.

The data relative to the responses to these items have been organized in this manner for the sake of convenience, so that a brief discussion can be presented on the data where the F-test yielded a significance in difference.

As Table 7.30 reveals, the F-test registered significant differences between master's and doctoral African graduate students in

the level of their participation in the development of their individualized programs. The Group Mean Scores, as presented in Table 7.48, shows that the doctoral students reported a higher level of participation than did the master's students. Their difference in the level of participation between these two cohorts may be attributed to the fact that doctoral students have a committee, as a given, although some master's students may have such a committee in cases where they have to do a master's thesis, and that the doctoral programs take a longer time and require much more intense program planning. It can also be suggested that the doctoral students are usually more experienced in terms of academic careers and academic work (this is supported by the data presented in the analysis of the profile of the participants).

As Table 7.32 indicates, the F-test produced significant differences between the responses of the master's and doctoral students, and also between the sub-groups based on field of specialization. The Group Mean Score analysis (Table 7.31) indicated that the doctoral students registered a higher level of satisfaction with the system used to plan their respective individualized programs. The same table reveals that students in physical sciences and life sciences reported a higher level of satisfaction. One possible reason as to why those groups in the physical sciences and life sciences indicated higher level of satisfaction with the system used to plan their respective individualized programs could be due to the fact that graduate students in these fields are usually

introduced to independent research, and the nature of the research project is usually that of controlled experiments, where meticulous organization and supervision by the professor(s) is required.² The same factors suggested earlier when discussing the reasons why a higher ratio of doctoral students in the sample felt that they had participated more adequately in the preparation of their respective individualized academic programs than those in the master's could apply in this case.

The test for the perceived level of interest shown by their respective academic advisors in their respective programs, shows a significant difference between the academic levels (i.e., between those in master's and doctoral programs) only (see Table 7.34). An examination of the Group Mean Score results (Table 7.33) reveals that those Africans in doctoral programs perceived the level of interest exhibited by their respective advisors as higher than did those in the master's program. It is reasonable to suspect that the dynamics which are discussed in the preceding sections with respect to such differentiations between the two subgroups (master's and doctoral) may be appropriate here as well.

With respect to the level of the students' comfortableness when meeting with their professors in academic settings (Interview Question 82), the F-tests showed significant differences between the master's level and the doctoral graduate students (see Table 7.36). Again, interpreting the data in Table 7.35, (i.e., the Group Mean Score), those in master's programs felt less comfortable with their

professors in academic settings. Here again, it is reasonable to speculate as to why the Master's students had such experiences. Their period of professional socialization in the university community is relatively shorter than is that of students in doctoral programs, and the amount of contact (frequency) is less, due to the nature of the master's program vis-à-vis the doctoral, which could contribute to the differences.

In regard to the test for differences in the perception of the participants regarding the level of usefulness of the knowledge gained from the core courses, in their future professional activities (Interview Question 130(a)), the differences were in the area of curriculum (see Table 7.37).

The Group Mean Score results (see Table 7.38) show that those in life sciences, physical sciences, and social sciences scored less, in that order. That is, it can be suggested that those in life sciences and physical sciences found the knowledge gained in this category of courses were useful, in that stated order, than did those in social sciences.

7. Do you think you had adequately participated in planning your academic program?

Relative
Value

- | | |
|---|--------------------------|
| 1 | (a) More than adequately |
| 2 | (b) Adequately |
| 3 | (c) Not adequately |

TABLE 7.29.--Group mean score cross-breakdown indicating the level of participation by Africans in planning their academic program, by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.10	0	1.71	1.94
Ph.D.	1.64	1.25	1.67	1.54
Column Total	1.86	1.25	1.69	1.69

TABLE 7.30.--Results of testing variable--participation (level of) by curriculum and academic level by using two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	1.73898	1	1.73898	5.62140	0.02265*
Curriculum (V.25) with Level (V.19)	1.53144	3	0.51048	1.65016	0.19312**

Significance = .05

*Significance

**No Significance

Question 11. How do you view the planning and selection procedures followed in your academic program?

Relative
Value

- 1 (a) Very unsatisfactory
- 2 (b) Unsatisfactory
- 3 (c) Satisfactory
- 4 (d) Very satisfactory

TABLE 7.31.--The group mean score cross-breakdown indicating the reported level of satisfaction with the planning and selection procedures followed in the students' academic programs by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.70	0	3.42	3.00
Ph.D.	3.18	3.88	3.33	3.43
Column Total	2.95	3.88	3.38	3.27

TABLE 7.32.--Results of testing variable-satisfaction (levels of) by curriculum and academic level by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Within Cells	16.32565	40	.40814		
Level (V.19)	1.94286	1	1.94286	4.76	.035*
Curriculum (V.25) with Level (V.19)	4.531	3	1.510	3.70	.019*

Significance = .05

* = Significance

74. What do you perceive is the level of interest shown by your academic advisor in your program?

Relative
Value

- 1 (a) Very high
- 2 (b) High
- 3 (c) Adequate
- 4 (d) Low
- 5 (e) Very low

TABLE 7.33.--Group mean score cross-breakdown indicating the perceived level of interest shown by academic advisors in students' programs, by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.80	0	2.00	2.47
Ph.D.	1.46	1.75	1.67	1.61
Column Total	2.10	1.75	1.81	1.93

TABLE 7.34.--Results of testing variable--the level of interest shown by the advisor in the student's program by level and curriculum by using the two-way ANOVA

Source of Variation	Sum of Squares	D.F.	Mean Square	F	Significance of F
Level (V.19)	7.886	1	7.886	9.911	.003*
Curriculum (V.25) with Level (V.19)	3.0866	3	1.0289	1.293	.290**

Significance = .05

*Significance

**No significance

82. How do you feel your professors generally relate to you in academic settings?

Relative
Value

- 1 (a) Very comfortable
- 2 (b) Just comfortable
- 3 (c) Uncomfortable
- 4 (d) Very uncomfortable

TABLE 7.35.--Group mean score cross-breakdown indicating the perceived level of comfortableness when meeting with the professors in academic settings by academic level and curriculum

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	2.11	0	2.17	2.13
Ph.D.	1.55	2.00	1.89	1.79
Column Total	1.80	2.00	2.00	1.91

TABLE 7.36.--Results of testing variable--the level of comfortable-ness when meeting the professors in academic settings by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Square	D.F.	Mean Square	F	Significance of F
Level (V.19)	1.180	1	1.180	6.112	.018*
Curriculum (V.25) with Level (V.19)	1.109	3	.370	1.915	.144*

Significance = .05

*Significance

**No significance

130. How do you evaluate the courses and seminars you have taken under the following categories in terms of your future professional activities?

Relative Value	(A) Core courses (major field)
1	(1) Generally very useful
2	(2) Generally useful
3	(3) Generally not so useful
4	(4) Generally not at all useful

TABLE 7.37.--Group mean score cross-section breakdown indicating the perceived level of usefulness of the core courses in terms of students' future professional activities

	Social Science	Physical Science	Life Science	Row Total
MA/MSc	1.80	0	1.00	1.47
Ph.D.	1.46	1.50	1.44	1.46
Column Total	1.62	1.5	1.25	1.47

TABLE 7.38.--Results of testing the level of usefulness of the core courses for future professional activities by level and curriculum, by using the two-way ANOVA

Source of Variation	Sum of Square	D.F.	Mean Square	F	Significance of F
Level (V.19)	.000	1	.000	.001	.971**
Curriculum (V.25) with Level (V.19)	2.650	3	.883	2.816	.951*

Significance = .05

*Significance

**No significance

Summary

In this chapter the data obtained through 19 quantative (rank-order) questions from African graduate students in the sample were analyzed. More specifically, the impact of the two sets of independent variables, namely, academic level (i.e., master's and doctoral), and fields of specialization (i.e., social sciences, physical sciences, and life sciences), on selected aspects of the sample members' academic experiences is revealed, as reflected in their responses to the questions about the 19 selected items.

The two-way Analysis of Variance (ANOVA)--the nested model--was used to test the significance of the differences. The data were also analyzed by the use of Group Mean Score, firstly to isolate the pattern of the responses of these sub-groups under the category of academic level and curriculum (area of specialization), and secondly, to further interpret (although rather crudely) the direction of the significant differences where the F-test produced such results.

The statistical tests yielded significant differences in the cases of five items out of the 19 item cases for which the statistical significance was tested. Below is the summary of the results for those five items.

1. There was a significant difference between Master's level graduate students and doctoral level graduate students in the sample, relative to their perceptions regarding the level of their participation in constructing their individualized graduate programs. The mean score showed that doctoral students felt that they had participated to a greater degree than did those in the master's programs.

2. Significant differences were registered in both the levels and the areas of specialization, with respect to the students' satisfaction with the processes and procedures followed in the development of their individualized graduate programs. That is, there were significant differences between master's and Ph.D. candidates, and among those in the three broad areas of specializations, in regard to their levels of satisfaction.

The mean measure indicated that the doctoral cohort was more satisfied than were students in the master's group. In the areas of specialization, those in physical sciences followed by those in life sciences indicated more satisfaction, in that order, than did those in the social sciences.

3. There was a significant difference between master's level subjects and doctoral subjects in the perceived level of interest whose by their academic advisors in their programs. The doctoral students registered a relatively higher level of the interest which they perceived their advisors had shown in their programs than did those in the master's level group, where the relative value of "very high" was one, and "very low" was five, respectively.

4. There was a significant difference between master's level students and doctoral level students in the level of comfortableness they felt when meeting with their other professors for academic purposes. The group mean score showed that these at the Ph.D. level reported a higher level of comfortableness than did those in the master's level.

5. There were significant differences among the three broad areas of specialization regarding the students' views on the level of usefulness of knowledge gained from the core courses for future use. The group mean indicated that those in the life sciences and the physical sciences, in that order, felt that knowledge acquired from their respective sets of core courses was more useful than did those in the social sciences.

Some plausible reasons were suggested for such differences, in terms of students' educational experience at these two levels (i.e., master's and doctoral) and in the three broadly categorized fields of specialization (i.e., social sciences, physical sciences, and life sciences).

CHAPTER VIII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

In this chapter the summary of the development of the study is presented, the findings relative to the academic experience of African students at Michigan State University are summarized, conclusions relative to the study are made, and recommendations for further research and policy considerations are put forth.

Summary

Purpose of the Study

The purpose of this study was threefold:

1. To develop a profile of the African graduate students at a large midwestern public university.
2. To explore and examine the educational experiences of African graduate students while they were pursuing graduate studies at the master's and doctoral levels at Michigan State University. Seven dimensions of their experiences were selected and investigated: (a) the development of individualized academic programs required for graduation; (b) the processes involved in acquiring knowledge (i.e., methods of teaching, class participation); (c) evaluation; (d) research; (e) critical factors (i.e., access to relevant data/literature, family obligations, the parity or disparity between

previous and present education); (f) human interaction in academic related matters; and (g) the anticipated usefulness of current education upon reentering one's own society.

3. To investigate whether two sets of variables, namely, academic level (i.e., master's and doctoral) and area of specialization (i.e., social sciences, physical sciences, and life sciences) had differential impact on the academic experience of African graduate students, as reflected in their responses (this was limited to those 19 items analyzed in Chapter VII).

Flow of African Students to the United States: A Historical Analysis

For the purpose of placing the educational experience of the African graduate students selected for current investigation in the proper historical context, the historical flow of African students to the United States was analyzed.

More specifically, 10 variables were used to compare the general pattern of the flow between the two decades leading to independence and the decade and a half of past-independence, namely:

- (1) the country of origin; (2) the region of the continent; (3) the academic year; (4) the language of instruction of this country of origin; (5) gender; (6) the number of countries (territories) from which the students originated; (7) the volume of the flow of African students in relation to the flow of global students to the United states; (8) fields of specialization; (9) the academic level (i.e., undergraduate and graduate); and (10) sources of sponsorship.

Viewing the flow from the standpoint of these 10 variables, with the exception of the areas of gender and of academic level (i.e., undergraduate and graduate), several changes in the pattern of the flow were noted in the post-independence era. That is, during the post-independence years, the flow of African students to the United States increased, in varying proportions, from almost every African state, every region of the continent, and every linguistic orientation (i.e., Anglophone, Francophone, etc.); more students majored in the so-called "priority fields" (i.e., physical sciences and management sciences, etc.) vis-à-vis the social sciences; and the home government and American institutions increased the volume of those sponsored (in relative terms). Furthermore, the number of African countries/territories from which students coming to American institutions in order to obtain higher education originated, increased dramatically during those years from 28 in 1950/60 to 48 in 1976/77. The volume of the flow of African students in relation to global student flow also increased considerably (from 3.1 percent in 1950-51 to 12.4 percent in 1976/77). The political-economic dynamics responsible for these alterations in the pattern of the flow during the selected period are discussed in the analysis (see Chapter II).

Review of Literature

In the review of literature, some aspects of the educational experiences of foreign students and African students in American higher education were briefly covered. This approach was adopted for two basic reasons: the fact that African students comprise one

segment of the total global population of students in the United States, and as such, share some common experiences in the process of schooling in the system; and the fact that literature on African students in the United States is (relatively) very limited. Thus it was deemed useful to include a brief relevant research review on the experience of foreign students in general, on the assumption that it would provide some helpful insights on the subject.

The review (of both the global students and African students) focused on five specific aspects of the academic experience, namely: academic performance, factors associated with achievements, academic problems and adjustment, satisfaction and relevance.

Design of the Study

Two instruments, a questionnaire and a structured interview were used to gather the data for this research project.

The questionnaire was utilized to collect information pertinent to the personal background of the sample members. The data information extracted through the questionnaire was used first to develop a profile of African graduate students at Michigan State University at the time of the study; and secondly, to provide an overview of the students' backgrounds, in order to suggest implicitly to the reader, prior to the analysis of the responses in the chapters that followed, that those students' social and educational socialization and their past work experience would influence their academic experiences and their perceptions, and that the results should be viewed in that light. Thirdly, the information was used to obtain

pertinent information relative to the two sets of variables, namely, the students' academic level (i.e., master's/doctoral) and his/her area of specialization (i.e., social, physical, and life sciences), to be used in analyzing the 19 quantitative questions with respect to the academic experiences of the participants.

A structured interview schedule was used to gather the information relative to the educational experiences of the sample in the seven dimensions listed at the beginning of this chapter. Both instruments were pre-tested prior to commencing the actual gathering of the data for the research.

The universe of this study was the African graduate students (from the sub-Sahara, with the exclusion of those from South Africa) at Michigan State University. Of the 96 total Africans pursuing graduate studies at Michigan State University at the time, 50 percent were randomly selected. Thus forty-five African graduate students participated in the study. For the majority, the interviews were conducted in the offices in which the participants worked or studied (or where they did both, in some cases). Most of the sample members preferred to fill out the questionnaire at the same time--usually at the end of the interview session--while some decided to fill it out and mail it to the researcher later.

The data obtained through the questionnaire were coded and transferred to a Fortran Coding Form by the researcher and the cards were punched. Then frequencies and percentages were computed by using the Michigan State University CDC 65 ou computer.

Since the interview schedule questions were of three types, three different methods of analysis were utilized, depending on the classifications. The data obtained by the closed-ended questions were analyzed in the same manner described in the preceding paragraph relative to the data on personal background. For the 19 quantitative (rank-order, closed-ended) questions,¹ a two-way analysis of variance (ANOVA)--the nested model--was used to determine the significant differences, if any, in the responses between African graduate students at different academic levels (i.e., master's and doctoral), or among those in different fields of specialization (i.e., social sciences, physical sciences, and life sciences). The responses to the 32 open-ended questions were transcribed verbatim from tapes onto regular writing paper by hand, and the responses to each question were categorized according to the major patterns of focal points which emerged. The assistance of a panel of qualified judges (two) was solicited for the purpose of establishing a degree of consistency in classifying the responses. Each judge read the transcribed narration of the responses of randomly selected sample members independently, categorized them according to the main common themes of concerns or areas, and tallied them in the manner of such classifications. After a reasonable comparability (similarity) of the results of the categorization was determined, the researcher proceeded with the categorization of the

¹For the listings of these questions, please see Chapter IV, Table 4.1.

responses of the remaining subjects. The categories of the points of each question have been presented in raw figures and percentages.²

Findings of the Study

The major findings are presented in the sequential order of the three parts into which the data analysis has been organized: first, the profile; secondly, the academic experience under the seven dimensions from which the students' experiences were examined; and finally, the impact of the two sets of independent variables, namely, that of the academic level (i.e., master's and doctoral) and of the curriculum area of specialization (i.e., social science, physical sciences, and life sciences) on the students' experiences as reflected in the patterns of the responses on the 19 selected items (questions).

A Profile of African Students at Michigan State University.--

The first area of interest which the findings are discussed is a profile of African graduate students at a large mid-western university.

Gender: The overwhelming majority, 38 (84.4 percent) were male, and most of the women were those who accompanied their spouses in their quests for further education.

Age: The majority were between the mid-20s and mid-30s.

²See Appendix D.

Marital and family status: The majority were married (27). Most of those married were accompanied by their spouses. More than two-thirds of those who were married had children and most of them had their children with them.

The ecological origins: About two in five originated from countryside/villages, while the remainder were from small towns or big cities.

Educational background: The overwhelming majority received their high school and undergraduate education at home. Most of them attended either public high schools or mission high schools, and most of those schools were boarding institutions. Most of them attended schools located either in small towns or big cities. Of the 28 who held master's degrees, more than two-thirds had received them in the United States, while one-fourth had acquired them in their own countries. Most of them were bilingual or multi-lingual, and the language of instruction from high school to college level was other than their mother tongue--for most, English.

Work experience: Thirty-four (76.6 percent) has worked prior to beginning their graduate education at Michigan State University. For the majority, about two-thirds, the average period of work was one and one-half years. One-third had an average of three and one-half years of work. For a slight majority, the ecological place of work was exclusively in urban centers, while the rest worked either in rural or in both urban and rural areas.

Current education and length of sojourn experience: Broadly speaking, three areas of specialization were represented: social sciences--21 (47.7 percent); life sciences--16 (35.6 percent); and physical sciences--8 (17.8 percent). About two-thirds of the students were pursuing graduate courses at the doctoral level. Slightly more than one-half had been pursuing graduate programs at Michigan State University for two or more years, and more than two-thirds had completed about 75 percent of their academic requirements for graduation.

Sources of financial support: The overwhelming majority had some kind of financial support, either total or partial. Home government was the single largest source of financial support, followed by income procured from Michigan State University graduate assistantships and external agencies.

Future plans and commitment to home country: The overwhelming majority, 37 (82.2 percent) had definite plans to return to their respective home countries; 33 (73.3 percent) had jobs waiting for them back home, and 27 (60.0 percent) were on leaves of absence from jobs to which they would return following the completion of their education.

Personal position in the family history: About two-thirds were neither the first nor last child in the family history birth position. About two-thirds were second generation schooled, while about one-third were first generation educated. However, the majority, 34 (75.6 percent), were the "first" to have attained the highest level of education in the family.

Family background: Almost one-third originated from homes where the fathers did not have a formal education, and more than one-half originated from homes where the mother did not have formal schooling. Most of the parents of the African graduate students were self-employed in some type of activity in the traditional sector of the economy.

The Academic Experience.--The academic experience of the students is the second division under which the findings of the study are organized.

The development of the academic program--procedures and processes:

A. About 50 percent of African graduate students in this study obtained the pertinent information relative to the development of their individualized academic programs from their respective advisors, and about one-third from departmental catalogues. The remaining proportion received this information either from the students in the department or from academic committee members.

B. As to the sources of input and the relative emphasis attributed to each set of sources in shaping their individualized academic graduate programs, the students and the advisors played major roles. About one-half reported that most of their own suggestions, in combination with some recommendations from their advisors, became the bases for their graduate academic programs, while about one-fourth indicated that their programs were formulated mostly on

the basis of their advisor's recommendations, and on some of their own suggestions. Approximately another one-fourth said their own suggestions were the sole source of input.

C. Among the possible factors essential in considering each student's individualized program for a graduate degree, five were considered in the following order of priority, one to five: the student's future professional aspirations; his/her personal academic needs; the student's cultural background and the environment conditions of his/her future field of professional work; the necessity for meeting departmental academic requirements; and the student's past professional experience (in that order of plurality).

D. About 85 percent of the sample (38) had persisted in the original majors they had applied for at the time of admission. Only six (13.6 percent) had switched majors since the time of admission to pursue graduate education at Michigan State University.

E. Based on their assessment regarding procedures and processes followed in constructing their respective individualized graduate programs, as viewed from three items of concern in this context, the perceptions of the African graduate students were relatively positive about this aspect of their educational experience:

1. About 97 percent (44) thought the graduate programs developed for them contained what could be considered the basic "ingredients" which would serve as preparation for their future work

2. Slightly more than one-third and slightly more than one-half recorded the level of their participation in the development of their own individualized academic programs as "more than adequate" and "adequate" respectively
3. Slightly more than one-third and about one-half of the sample population judged the procedures and processes followed in the construction of their individualized academic program to be "very satisfactory" and "satisfactory" respectively

The process of acquiring knowledge:

A. Lecture

1. About 70 percent (34) thought that their experience with the lecture method as a mode of acquiring knowledge at Michigan State University has been "mixed," and gave that method a more qualified rating of "effective." About one-fifth (9) recorded it as "very effective." Only one person rated the lecture in the negative.

2. Good preparation and good delivery were the two top characteristics which contributed to the quality of the good lectures (as reported by 30 participants (66.7 percent each) respectively. Good structure and the lecturer's wealth of experience were the third and fourth factors listed.

3. For the lectures which were considered less than effective, lack of preparation and lack of good development were the two major factors listed as contributing to their poor quality.

Twenty-three (51.1 percent) and 18 (40.0 percent) cited these respectively. Language problems, the use of unfamiliar illustrations, and too much unstructuredness were reported by seven (15.6 percent) each, and too much structuredness was selected by five (11.1 percent).

B. Group Discussion

1. Seven (20.0 percent) and 23 (65.7 percent) evaluated Group Discussion as "very effective" and "effective," respectively, as a mode of acquiring knowledge. Only five (14.3 percent) rated this method in the negative.

2. The factors which the African graduate students thought contributed to the effectiveness of group discussions were their capacity to facilitate the exchange of varied views; their nature, which made the presentations less boring; their style which made learning easier; and their unstructuredness (in that order of plurality).

3. The factors which were thought to contribute to the ineffectiveness of group discussions were their tendencies to cause diversion of the discussions to nonrelevant subjects; their tendencies to encourage professor(s) not to make adequate preparation; their unstructured nature, which contributed toward their tendencies of disorganization; and their tendencies to contribute to wasting time, which were selected in that order of plurality.

In addition, a number of the participants noted that group discussion as a method of teaching may easily be abused by certain

factions of students and professors, in that this format is always open to manipulations.

C. Films and Other Audio/Visual Presentations

1. About the same proportion, 14 (41.2 percent) and 16 (47.1 percent) of African graduate students rated films and other audio/visual presentations as "very effective" and "effective," respectively. Four (11.7 percent) judged them to be "ineffective" to "very ineffective."

2. Their capacity to make learning easier and the fact that they were appropriately selected for the topic were chosen, in that order, by 25 (73.5 percent), 14 (41.1 percent), as the factors which contributed to the effectiveness of the presentations using this medium of teaching.

3. On the other hand, lack of relevance to the assigned topic was selected by six (17.6 percent) who found this method less than effective. The other two items mentioned in this regard were failure on the part of professors to relate the teaching aid gadgets to the subject material, indicated by four (11.8 percent), and poor presentations, which made these teaching aids less effective, indicated by three (8.8 percent).

D. Class Reports

1. Twelve (32.4 percent), 14 (37.8 percent), and 11 (29.7 percent) rated class reports as "very effective," "effective," and "ineffective," respectively.

2. For the class presentations which the participants regarded as "effective" and "very effective," the following characteristics were selected: the capacity of encourage personal involvement in preparation for class; the nature of the format, which allowed for class participation; and their format, which was less restricting for information gathering (in that order of plurality).

3. As for the factors which contributed to those class presentations which the participants felt were on the negative side, the following three were selected: the fact that they were usually too time-consuming for the amount of learning actually attained, their tendency toward fragmentation, and their unsuitability for the graduate student as an adult learner (in that order of plurality). In addition, many African graduate students in the study observed that, in general, students lacked the skills to prepare materials on a given topic and present them in a balanced fashion, and that their fellow students did not pay attention to the materials presented by the students.

E. Class Participation

1. Eight (18.6 percent), 17 (39.5 percent), and 18 (41.9 percent) reported their level of the class participation as "very frequent," "frequent," and "not much," respectively.

2. For those who participated more frequently in class discussions, three factors were selected by more of the participants: personal determination to participate irrespective of encouragement from the professors and classmates, the fact that they usually

received encouragement from the professor(s), and the fact that the discussions were usually relevant (in that order of plurality).

3. Those who did not participate much in classes selected the following: fear of making language errors or over-consciousness of their foreign accents, lack of encouragement from classmates and professors, and lack of relevance either to the topic under discussion or to personal interest.

Evaluation:

A. The overwhelming majority of the African graduates in the sample had had all of those types of evaluation exercises (i.e., quizzes, mid-term examinations, and final examinations), which could be appropriately placed under the category-scope, weight-based progressively sequential. About 80 percent reported that they took most of them in class.

Most of the graduates in the study had some types of problems with each type of the evaluation exercises listed above. However, most of the complaints were related to the quizzes, both in actual difficulties encountered (i.e., both in preparing for them and actually sitting for them), and in philosophical opposition to the practice of using them as evaluation exercises at graduate school level. In the main, the following problems were cited with respect to the students' experience with quizzes: their nature, which emphasized speed rather than deeper knowledge, both in the student's efforts to digest information and in their actual writing of such exercises; the fact that quizzes were disruptive and were hindrances

to the student's own academic programming and activities; the fact they became sources of pressure and unnecessary bother; the fact they became sources of pressure and unnecessary bother; the fact they required rote memory; and the fact that they limited the source of information on a given topic to a narrowly based literature.

There were complaints regarding the mid-term examinations, although these were registered by a smaller ratio of the participants. In some respects the concerns raised relative to taking mid-term examinations were similar to those expressed with respect to taking quizzes. These were the apparent emphasis on speed (inherent in their nature), rather than on actual knowledge; lack of time for preparation (i.e., in the middle of the term); the fact that they limited and disrupted the graduate students' freedom to organize and execute their own academic activities; the fact that this mode of evaluation contributed to the process of learning being mechanical rather than reflective; and the fact that they encouraged rote memorization.

B. Essays, objective tests, lab tests, and applied and experimental reports were the formats (i.e., types of questions) used in the students' evaluation exercises, although objective and essay questions were the most pervasive ones (in that order of frequency).

About 80 percent out of 42 sample members had some problems (or questions) relative to the formats used in the evaluation exercises, although most of these problems occurred in regard to

objective and essay questions (in that order of volume of complaints). The main concerns raised with respect to objective questions were the fact that in preparing to answer them one is forced to memorize and reproduce facts; their structurally ambiguous nature; the nature of the format, which forces students to study useful facts, rather than focussing on broader themes; the facts that the format is exclusively indigenous to the American tradition of academic evaluation, and thus, inherently favors the host country students vis-à-vis foreigners; language; and the fact that the style is so structured and mechanized that it forces the students to view the subject matter in a mechanical manner, thus contributing to distortion of the wider dimensions.

The majority of the African graduate students in the study had generally favorable attitudes toward essay questions as an "appropriate format" for evaluating the performance of graduate students; however, four issues emerged which affected some of the participants (albeit a minority) negatively. The differences, in some cases, were substantial differences in approaches to essay questions, in term of length and scope between American and African academic tradition, in terms of the responses expected; language difficulties; lack of accommodation to alternative views expressed by the students on the part of some professors; and cultural biases inherent in the questions.

C. About 70 percent of the 13 who had gone through the preliminary/comprehensive examination phase of their graduate training indicated having had some problems, either in the preparation which

these examinations entailed, or in the actual taking of them. Among these students' major concerns were the lack of adequate guidance during the process of preparation for the examinations; the fact that the preparation for them was time-consuming; the fact that the examinations included too many questions; the fact that most of the questions focussed on American experience; and the occurrences of goal conflicts between departments and the African trainees, in some cases, as a result of departmental academic focuses aimed at making the department one of the top in the national ranking. While these may have been legitimate goals for those departments which aspired to secure such recognition within the country, and which consequently charted their academic emphasis along paths which presumably would lead them to realize such goals, the African graduate students found, in such cases, that the departmental policies demanded the intense absorption of theories, but that such knowledge (theories) had little or no relevance to African problems.

D. However, over 80 percent of those who had taken such examinations (preliminary/comprehensive) indicated that the experience of going through them (i.e., preparing for them and taking them) was "very useful" to "useful."

E. About 80 percent of the total sample population reported that they had not been leniently graded, either because they were foreigners or Africans. However, about 5 to 10 percent did report that while they were not assigned unearned grades for their performances, they were given more time to complete their tests and

examinations as a gesture of consideration on the part of some of the professors toward foreign students.

When the issue of the human factor in evaluation was considered from the opposite spectrum, a relatively larger ratio reported that they had experienced harsher grading by instructors because they were foreigners, or because they were Africans. About 20 to 30 percent reported such experiences with varying frequencies. However, even in this line of investigation, about two-thirds reported no such treatment with respect to academic evaluations. In most cases, where the subjects felt the human factor affected them adversely in the grades they were assigned, they also explained that the professors were unfamiliar with foreigners, or had no international experience.

Research:

A. Papers

1. About 90 percent of the 45 African graduate students whose academic training included writing term papers had written on topics related to African concerns.

2. About 50 percent out of the 39 indicated that there were times when they wished to write on topics with more relevance to Africa, but were unable to do so. The inquiry did not establish any definite discernible pattern as to the phase(s) of their sojourn experience during which they wrote on topics with relevance to Africa, nor was there a discernible pattern in regard to the times when they wished to write on concerns relevant to Africa but could not do so. However, there was some evidence in the pattern, albeit less than

substantial, which suggested that both of those trends occurred during the first phase of the sojourn experience.

3. For those who wished to write their papers on African-related concerns, several issues were cited as militating against the realization such wishes. These factors included active discouragement by the professors in some specific courses, due to the fact that the professors lacked international experience; lack of relevant data and literature (both old and new); the absence of the entire environment in the student's were physically removed from it; the disparity of contents and orientation between some of the courses and African conditions; and lack of resources to go elsewhere where relevant data and literature could be found (in that order of plurality).

When asked if they had any problems in writing actual papers, 13 out of 37 replied in the affirmative. One cited difficulties encountered in writing papers similar to those summarized above. However, four others emerged: (a) language difficulty, (b) the assignment of pre-ordained topics), (c) deadline times for submission which interfered with quality, and (d) instances where the assignment was given as a group project (in that order of plurality).

4. Over 90 percent felt that the experience of writing papers (researching and actual writing) in graduate school at Michigan State University was educationally beneficial ("useful" to "very useful").

B. Thesis/Dissertation

1. About 70 percent of the 28 African candidates who had commenced working on their thesis/dissertation reported that their research projects were on the topics in which they had the greatest interest, while about 30 percent indicated otherwise.

2. The advisors' desire to see some breakthrough in their respective areas of knowledge, and the advisors' deep knowledge of the subject were the two (interrelated) factors which most influenced students in their choices of the topics for thesis/dissertation research projects. The other factors which were reported were the availability of resources, the student's desire to write on an African-related topic, the home country government's interest in the investigation of such topic(s), and the availability of the relevant data (in that order of plurality).

3. While lack of funds for the graduate student to go and conduct research in his/her home country was a perennial problem encountered by the majority of the African graduate students in the sample, some other issues arose which stemmed from the conflicts of interests and goals between the students and advisors, and the students and departments, concerning research. Such problems occurred when the advisors and departments had already set goals for future research, a common practice in most cases, particularly in the physical and life sciences, and the African graduate students wanted to do their research projects on topics more relevant to Africa, which were inevitably different from those research areas identified by the

professors and departments for further inquiry. There a new element of conflict emerged. This investigation revealed instances where accommodations had been made to resolve such problems through imaginative arrangements between the student's advisors in some cases, while in other cases no such accommodations were made.

4. About 80 percent of those who had commenced working on their thesis/dissertation projects indicated that they had received adequate help from their advisors, while the remaining proportion felt they had not.

5. About one-half reported that the new knowledge on which the research focused, and the value the advisor attached to it, were the major factors which influenced the amount of interest exhibited by the advisor toward the research projects. Three interrelated elements were encompassed in this factor. These were the professor's publication interest, the perceived potential of the research as a contribution to scientific knowledge, and the advisor's sphere of specialization. Other such factors were also identified: the fact that the advisor was the team leader in research projects, and that the students were needed for the labor; the advisor's interest in the student's academic and personal growth; and his/her confidence in the student to handle the given project (in that order of plurality).

Those factors which influenced the writing of thesis/dissertations were the advisor's busy program, which made impossible for him/her to attend to the student's research concerns, and the lack of experience on the part of some advisors with African problems.

6. All the students in this sub-group of the sample (i.e., those who had commenced on thesis/dissertations), felt that their experience of conducting the research and of actually writing the thesis was "useful" to "very useful."

Some critical factors:

A. Of the four selected "critical factors," namely, access to relevant data/literature, levels of their reading speed and comprehension, family obligations, and the disparity between previous and current education, if any, lack of access to relevant data/literature was the major constraint which affected the educational experience of the majority of the sample. Over two-thirds of the 35 students indicated having encountered difficulties, in varying relative frequencies, in finding relevant data and literature on African-related issues.

About 60 percent of the total sample had visited the African studies center on campus, in varying relative frequencies, while pursuing their graduate studies at Michigan State University. For most the purpose was to read newspapers and to attend seminars/colloquia or "brown bag" lectures on African-related topics sponsored by the center. This fact can be interpreted as an indication that the African graduate students were eager to enhance their educational experience by taking advantage of the relatively informative academic environment at the university on issues related to Africa. However, more than 40 percent of the total sample found their departmental program did not have sufficient flexibility so that the graduate students

could go outside of their respective departments for the purpose of enriching their educational experience.

On the other hand, the majority thought that their experiences at Michigan State University had contributed to their becoming more informed about the Third World and African countries (in that order of plurality), though mostly as a result of contact with fellow graduate students from these regions. The proportion of Africans who felt that their experiences at Michigan State University had contributed to their becoming more informed about their own respective countries was slightly less than one-half.

B. About 70 percent reported that their level of reading skills and comprehension was adequate to carry the graduate school load. Most of the African graduate students, including those who indicated the level of their reading was "too slow," had not taken any courses or other remedial exercises to improve their skills in reading, mainly due to the fact that they found that most of the programs designed for such purposes were unsuitable for their needs.

C. The majority of the African graduate students had dependents, both immediate family members (i.e., spouse and children) and relatives, which entailed their providing financial assistance either for education or sustenance, or for both, for these dependents. Those obligations, however, did not often seem to affect their graduate education experience negatively. The fact that most of the sample members were sponsored, and that the majority were on study leave and had some portion of their salary channeled to meet their financial

obligations to their dependents, was responsible for this. However, an even larger ratio, with respect to their obligations to their immediate family members, reported having some difficulties and inconveniences. Nevertheless, the difficulties reported both in frequencies and in severity and magnitude, were clearly less than they would have been had it not been for the sponsorship most were receiving.

D. The overwhelming majority felt that there was no apparent gap between their previous education and the graduate program they were pursuing.

Human interaction in academic-related matters:

A. Faculty

1. Advisors. Although the African graduate students in the study interacted fruitfully in academic-related matters with each of the sub-groups involved in academic endeavors at Michigan State Universitys, namely, advisors, professors, host country graduate students, the findings indicate some differences both in terms of frequency and quality of interaction, dependent on the above-listed sub-groups.

a. The intensity of academic activity and the stage where a graduate student was in the process of his/her academic progression were common factors which affected the frequency of interaction between the graduate students and academic advisors. That is, three critical periods in the span of the student's graduate education, namely, when preparing the individualized academic programs, when preparing for the

preliminary/comprehensive examinations, and when researching for writing the thesis/dissertations, were the periods which they sought more close work and interacted more frequently in relative terms with their advisors.

b. Having access to the department in terms of securing a place to work within it was a crucial factor relative to both the frequency of contact, and consequently, the quality in this regard. That is, those who were provided a space, in the form of a desk or an office, either because they worked for the department or because providing such space was part of the department's policy, met and interacted with their advisors more often than did the others.

c. However, the overwhelming majority (over 80 percent) reported that they got sufficient time from their advisors for academic counseling.

d. Based on the level of interest shown by their respective advisors (which was recorded as "high" to "very high" by the majority), and the level of the students' comfortableness with their advisors (reported as "just comfortable" to "very comfortable" by the majority), the quality of interaction between the African graduate students and their respective advisors was positive. That is, it can be inferred from the above-cited findings, that, in the main, the majority experienced an atmosphere filled with congeniality, sympathy, empathy, and enthusiasm, etc.

e. Five major factors were reported as having influenced the level of the advisor's interest in the student's academic program:

(1) the advisor's interest and experience in developing countries; (2) his/her interest in the student's own future and professional development; (3) his/her academic interest in a common field of specialization; (4) the student's own level of performance and competence in the field; and (5) the advisor's attitude toward the student (i.e., whether he/she had respect for the ideas and opinions of the student).

f. The findings relative to those factors which had contributed to the high level of comfortableness show that they were all associated with the advisor's past experience with foreign students, and with his/her attitudes toward graduate students in general, and foreigners in particular. Five such factors were recognized more (relatively). They included (1) the good relationship the advisor created so that the graduate student could communicate his/her ideas; (2) the advisor's willingness to help with any problem; (3) his/her interest in the personal progress of the students; (4) his/her interest in developing countries; and (5) his/her exhibition of sympathy for foreign students.

2. Other professors

a. The majority put their level of comfortableness with their other professors as "just comfortable." This was less than the level of their comfortableness when meeting with their advisor. However, only three of the 43 indicated their experience in this regard as "uncomfortable."

b. The factors which the participants judged as contributing to their being comfortable when interacting with other professors were almost identical to those noted earlier when discussing the factors which had contributed to their level of comfortableness when interacting with their respective advisors.

International experience emerged as one of the most significant factors, both when interacting with advisors and other professors. That is, those professors who had worked abroad, particularly in developing societies, provided a better atmosphere for meaningful interaction for African graduate students. For example, the 34 out of 43 (about 80 percent) reported that the professors with international experience related to African graduate students more easily than did those who did not have international experience. The examination also revealed a similar pattern with respect to the background of the three professors and to the one of the three (respectively) with whom the Africans had the best relations.

3. Professors as "Significant Others."

a. Twenty (44.4 percent) out of 45 had at least one professor whom they considered to be a "significant other," and another 13 (28.9 percent) had one professor with whom their interrelations were not as close, but whom they considered a "supporter." Only 12 (26.7 percent) of the Africans indicated that they had no professor(s) as either "significant others" or "supporters,"

b. Most of such professors were their advisors, and these professors were male and had had international experience.

c. The findings established that most of those who indicated having a professor as "a significant other," or "a supporter," respectively, frequently engaged with him/her in common activities, such as academic, personal, and social activities. In general, however, greater proportions of those African graduates who had "significant others" were engaged in such common activities with their "role models" than were those who had only "supporters."

It can be inferred from this that, in general, such common activities did provide an environment conducive to professional socialization at more intimate levels than might otherwise have been possible.

B. Fellow Graduate Students (Americans, International, and African)

1. The majority of the Africans interacted with American, international, and other African graduate students under the following three conditions for the purpose of engaging in academic activities outside the formal classroom: shared academic problems in a two-way manner on a one-to-one basis, participated in voluntary study groups, and functioned in student groups organized by professors to carry out some academic tasks.

2. However, for the majority, their experience with respect to the quality of the interaction varied from situation to situation, mostly when dealing with their American counterparts. The findings suggest that, in the main, the quality of the interaction was more favorable under voluntary study group situations than under either

of the other two. The fact that under the voluntary conditions, team organizations tended to bring together graduate students who were already acquaintances and friends was chiefly responsible for this pattern.

However, even under this condition, about one-third of the 29 who answered the question reported that they had to work hard at their participation in these study groups because the Americans tended to doubt the academic ability of the Africans.

3. When interacting with Americans on a one-to-one basis, about one-half felt their interrelations were normal, while the remaining proportions reported patterns of uneasy behavior, ranging from over-simplifying explanations to avoidance, on the part of their American counterparts.

4. When interacting in groups organized by professors to carry out academic projects, the majority reported two types of reactions from Americans--clear efforts to avoid working with foreigners, and giving the foreigners dependent roles in the distribution of the labor at hand.

5. In general, the majority, with a few exceptions, viewed the quality of interaction of the sample members with the other two sub-groups (international students and Africans) as more favorable in all three conditions.

6. In indicating their comparative pattern of interrelations with the three sub-groups at a more general level, over 80 percent (37 out of 44) indicated there were differences in the way they

interacted with the three sub-groups. Four patterns of tendencies and preferences for working with various groups, based on rank-order, emerged: (1) first, Africans, next internationals, then Americans (28--75.7 percent); (2) Africans, Americans, and internationals (seven--18.9 percent); (3) internationals, Africans and Americans (one); and (4) Americans, internationals and Africans (one).

7. The following reasons were cited by African graduate students as to why they preferred to work with Africans: (1) a common identity of historical, economic and political conditions; (2) mutual trust, confidence and understanding; (3) similar cultural values; (4) the ability to share common aspirations and experiences; (5) and having the same status, that of a foreigner (in that order of plurality).

8. Identical reasons, notwithstanding the language factor, were given by the Africans for their preferences and tendencies toward interacting with international students.

9. The students interviewed gave at least four possible reasons as to why their interactions with their American counterparts had not been as positive as those with other Africans or with internationals: (1) distance in culture and experience; (2) lack of mutual trust in academic matters; (3) differences in life and career expectations; and (4) the tendency on the part of the American students to relate to Africans on a limited basis (in that order of plurality).

The anticipated usefulness of current education: The African graduate students evaluated the courses and seminars they had taken at Michigan State University in terms of their future professional activities under four categories, namely, core courses (major field), cognate (minor field), elective courses, and research courses.

A. Each category was judged as "generally useful," by more than 40 percent and fewer than 70 percent (by those who responded to each section).

B. Three major reasons emerged as to why the participants thought the core courses were "generally useful" to "generally very useful." They were: (1) the courses provision of exposure to the basic knowledge and theory in the discipline; (2) their direct relevance to the professional goals of the student, though a lot of modification would be necessary; (3) and the fact that these courses were selected by the participants themselves based on their anticipated practical application (in that order of plurality). However, some did indicate that the core courses were too American in their theoretical orientations.

C. The cited reasons for having rated the future usefulness of the minor/cognate positively were: (1) the student's selection of the courses based on the knowledge that they would be relevant; (2) the fact that the courses had direct relation to the student's professional goals with a lot of modification; (3) and the fact that since they would be teaching the same courses back in their own universities, they were relevant (in that order of plurality). Here, too,

some felt that these courses/seminars were more fitted to American situations, and thus were nonrelevant for their future work.

D. Identical reasons were given for believing the elective courses were "generally useful" to "generally very useful" for future work by those who evaluated them so, as were given with respect to cognate/minor courses as outlined in the succeeding paragraph. As in the evaluations relative to the other group of courses analyzed earlier, some students did express their reservations with respect to the usefulness of the knowledge gained from this category of courses.

E. As to the reasons why the participants rated the research courses in a positive light, slightly different sets of opinions were set fourth: (1) courses were applicable to application to the type of research the graduate students would be doing at home; (2) they provided exposure to research technology and skills; (3) the (students) selected the courses based on the criterion of their application to home country needs; and (4) those courses provided practical skills for conducting research, although with a lot of modification.

The Effects of Academic Level and Fields of Specialization.--

The third area under which the findings of this study are grouped is that of the effects of the students' academic levels and of their fields of specialization.

The statistical test (ANOVA--the nested model) of the impact of the two sets of independent variables, namely, academic level (i.e., master's and doctoral), and fields of specialization (i.e.,

social sciences, physical sciences, and life sciences), on the 19 items analyzed in Chapter VII yielded significant results in the case of five items.

1. The African graduate students in master's and doctoral programs perceived the level of their participation in constructing their individualized graduate programs differently. The mean score showed that the Africans at doctoral levels felt they participated more in this construction than did those in the master's programs.

2. In accordance with both their academic levels and their areas of specialization, the Africans showed significant differences in the levels of their satisfaction with the processes and procedures followed in the development of their individualized academic programs. According to the mean score, the doctoral cohort was more satisfied than the master's cohort; and those physical sciences were more satisfied, followed by those in the life sciences, than those in the social sciences.

3. The interest exhibited by their advisors in the programs was perceived as significantly different by African students in master's and doctoral programs respectively. The doctoral group reported higher levels of interest exhibited in their programs (according to their mean score) than those in master's.

4. Those in the master's programs registered significantly different feelings than did those in doctoral programs relative to the level of their comfortableness when meeting with the other professors for academic purposes. Those in Ph.D. programs showed a

higher level of comfortableness (as measured in mean scores) than did those at the master's level.

5. The level of usefulness of the knowledge acquired from the respective sets of core courses was viewed in a significantly different manner by the Africans in the social sciences, physical sciences, and life sciences, respectively. The life sciences majors, followed by physical science majors, indicated perceiving a higher level of usefulness of knowledge acquired from the core courses than did those in the social sciences.

Recommendations

Research

This study has several limitations, among them the small size of the sample. Thus, due to the smallness of size, it does not lend itself to meaningful statistical manipulation using more variables.

The second major limitation is that it focuses on the experience of African students in one institution. While the findings can apply to the universe at Michigan State University, since the sample was a half of the total population, they do not reflect the situation relative to the larger population of African graduate students in other institutions.

The third major limitation is that the study is one sided: it was done from the African graduate student's perspective.

With this in mind, the following areas have been recommended for further research.

1. There is a need for a profile of African graduate students in American higher education, using the same variables utilized in developing the profile of Africans in this study. Such an inquiry should be done every ten years.

Such information should be useful both to the African countries from which the students come, and to American society. To leaders in the African countries where the students originate, it should reveal patterns of selection, and the extent to which the educational system expands educational opportunity for those who originate from illiterate homes, as well as for those who reside in rural areas, who are usually shortchanged when it comes to sharing the fruits of modernity including modern education. For administrators in the American institutions it should show, via the recipients of the degrees, which segment(s) of developing societies are benefiting from the transfer of knowledge, both cultural and technological.

2. It would be useful to replicate the study using African graduate students in nation-wide graduate schools.

3. The same should be done with foreign graduate students from other parts of the globe for comparative purposes. This should include a control group (Americans).

4. More detailed study is needed focusing on the interrelations between academic advisors and the African graduate students, and between these students and other professors as well. Such an inquiry should include the viewpoints of both sides.

5. Related to the above-suggested inquiry is the need to study the process of professional socialization of African students. Such an endeavor should encompass their professional experience in Africa and their socialization in the United States.

6. Using the items outlined in two-five, a study should be done on African students at the undergraduate academic level.

7. More follow-up studies are needed to provide additional insights into the impact of the cross-cultural education (both its strengths and limitations) when the trainee returns home and faces the world of work.

8. A study is needed to determine the learning style of African students and that of students from other parts of the globe. The results of such an inquiry should be compared with the learning style of Americans. It is assumed that such knowledge would aid the institutions and professors to be more flexible in their efforts to maximize the educational experience of foreign students. Such research findings could have potential for contributing toward our understanding of the theory of cognitive styles of learning from a cross-cultural perspective.

Policy Recommendations

Any set of recommendations for policy implications relative to educational programs which does not take into consideration the state of affairs in regard to the economic and political atmosphere in the given institution, and indeed in the larger society, is an academic experience devoid of practical impact. This is particularly

significant when the policies to be suggested for consideration pertain to the academic welfare of a small segment of foreign students who are not generally expected to make contributions to the society where the education is obtained.

As pointed out in Chapter I, American higher education is at the crossroads: on the one hand it is confronted with declining enrollment, and on the other with a financial crisis stemming from ever-rising inflation and loss of incoming funds as the result of declining enrollment. Added to this picture is the rising enrollment of foreign students, particularly of students from developing countries at an unprecedented level in American colleges and universities.³

The financial condition of Michigan State University has indeed precipitately worsened since the commencement of this study, and has presently reached a critical point due to the current faltering economy of Michigan, resulting primarily from the dramatic fall of auto sales in the state.⁴

1. Currently the university has an institution-wide coordinated system for the admission of foreign students, and a special (Office of Foreign Students Scholars Office of Advisor) to handle issues related to immigration concerns, as well as other logistical

³See Chapter I, pp. 4-7; 20 and 21.

⁴The atmosphere of financial crisis at the university is nowhere more apparent than in the deep budget cuts currently under consideration. See The State News, 2 February 1981 for fuller discussions of the recommendations for the university-side budget trimming.

needs of foreign students while these students are at Michigan State University.

In the view of this researcher, based on observations made during the actual process of training of foreign students is left to each department where the foreign students are enrolled, and to the individual advisor and professor(s) under whom such statements take their academic programs. While this arrangement for the academic training of foreign students has functioned well to the extent that foreign students have been imbued with the perscribed skills, knowledge, and the certifications essential in such training, this study did reveal a number of issues with which the African graduate students were concerned relative to their graduate education experience.⁵

These concerns may be summed up in the following manner.

1. There should be university-wide coordination both in academic policy and related activities so that the students could maximize the educational benefits of these various activities.

⁵The problems arising from the perceived disfunctionality of university education in African countries are still persistent after two decades, in some cases three, of African experience with modern university. According to Dr. David Wiley, the Director of African Studies Center, in a recent report (February 19, 1981), on the subject upon his return from his recent tour in four African countries (Senegal, Zimbabwe, Kenya, and Nigeria) as a part of a White House Scientific team, the perceived lack of relevance or inappropriateness of African univeristy programs for the developmental needs of Africans has further deepened. He observed that there exists an attitude among politicians in those countries that the university is an institution that is incapable of engaging in any significant social and economic endeavors, and therefore, exists for its own purpose and move at its own speed.

2. The same should be done at college and departmental levels. This procedure should entail making the requirements more flexible, not less or inferior with regard to quality, but at least flexible as those of U.S. born students, so that African graduate students can undertake more independent studies in the way of supplementing their academic programs.

3. Such coordination should include providing some orientation⁶ regarding the availability of different courses, and specific materials, presentations, and symposiums offered on campus to the students from time to time.

4. In these times of budget cuts and limitations, the university should limit its focus of interest with respect to acquiring literature and data from other countries to an economically feasible capacity, focus on limited regions of foreign countries. It should obtain more information through literature and data from such selected areas, rather than attempting to collect it from all regions of the world and thus to overextend itself, with the end result of covering available knowledge so thinly. The university should consider entering into some well-defined agreement with the major universities in the region (e.g., mid-west), so that each educational institution concerned might delineate its areas (regions) of interest and its

⁶The foreign students office of the university provides orientations every term for newly arrived foreign students, but such activities are limited to logistics and the physical environment of the university. The available evidence as indicated both in the findings of this study and in the literature in the field indicates that there is a need to provide some organized orientation for foreign students in academic areas.

capabilities and invest in collecting literature and data more thoroughly from or on the selected global regions, with the expressed purpose of collaborating with the other institutions involved, and in providing better services for teaching and academic research.⁷ Then the directors of academic programs should envisage the possibility of allowing students to become mobile among such institutions.

5. The findings in this study bore out the significance of the advisors and professors having international experience in affecting the educational experience of the subjects. Thus it is appropriate to suggest that the faculty members in those departments where African students and foreign students are enrolled be given some orientation on cross-cultural interaction and international issues.

6. This study confirmed a concern which has become generally apparent and troublesome to the students of cross-cultural learning, that is, the lack of meaningful interaction between foreign students and domestic students. It is generally believed that more interaction

⁷Currently Michigan State University does have collaborative linkages with other major universities in the mid-west in international activities. It is a member of the Mid-West Universities Consortium for International Activities Inc. (MUCIA), an entity which includes the following major universities, Illinois, Indiana, Ohio State, Iowa, Wisconsin, and Minnesota.

It may be that some type of cooperative in the education of foreign students exists among these member institutions. What is being suggested here is that in the face of the severe economic constraints confronting American higher education, and the simultaneously ever-increasing enrollment of foreign students (particularly of those developing countries) in U.S. institutions, and also of the increasingly heightened concerns with respect to the functionality and relevance of the education received by foreign students, particularly from industrialized countries, a new direction should be considered. Such a cooperative mechanism would contribute toward maximizing the usefulness of the educational experience of foreign graduate students.

between these two groups takes place in academic areas than in other areas. The findings in this inquiry indicated this to be true, but it was clear there were problems for about one-half of the sample, and in some regards for more than one-half, during the course of such interaction in academic-related matters.

Some conscious efforts need to be taken to minimize such a pattern. If this is not feasible, more efforts should be made to foster increased interaction between international graduate students as an alternative avenue for more professional socialization for these students.

APPENDICES

APPENDIX A

A LETTER OF INTRODUCTION

212 W. Owen Graduate Center
Michigan State University
East Lansing, Michigan 48824
June 1978

Dear Fellow African:

I have already spoken to many of you both in person and by telephone about my doctoral dissertation on the Academic Experience of African Graduate Students at M.S.U. I was delighted that most of you to whom I have spoken about this research exercise have shown keen interest in the project and have indicated a willingness to cooperate.

Enclosed is a very brief questionnaire on your personal data to be filled out by you. Completing this questionnaire will take at most ten minutes.

The main instrument for this research is an interview, and so I have already explained to you I will be visiting with you at the most convenient time and place for you, so that you can share your academic experience at M.S.U. with me.

The purpose of this research is purely academic and not political. The information you will provide will remain confidential and your name will not appear at all in the manuscript. A copy of my dissertation will be placed in the Michigan State University library so that any interested individual can read the findings.

If you have any questions concerning the project kindly contact me at 355-3831.

I hope you find it possible to participate in this study.

Thank you for your cooperation.

Thesis Director--Dr. Walter F. Johnson
Professor of Administration and
Higher Education

Hamdesa Tusso

APPENDIX B

PERSONAL DATA INFORMATION QUESTIONNAIRE

THE ACADEMIC EXPERIENCE OF AFRICAN GRADUATE
STUDENTS AT MICHIGAN STATE UNIVERSITY

PERSONAL DATA INFORMATION QUESTIONNAIRE

Instructions

It is important for the completion of this study that some personal data be obtained from you. The following questions are designed to obtain such personal data information.

Please answer the questions as honestly and as completely as you can. NB: Please do not write your name anywhere on these sheets. This is to assure you of anonymity with respect to any personal data and opinions which will be obtained.

Personal Data

1. What is your age bracket? _____ 23-29, _____ 30-36, _____ 37 and over.
2. What is your sex? _____ Male _____ Female
3. What is the name of your country? _____
4. What marital status: (a) _____ Married, (b) _____ Married but separated, (c) _____ Single (divorced, widowed, or never married).
5. If married, where is your wife/husband?
(a) _____ Here at the university, (b) _____ Home in Africa
(c) _____ Studying/working in another country
6. Do you have children? _____ Yes _____ No
7. If yes, how many? _____

MSU AFRICAN STUDENTS' STUDY

8. Where are they? (a) ____ All are back home with the mother/father, (b) ____ All are here at the university with me, (c) ____ All are back home with relatives, (d) ____ Some are back home; some are here.
9. In what type of community did you grow up in your home country?
(a) ____ A big city, (b) ____ A small town, (c) ____ In countryside/village

High School Education

19. (a) In what country did you pursue your high school education?

(List them if more than one)

1. _____
2. _____
3. _____

- (b) What type of high school did you attend (check the one(s) applicable to you)?

_____ Public high school

_____ Mission high school

_____ Private (nonmission but sponsored by foreign agency)
high school

_____ Private (for commercial purposes) high school

_____ Boarding high school

_____ Day high school

MSU AFRICAN STUDENTS' STUDY

(c) In what area was (were) the high school(s) located (indicate the area(s) appropriate to you)?

_____ In a big city

_____ In a small town

_____ In the country

Higher Education

11. (a) In what country(ies) did you pursue your undergraduate study?

1. _____

2. _____

3. _____

(b) What was your undergraduate major?

1. _____

2. _____

(c) If you hold a master's degree, in which country did you pursue it? (If more than one country, list them.)

1. _____

2. _____

3. _____

(d) What was/were the area/s of specialization in your master's program? (please list

1. _____

2. _____

MSU AFRICAN STUDENTS' STUDY

12. List all countries where you have studied (at any level for any length of time) outside of your home country.

13. Were you employed full time while pursuing your bachelor's degree?

☐ Yes ☐ No

14. Did you work full time following completion of the bachelor's program and before embarking on master's studies?

☐ Yes ☐ No

15. If yes, for how many years?

16. Did you work in a rural or urban area? ☐ Rural ☐ Urban
☐ Both

Current Education

17. Toward what degree are you now working?

☐ Masters ☐ Doctorate ☐ Professional (M.D., D.O.,
D.V.M., etc.)

18. Were you employed full time while pursuing your master's degree?

☐ Yes ☐ No

19. Did you work full time following completion of master's program and before embarking on doctoral studies?

☐ Yes ☐ No

20. If yes, for how many years?

21. Did you work in a rural or urban area? ☐ Rural ☐ Urban

MSU AFRICAN STUDENTS' STUDY

22. What schools (secondary schools, colleges and universities, institutes and centers) have you attended in the United States other than MSU?

Name of School	Number of Years or Terms	Name of State
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

23. How long have you been enrolled at Michigan State University?

- (a) ____ 3 terms or less
 (b) ____ more than 3 years but less than 2 academic years
 (c) ____ 2 or more academic years

24. Please indicate the level of your progress in your present academic program

- (a) ____ completed about 25 percent of the program
 (b) ____ completed about 50 percent of the program
 (c) ____ completed about 75 percent of the program
 (d) ____ completed more than 75 percent of the program

25. (a) In which department and college are you now registered at MSU?

Department _____

College _____

- (b) Your major is _____

MSU AFRICAN STUDENTS' STUDY

Source of Financial Support

26. What is the source of your financial support (Mark below as many as fit your case and indicate your partial or total dependence on the sources which apply to you)?

<u>Source</u>	<u>Extent of Dependence</u>	
	<u>Totally</u>	<u>Partially</u>
(a) ____ The government of your country	_____	_____
(b) ____ Foreign agency (i.e., corporations and foundations)	_____	_____
(c) ____ International agency (i.e., UNESCO WHO)	_____	_____
(d) ____ Religious organizations	_____	_____
(e) ____ Your own community	_____	_____
(f) ____ Personal friends and/or relatives	_____	_____
(g) ____ MSU graduate assistantship	_____	_____
(h) ____ Personal finances	_____	_____
(i) ____ Others (please specify)	_____	_____

Future Plans

27. What is your plan concerning your place of work after your completion of your current academic program?

- (a) ____ Will go back to your own country
- (b) ____ Will seek employment in an African country other than your home country
- (c) ____ Will seek employment in a developing country outside of Africa

MSU AFRICAN STUDENTS' STUDY

- (d) ____ Will seek employment in a "developed" country
- (d) ____ Have not made up my mind as yet
28. If you are returning to your country, is there a job waiting for you?
- ____ Yes ____ No
29. Are you currently on leave from a job to which you will return?
- ____ Yes ____ No

Language

30. What is the official language of your country? _____
- _____
31. What is the language(s) in the section of the country where you will be likely to work? _____
- _____
32. What is the language of instruction at the college level in your country? _____
33. Did your parents speak that language or did you have to learn it in school? (in reference to question 32)
- _____
34. If you did your bachelor's program outside of your country, what were the languages of instruction at college level in that country? _____
35. What is the language in use in that area of the foreign country where you did your bachelor's (i.e., what was the language used by the residents outside of school)? _____

MSU AFRICAN STUDENTS' STUDY

36. Did you have to attend an English institute (center) in the United States in order to improve your proficiency in English before starting on your academic program?

_____ Yes _____ No

Family Background

37. How many sisters and brothers do you have (give total of father's children, mother's children, children of your mother and father together)? _____
38. (a) How many brothers and sisters were born before you? _____
(b) How many brothers and sisters were born after you? _____
39. Were you raised by your parents or other relatives (such as grandparents)?
- _____ By parents
_____ By relatives
40. Were you the first child who went to school from your family?
- _____ Yes _____ No
41. Are you the first child to have received the highest education in your family?
- _____ Yes _____ No

MSU AFRICAN STUDENTS' STUDY

42. Please indicate the highest level of formal education of your parents.

Father

____ No formal school
____ Elementary
____ Some high school
____ High school
____ Post secondary
____ Bachelor's degree
____ Master's degree
____ Doctor's degree
____ Others (specify)

Mother

____ No formal school
____ Elementary
____ Some high school
____ High school
____ Post secondary
____ Bachelor's degree
____ Master's degree
____ Doctor's degree
____ Others (specify)

43. Occupation of parents (please be specific).

Father _____

Mother _____

APPENDIX C

INTERVIEW SCHEDULE

ACADEMIC EXPERIENCE OF AFRICAN STUDENTS
AT MICHIGAN STATE UNIVERSITY

INTERVIEW SCHEDULE

Please Note:

Most of the questions in this interview schedule will apply to all African graduate students participating in this study.

However, there are a few questions which may not apply directly to your field of study or the level of the academic program (i.e., masters and doctorate) you are pursuing currently. Kindly respond only to those which apply to you.

Please do not write your name on any of the pages of this interview schedule.

Thank you for your cooperation,

Hamdesa Tusso

ACADEMIC EXPERIENCE OF AFRICAN STUDENTS

AT MICHIGAN STATE UNIVERSITY

INTERVIEW SCHEDULE

I. PERCEPTIONS OF THE PROCEDURES FOLLOWED IN THE DEVELOPMENT OF
ACADEMIC REQUIREMENTS FOR GRADUATION.

I am going to ask you a few questions regarding the procedures followed in the development of your academic requirements for graduation.

1. Are you pursuing the same specific major you had indicated at the time of admission now?

_____ Yes

_____ No

2. If not, how did you arrive at choosing the present specific area of specialization?
3. If you have changed your area of specialization, why did you change?

Planning the Actual Degree Program

4. Who provided most of the information for consideration regarding your program?

_____ (a) My advisor provided most of the information

_____ (b) Students in the department provided most of the information

_____ (c) Once my committee was formed I consulted with each member and received most of the information.

Comments.

MSU AFRICAN STUDENTS' STUDY

The Approved Degree Program

5. Whose suggestions (recommendations) became the main basis for your program?

- _____ (a) Most of advisor's recommendations were accepted and then became the main part of my program.
- _____ (b) Most of my suggestions became the major part of my program.
- _____ (c) Most of my advisor's recommendations and some of my suggestions were accepted and then became the main part of my program.
- _____ (d) Some of my advisor's recommendations and most of my suggestions were accepted and then became the main part of my program.
- _____ (e) The committee members had many suggestions which became the main part of the program.

Comments.

6. Which of elements (factors) were considered in planning your academic program? Of the following, rank 1-5 in the order of importance.

- _____ (a) Primarily the academic requirement
- _____ (b) Your personal academic needs
- _____ (c) Your future professional aspirations
- _____ (d) The cultural and environmental conditions of your future field of professional work
- _____ (e) Past professional experience

Comments.

MSU AFRICAN STUDENTS' STUDY

7. Do you think you had adequately participated in planning your academic program?

_____ (a) More than adequately

_____ (b) Adequately

_____ (c) Not adequately

Other comments

8. If the response to 7 is part c, "not adequately," what factors militated against your meaningful participation in planning your academic program?

9. Do you think your academic program has what might be considered the basic "ingredient" for preparing you for your future work?

_____ Yes

_____ No.

10. If the response to Question 9 is "no," why do you think so?

11. How do you view the planning and selection procedures followed in your academic program?

_____ (a) Very unsatisfactory

_____ (b) Unsatisfactory

_____ (c) Satisfactory

_____ (d) Very satisfactory

Comments.

II. REACTIONS TO THE PROCESS OF ACQUIRING KNOWLEDGE IN THE CLASSROOM SETTING THROUGH VARIED METHODS OF DISSEMINATION.

Now, we will leave this area and consider the process of acquiring knowledge in the classroom setting through various methods of dissemination. Thus, my next few questions will be on this area.

MSU AFRICAN STUDENTS' STUDY

Lectures

12. From your experience at MSU, how do you view the lectures you have had as a mode of acquiring knowledge?

- ____ (a) Very effective
____ (b) Effective
____ (c) Ineffective
____ (d) Very ineffective

Comments.

13. If the response in Question 12 is a or b, why?

- ____ (a) Well structured
____ (b) Unstructured
____ (c) Well prepared
____ (d) Well delivered
____ (e) Lecturer's wealth of experience

Other comments.

14. If the response to Question 12 is either c or d, which factor(s) make them ineffective?

- ____ (a) Language problem
____ (b) Not well delivered
____ (c) Not well developed and prepared
____ (d) I was not familiar with the illustrations
____ (d) Too structured
____ (f) Too unstructured

Other Comments.

MSU AFRICAN STUDENTS' STUDY

Group Interaction Discussion (as in a seminar)

15. From your experience here at MSU, how do you view group discussion (as in a seminar) as a mode of your acquiring knowledge?

- ___ (a) Very effective
___ (b) Effective
___ (c) Ineffective
___ (d) Very ineffective

Other comments.

16. If the response to Question 15 is a or b, why?

- ___ (a) They generally facilitated the exchange of varied views.
___ (b) They were less boring.
___ (c) They were unstructured.
___ (d) Learning was easier under such conditions

Other comments.

17. If the response to Question 15 is c or d, why?

- ___ (a) They were unstructured and tended to be unorganized.
___ (b) They tended to encourage diversion to irrelevant discussion
___ (c) They encouraged professor not to make adequate preparation
___ (d) They tended to contribute to wasting time.

Other comments.

MSU AFRICAN STUDENTS' STUDY

Film and Other Audio/Visual Presentation

18. From your experience here at MSU, how did you find the film and other audio/visual presentation as methods for your acquiring knowledge?

____ (a) Generally very effective
____ (b) Generally effective
____ (c) Generally ineffective
____ (d) Generally very ineffective

19. If your response to Question 18 is either a or b, why?

____ (a) Well selected for the topics
____ (b) Makes learning easier

Comments.

20. If your response to Question 18 is either c or d, why?

____ (a) Usually they were not really relevant to the assigned topic
____ (b) Usually the professors could not relate to and discuss the audio/visual material effectively
____ (c) Not well presented

Comments.

Class Reports

21. Based on your experience at MSU, what is your view on class reports as a method for acquiring knowledge?

____ (a) Very effective
____ (b) Generally effective
____ (c) Generally ineffective
____ (d) Generally very ineffective

Comments.

MSU AFRICAN STUDENTS' STUDY

22. If your response to Question 21 is either a or b, why?

- ☐ (a) They are generally less restricting for information gathering
- ☐ (b) They generally allow for my participation in class
- ☐ (c) They generally encourage my personal involvement in preparation for the class

Comments.

23. If the answer to Question 21 is either c or d, why?

- ☐ (a) Generally not suitable for me as an adult learner
- ☐ (b) Generally too fragmented
- ☐ (c) They are usually time consuming for the amount of learning actually attained.

Comments.

Class Participation

24. How was your own class participation (discussions, asking questions, making observations on topics under consideration)?

- ☐ (a) Very frequent
- ☐ (b) Frequent
- ☐ (c) Not much (sometimes)
- ☐ (c) Not at all

25. If the response to Question 24 is a or b, what do you think are the facilitating factors?

- ☐ (a) The discussions were usually relevant
- ☐ (b) There was usually encouragement from the professor
- ☐ (c) There was usually encouragement from classmates
- ☐ (d) Participation was a requirement for passing the course

MSU AFRICAN STUDENTS' STUDY

- ____ (e) I was determined to participate no matter what the professor and classmates thought

Comments.

26. If the response to Question 24 is either c or d, why?

- ____ (a) Lack of relevance to topics under discussion
____ (b) Lack of relevance to my personal interest
____ (c) No encouragement from the professors
____ (d) Class environment did not encourage the class members to participate
____ (e) Fear of making language error or overconsciousness of my foreign accent

Comments.

27. What types of testing have you had here at MSU?

- ____ (a) Quizzes
____ (b) Mid-term examinations
____ (c) Final examinations

28. Under what conditions did you take them?

- ____ (a) Most of them in class
____ (b) Most of them take-home
____ (c) Some in class and some take-home

29. What problems did confront you when you took these types of testing? (quizzes, mid-term, and final)

MSU AFRICAN STUDENTS' STUDY

30. Which type of question did you have most frequently?

Frequency (very often, often, some-
times, rare)

<input type="checkbox"/> Essay (subjective)	<input type="text"/>
<input type="checkbox"/> Objective	<input type="text"/>
<input type="checkbox"/> Lab test (practical)	<input type="text"/>
<input type="checkbox"/> Applied questions	<input type="text"/>
<input type="checkbox"/> Experimentation reports	<input type="text"/>

31. Did you have any problems with any of these types of questions?

☐ Yes ☐ No

32. If you had problems with any of these types of questions, why do you think you encountered the problems?

33. Have you taken the doctoral comprehensive examination (preliminary oral)?

Preliminary ☐ Yes ☐ No

Oral ☐ Yes ☐ No

Both ☐ Yes ☐ No

34. Have you encountered any problems either in the process of preparing for them or taking them?

☐ Yes ☐ No

35. If the response to Question 34 is "no," what factors, strategies made it easier for you?

36. If the response to Question 34 is "yes," what was the nature of the problem?

37. How do you rate the comprehension (preliminary/oral) examination in terms of its educational values apart from its function of fulfilling academic requirements?

☐ (a) Very useful

MSU AFRICAN STUDENTS' STUDY

- ____ (b) Useful
____ (c) Not so useful
____ (d) Not at all useful

38. Do you think the professors grade you leniently because you are a foreigner?

- ____ (a) Most do
____ (b) Some do
____ (c) Very few do
____ (d) None do

Comments.

39. Do you think the professors grade African students more leniently than other foreign students?

- ____ (a) Most do
____ (b) Some do
____ (c) Very few do
____ (d) None do

Comments.

40. Do you think professors grade you more harshly (severely) because you are a foreigner?

- ____ (a) Most do
____ (b) Some do
____ (c) Very few do
____ (d) None do

Comments.

MSU AFRICAN STUDENTS' STUDY

41. Do you think the professors grade Africans more harshly (severely) than other foreign students?

____ (a) Most do
____ (b) Some do
____ (c) Very few do
____ (d) None do

Comments.

Writing Term Papers, Major Papers, Master's Projects/Thesis and
Doctoral Dissertation

The next area I would like us to examine is that of writing-- term papers, major papers, master's projects/thesis and doctoral dissertation. Thus, the following questions will help us to address it.

42. Do you have to write papers for your courses?

____ (a) For every course
____ (b) For many courses
____ (c) For a few courses
____ (d) Not at all

43. Have you written papers on topics related to Africa?

____ Yes ____ No

The following question applies only if you have been enrolled at MSU for 1-3 terms and have written papers on subjects related to Africa.

44. During which term did you write those papers on African concerns?

____ (a) Most of them during the first term
____ (b) Most of them during the second term
____ (c) Most of them during the third term

MSU AFRICAN STUDENTS' STUDY

The following question is for those who have been enrolled at MSU for more than one academic year.

45. During which year of your graduate study did you write most on issues related to Africa?

☐ (a) Most of them during the first year
☐ (b) Most of them during the second year
☐ (c) Most of them during the third year
☐ (d) They were evenly distributed

46. Were there times when you wanted to write papers on subjects related to Africa, but could not?

☐ Yes ☐ No

If you wished to write your papers on subjects related to Africa and could not, what factors prevented you from doing so?

47. If the answer is yes, during which term or year did you wish the most to write on African-related subjects, but could not?

☐ (a) During first term
☐ (b) During second term
☐ (c) During third term
☐ (d) During first year
☐ (e) During second year
☐ (f) During third year

48. Did you have any problems writing papers?

☐ Yes ☐ No

If the responses is yes, what was the nature of the problem?

MSU AFRICAN STUDENTS' STUDY

49. How do you rate the educational values for yourself of term papers apart from the function of fulfilling academic requirements?

____ (a) Very useful
____ (b) Useful
____ (c) Not so useful

Comments.

The following questions are for those who have either strated on their thesis/dissertation or have completed it.

50. Is your thesis/dissertation on the subject you really had greatest interest in?

____ Yes ____ No

51. What factors played a part in choosing the current topic for your research?

52. (a) Do you think you have received or are receiving adequate help from your academic advisor/thesis director in conducting your thesis study and

(b) in the writing of the dissertation?

____ Yes ____ No

53. From your observation, what factors appear to be influencing the amount of interest exhibited by your academic advisor in your thesis/dissertation?

54. How do you rate the educational values for yourself of the total experience of conducting the thesis research and writing the dissertation?

____ (a) Very useful
____ (b) Useful
____ (c) Not so useful

Comments.

MSU AFRICAN STUDENTS' STUDY

Critical Factors

Now, I would like us to consider some critical factors such as access to relevant literature/data, reading speed and comprehension, family obligation here/at home, and discrepancy between previous education and your present degree program. The purpose of following questions is to look into these areas briefly.

Course Work--Access to Relevant Data/Literature

55. In the course of your academic pursuit here at MSU, did you experience a problem of access to relevant data/literature you might have wanted to undertake for your African-oriented academic activities?

- ____ (a) Very often
____ (b) Often
____ (c) Sometimes
____ (d) Never

Comments.

56. How often have you visited the African Studies Center for academic purposes?

- ____ (a) Very often
____ (b) Often
____ (c) Sometimes
____ (d) Never

57. If the response to Question 56 is a, b, or c, for what particular purpose(s)? (Check below as many as fit your case.)

- ____ (a) To inquire about the courses offered under the auspices of the center.
____ (b) To attend weekly "Brown Bag" lunch lectures sponsored by the center.
____ (c) To attend seminars/colloquia on Africa sponsored by the center

MSU AFRICAN STUDENTS' STUDY

- ____ (d) To read newspaper/books/periodicals about Africa
- ____ (e) To consult with professors regarding your academic program (courses, research, etc.)
- ____ (f) To seek employment (graduate assistantship) at MSU
- ____ (g) To acquire information on scholarships or other financial assistance available to African students in the U.S.
- ____ (h) To acquire information regarding jobs in other institutions and organizations.
- ____ (i) Others (specify) _____
58. Do you think there was the necessary flexibility in your degree requirements to allow you to include non-required courses/seminars related to African concerns in your program to enrich your experience?
- ____ Yes ____ No
59. Did your experience here at MSU help you to become more informed?
- (a) About your country
- ____ Very much so
- ____ Somewhat
- ____ Not much
- ____ Not at all
- (b) About African other than your country
- ____ Very much so
- ____ Somewhat
- ____ Not much
- ____ Not at all

MSU AFRICAN STUDENTS' STUDY

(c) About the Third World in general

_____ Very much so

_____ Somewhat

_____ Not much

_____ Not at all

60. Did you find your reading speed/comprehension adequate to enable you to cope with all the assignments and research work?

_____ (a) Adequate

_____ (b) Too slow

Other comments.

61. If you found reading speed too slow, what do you think are the causes?

62. Have you ever taken courses or activities to improve your reading speed/comprehension?

_____ Yes _____ No

Family Obligations

63. What type of dependents do you have?

_____ (a) Wife/husband here

_____ (b) Wife/husband and children here

_____ (c) Wife/husband at home

_____ (d) Wife/husband and children at home

_____ (e) Parent(s)

_____ (f) Brother(s) and sister(s) and relatives

_____ (g) None

MSU AFRICAN STUDENTS' STUDY

64. Are any of the immediate family (wife/husband, children) going to school?

_____ Yes _____ No

65. What is the nature of the dependence of any other family relatives? (in reference to Question 63)

_____ (a) Financial for sustenance

_____ (b) Financial for education

Comments.

66. Do your financial immediate-family obligations limit your academic activities?

_____ Yes _____ No

67. If the response to Question 66 is yes, how?

68. Do your financial obligations to other relatives affect your academic activities?

_____ Yes _____ No

69. If the response to Question 68 is yes, how?

Problems in Academic Preparation for Current Degree

70. Do you feel that your previous education prepared you adequately for your current degree program?

_____ (a) More than I think was needed

_____ (b) Satisfactory

_____ (c) Unsatisfactory

_____ (d) Most unsatisfactory

Comments.

71. If your answer to Question 70 is c or d, why?

MSU AFRICAN STUDENTS' STUDY

72. How did this unsatisfactory preparation affect your current academic program?

Academic Advisor

73. How often do you meet with your academic advisor each term regarding your academic program?
74. What (how) do you perceive is the level of interest shown by your academic advisor in your program?
- ____ (a) Very high
- ____ (b) High
- ____ (c) Adequate
- ____ (d) Low
- ____ (e) Very low
75. What factors do you think influence his/her level of interest in your program?
76. How do you feel when you meet with your academic advisor regarding your academic activities?
- ____ (a) Very comfortable
- ____ (b) Just comfortable
- ____ (c) Uncomfortable
- ____ (d) Very uncomfortable
77. What factors contribute to your level of comfort when meeting with your academic advisor?
78. Do you think you are getting enough time from your advisor for counsel on academic matters?
- ____ Yes ____ No.
79. Why?

MSU AFRICAN STUDENTS' STUDY

Scope of Your Professors' International Experience

80. (a) How many of your professors have had personal experience in Africa?
- ____ (1) Most of them
- ____ (2) Several of them
- ____ (3) A few of them
- ____ (4) None of them
- (b) What was generally the nature of their activities in Africa?
- ____ (1) Travel (vacation)
- ____ (2) Field work
- ____ (3) Teaching, consulting
81. How many of your professors have had personal experience in other developing countries?
- ____ (a) Most of them
- ____ (b) Several of them
- ____ (c) A few of them
- ____ (d) None of them

Professors' Relation to You

82. How do you feel your professors generally relate to you in academic settings?
- ____ (a) Very comfortable
- ____ (b) Just comfortable
- ____ (c) Uncomfortable
- ____ (d) Very uncomfortable
83. What factors have contributed to your feeling comfortable with your professors in academic settings?

MSU AFRICAN STUDENTS' STUDY

84. What factors have contributed to your feeling uncomfortable with your professors in academic settings?
-

85. Do you feel that those professors who have had professional international experience relate better to you than those who have not?

_____ Yes _____ No

86. Of the three professors whom you think professionally relate to you the best

- (a) How many of them have worked in the following?

_____ (1) Developing countries but not in Africa
_____ (2) Developed countries
_____ (3) Developing countries (including Africa) and developed countries
_____ (4) Africa
_____ (5) Never worked outside USA

- (b) Of these three professors, where would the one who you think relates to you the best fall in terms of his/her work/experience?

_____ (1) Has worked in Africa
_____ (2) Has worked in developing countries but not in Africa
_____ (3) Has worked in developed countries
_____ (4) Has worked in developing countries (including Africa) and developed countries
_____ (5) Has never worked outside of USA

87. Have you encountered any other problems while dealing with your professors in matters concerned with academic-related matters?

_____ Yes _____ No

MSU AFRICAN STUDENTS' STUDY

88. If the response to Question 87 is yes, what is the nature of the problem?
-

89. Do you feel that your race affects the working relationship between your professor and you?

____ (a) Very often

____ (b) Usually

____ (c) Seldom

90. If the response to Question 89 is either a or b, how?

91. Is there any professor whom you consider a "significant other" (model) here at MSU?

____ Yes ____ No

92. If the response to Question 91 is yes, check the following characteristics applicable to the particular professor whom you consider your model.

(a) Sex ____ Male ____ Female

(b) His/her marital status ____ Married ____ Single

(c) His/her international experience

____ Has worked in Africa

____ Has worked in one of the developing countries but not in Africa

____ Has worked in other countries, but not in the developing countries

____ Has never worked outside of the USA

93. Which of the following do you do with your "significant other" professor frequently? (Check below as many as fit your case.)

____ (a) Visit his/her home

____ (b) Go for a drink together

MSU AFRICAN STUDENTS' STUDY

- ☐ (c) Do research together in the laboratory/field/library
- ☐ (d) Go to professional meetings together
- ☐ (e) Talk about your personal problems, achievements, and activities
- ☐ (f) Discuss what you should do to develop professionally
- ☐ (g) Talk about your family problems
- ☐ (h) Participate together in sports (volleyball, soccer, tennis, golf, ping pong, paddleball)
- ☐ (i) Go to a party of Americans
- ☐ (j) Go to African parties
- ☐ (k) Visit his/her relatives in the area or other cities
- ☐ (l) Exchange literature and references in your (his/her) special area of academic activities
- ☐ (m) Teach courses together

Africans with Host Country Students

In the following few questions, I would like to ask you of your interrelations with American students in matters related to your academic studies.

94. Have you ever sought help from American students in matters related to your academic studies?

☐ Yes ☐ No

95. If your answer to Question 94 is yes, how often?

- ☐ (a) Quite often
- ☐ (b) Often
- ☐ (c) Very rare

MSU AFRICAN STUDENTS' STUDY

96. If your answer to Question 94 is yes, in what ways?

- ☐ (a) (General) simple information
- ☐ (b) Advice on selection advisors
- ☐ (c) Help in academic assignments (studying together for exams, quizzes or research projects)
- ☐ (d) Editing and proofreading of papers

97. When American students assist you with an academic problems, what do you think is their approach?

- ☐ (a) They oversimplify
- ☐ (b) They are too generous
- ☐ (c) They are uptight (very careful, cautious)
- ☐ (d) They are just normal
- ☐ (e) Not enough (tendency to avoid you)

Comments.

98. Do American students ever share with you their academic problems?

☐ Yes ☐ No

99. If yes, how often?

- ☐ (a) Quite frequently
- ☐ (b) Frequently
- ☐ (c) Rarely
- ☐ (d) Never

Comments.

100. Have you ever been involved in voluntary study groups with American students?

☐ Yes ☐ No

MSU AFRICAN STUDENTS' STUDY

101. If yes, how often?

_____ (a) Very often

_____ (b) Often

_____ (c) Seldom

_____ (d) Not at all

102. How did you relate to them and how did they relate to you in this type of situation?

103. Have you ever been assigned by your professor(s) to team up in undertaking an academic project? By project here, it is meant laboratory work, field work, etc.

_____ Yes _____ No

104. If the response is yes, how did you work together?

Non-Host Country Students (Non-Africans)

Now let us consider your interrelations with other foreign students (non-African) in matters related to academic studies.

105. Did you have international students (non-Africans) in your classes/seminars?

_____ Yes _____ No

106. If the response is yes, which of the following type of international students did you have in your classes/seminars?

_____ (a) Those who came from developing countries

_____ (b) Those from industrialized nations

_____ (c) Both

107. Have you ever sought help from international students in matters related to your academic studies?

_____ Yes _____ No

MSU AFRICAN STUDENTS' STUDY

108. If yes, how often?

____ (a) Quite often

____ (b) Often

____ (c) Very rare

Comments.

109. Do international students (non-Africans) ever share with you their academic problems?

____ Yes ____ No

110. If they do, how often?

____ (a) Quite frequent

____ (b) Frequent

____ (c) Rare

Comments.

111. Have you ever been involved in voluntary study groups with international students?

____ Yes ____ No

112. If yes, how often?

____ (a) Very often

____ (b) Often

____ (c) Seldom

113. Have you ever been assigned by your professors to team up with international student(s) in undertaking an academic project(s)?

____ Yes ____ No

114. Did you have any problems working together?

____ Yes ____ No

MSU AFRICAN STUDENTS' STUDY

115. If there were problems, what was the nature of the problem?

The Students' Interrelations with Other African Students

Now, I wish us to move on to another area; your interrelations with African students in academic-related areas.

116. Did you have African students in your classes/seminars since you have been at MSU?

_____ Yes _____ No

117. Have you ever sought help from African students in matters related to your academic studies while at MSU?

_____ Yes _____ No

118. If yes, how often?

_____ (a) Quite often

_____ (b) Often

_____ (c) Seldom

Comments

119. Do African students come to you for help with academic-related matters?

_____ Yes _____ No

120. If yes, how often?

_____ (a) Quite often

_____ (b) Often

_____ (c) Seldom

Comments.

121. Have you ever been involved in voluntary study groups with African students here at MSU?

_____ Yes _____ No

MSU AFRICAN STUDENTS' STUDY

122. If yes, how often?

_____ (a) Very often

_____ (b) Often

_____ (c) Seldom

Comments.

123. Have you ever been assigned by your professors to team up with other African student(s) in undertaking academic project(s)?

_____ Yes _____ No

124. If yes, how often?

_____ (a) Very often

_____ (b) Often

_____ (c) Seldom

Comments.

125. Do you find that there is a difference in the way you interact with each of these student groups--Americans, international (non-African) and African students in matters related to your academic studies?

_____ Yes _____ No

126. If the response is yes, what is the nature of the difference?

Foreign Student Advisor

127. Have you ever seen the foreign student advisor or his assistants regarding your academic program?

_____ Yes _____ No

128. What is the nature of the concerns regarding your academic studies that you shared with the foreign students' counselor/ assistants?

MSU AFRICAN STUDENTS' STUDY

I have just one more question regarding human interaction in academic-related matters.

129. What was your feelings about the way you interacted with foreign students' advisors and the way you interacted with the academic professors?

The Usefulness of the Education

Now, let us consider how this education would be useful to you.

130. How do you evaluate the courses and seminars you have taken under the following categories in terms of your future professional activities?

(a) Core courses (Major Field)

- ☐ Generally very useful
- ☐ Generally useful
- ☐ Generally not so useful
- ☐ Generally not at all useful

(b) Cognate courses (Minor Field)

- ☐ Generally very useful
- ☐ Generally useful
- ☐ Generally not so useful
- ☐ Generally not at all useful

(c) Elective courses

- ☐ Generally very useful
- ☐ Generally useful
- ☐ Generally not so useful
- ☐ Generally not at all useful

MSU AFRICAN STUDENTS' STUDY

(d) Research courses

- ☐ Generally very useful
- ☐ Generally useful
- ☐ Generally not so useful
- ☐ Generally not at all useful

131. Why do you think you found them useful or not useful?

APPENDIX D

**COMPILATION OF AFRICAN GRADUATE STUDENTS'
RESPONSES TO STRUCTURED INTERVIEW**

COMPILATION OF AFRICAN GRADUATE STUDENTS'
RESPONSES (CATEGORIZED) TO OPEN-ENDED
INTERVIEW QUESTIONS

Categorization of the Open-Ended Question

29. Question: What problems did confront you when you answered these types of questions (quizzes, mid-term and final)?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. Not enough time to digest the information when preparing for quizzes	7	23.3
b. Success in quizzes is a matter of speed rather than of deep knowledge	11	36.7
c. Quizzes are a hindrance to a students' own programming and academic activities (schedule)	6	20.0
d. Quizzes are a source of pressure (unnecessary bother)	5	16.7
e. Quizzes require rote memory	4	13.3
f. Studying for quizzes limits the sources used in expanding one's knowledge in a given subject	4	13.3

Philosophical Reasons for Disliking Quizzes

a. In graduate school they (professors) need to emphasize original thinking rather than reproducing (spitting back) facts	6
b. Quizzes are irrelevant, especially in graduate school, because at the graduate level students should plan their own programs	5
c. There is no relationship between the marks received in quizzes and the level (or amount) of learning	2
d. Quizzes may motivate students who are not interested in study for, and to pass, the course, but the learning which results from such motivation will evaporate	1

Categorization of the Open-Ended Question

32. Question: If you had problems with any of these types of questions, why do you think you encountered the problems (in reference to Question 30 of the interview schedule)?

Objective Questions

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. Encourage memory, not reflective thinking; foster reproducing what is heard and read, instead of internalizing knowledge	19	45.2
b. The questions are structurally ambiguous (can be true under some circumstances and untrue under others)	17	40.8
c. The questions force one to study sentences and detailed facts	11	26.2
d. Unfair to foreigners, because objective tests are an American product and American students are used to taking them from childhood on	10	23.8
e. Questions do not provide room for more answers (i.e., personal views and disagreement, etc.)	8	19.0
f. Language is a factor in answering objective questions	5	11.9

<u>Essays</u>	<u>Number</u>	<u>Percent</u>
a. Professors have superficial approaches to addressing essays	3	9.1
b. Language is a major factor in writing essay questions	3	9.1
c. Professors are not able to respond intelligently to alternative views which are alternative to their own	2	6.1
d. There is cultural bias in the questions and assumptions	1	3.0

36. Question: If the response to Question 34 is "yes," what was the nature of the problem?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. They ask too many questions (unnecessarily) and not enough time	13	

Categorization of the Open-Ended Question

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
b. They (professors) demand too much (some) in order to be the number one department in the nation, and thus torture students with comprehensive examinations	3	23.1
c. Inadequate guidance is provided in preparation for them	2	15.4
d. Preparation is time consuming	2	15.4
e. Most of the questions are based on American experience	2	15.4
f. Too much stress is put upon theory (absorption of theory in the discipline at the expense of broader considerations with respect to African reality)	2	15.4

46. Question: If you wished to write your papers on subjects related to Africa and could not, what factors prevented you from doing so?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. Lack of data (old and new) and literature	7	38.9
b. Discouraged by the professors	9	50.0
c. The absence of the actual environment	5	27.8
d. Most of the course content has no relevance to African situations and thus does not lend itself to providing a basis for writing papers on Africa	2	11.1
e. Lack of resources	1	5.6

48. Question: If the response is "yes," what was the nature of the problems?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. Technical part-language	3	23.1
b. Lack of appropriate data and literature, etc.	2	15.4
c. Conflict arises when professors stipulate a topic	2	15.4
d. Lack of time to meet deadlines	2	15.4
e. Writing with group is not easy	1	7.7

Categorization of the Open-Ended Question

51. Question: What factors played a part in choosing the current topic for your research?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. Advisor's desire to see some breakthrough in the field (his consistent encouragement to pursue it)	11	39.3
b. Professor's deep knowledge of the subject (topic) and committee members' knowledge	8	28.6
c. The availability of funds	10	35.7
d. Student's desire to write on a topic related to African issues	6	21.4
e. Interest from home government presumably due to its usefulness	5	17.9
f. Field experience in related problems in consideration for future work	5	17.9
g. Availability of relevant data	2	7.1

53. Question: Based on your observations, what factors appeared to be influencing the amount of interest exhibited by your academic advisor in your thesis/dissertation?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. The professor's interest in publication	9	42.0
b. The professor was the leader of the research team	5	17.9
c. The potential of the research to contribute to scientific knowledge/data (hot area)	7	25.0
d. The professor needed students to do his research	3	10.7
e. The subject (topic) was in his/her own area of specialization (e.g., dissertation)	2	7.1
f. Advisor's interest in my academic and personal growth	2	7.1
g. My professor had confidence in my ability to handle the project	1	3.6
h. He/she was too busy with other duties and could not attend to my research needs	2	7.1
i. The professor had not had much experience with African problems	1	3.6

Categorization of the Open-Ended Question

67 and 69. Question: If the response to Question 66 is "yes," how?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. I could not participate in (afford to go to) professional conferences	4	23.5
b. I cannot afford to buy some of the books I would like to have in my field	4	23.5
c. Had to pay fees for my wife	4	23.5
d. Had to send money home	3	17.6
e. Had to raise money for family needs	3	17.6
f. No money for babysitters, so I had to be at home, instead of in the library or office	3	17.6
g. No money for editor	1	5.9

75. Question: What factors do you think influences his/her level of interest in your program?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. The professor has an interest in my future and professional development	11	24.4
b. The professor has an interest in my country The professor has experience in Africa/ developing countries	14	31.1
c. We both have interest in the same area/ has interest in my thesis	9	20.0
d. He/she shows me much respect	6	13.3
e. He/she has interest in and sympathy for foreign students	6	13.3
f. My good performance (competence) in his course/work and his/her expectation that I do well	10	22.2
g. I have confidence in myself/and in my academic performance	5	11.1
h. The professor involves students in his/her research (we work together)	4	8.9

Categorization of the Open-Ended Question

77. Question: What factors contribute to your level of comfort when meeting with your academic advisor?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. I have no inhibitions in my interactions with the professor (we have good relations)	23	51.1
b. He/she is willing (open) to listen to my ideas for consideration/review	9	20.0
c. He/she is readily available to help in case of any problem	6	13.3
d. He is interested in my progress	9	20.0
e. He/she is interested in my country/Africa	7	15.6
f. He/she is generally good to foreign students	3	6.7

83. Question: What factors have contributed to your feeling comfortable with your professors in academic settings?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. His/her willingness to listen to my ideas	10	25.0
b. His/her perceived interest in my academic affairs	7	17.5
c. My knowledge of the subject (comprehension)	8	20.0
d. Their familiarity (interest) with Africa/developing countries	5	12.5
e. The friendly attitude of the professor(s)	5	12.5
f. My ability to ignore stereotypes (to try to be tolerant and positive)	3	7.5
g. The fact that professors and students engage in the same projects most of the time	3	7.5

84. Question: What factors have contributed to your feeling uncomfortable with your professors in academic settings?

<u>Answer</u>	<u>Number</u>
a. Professors who are prejudiced and engage in stereotyping of students	5
b. Professors who never have been outside the U.S.	3
c. Times when professors place me in lower status in their minds because of my foreign accent	2
d. I am uncomfortable with professors from outside my department	3

Categorization of the Open-Ended Question

<u>Answer</u>	<u>Number</u>
e. Receiving a low grade (grades) which precipitately lower the student's image with professor(s) (one gets ignored, neglected, and rejected)	2

88. Question: If the response to Question 87 is "yes," what is the nature of the problem?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. There are biases in professor(s)' grading. They expect little from me (grade me unfairly)	6	
b. Some professors are inflexible, inconsiderate, in terms of academic programs (i.e., topics for term papers, choices of courses, and addressing certain issues)	4	

90. Question: If the response to Question 89 is either "a" or "b," how? (see Analysis)

<u>Answer</u>	<u>Number</u>
a. The white professor never seems sure of my reaction to a given issue	3
b. They underestimate the quality of my work when they grade me	3
c. They respond to my questions in an uneasy and unfriendly manner	3
d. The professor lacks knowledge about my country and the problems relating to it	2
e. Prejudice/stereotypes	2

102. Question: How did you relate to them and how did they relate to you in this type of situation?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. We had a satisfactory (normal) relationship	20	69.0
b. The interaction went well, but I had to work hard at it (some doubt African students' abilities academic level)	9	31.0

Categorization of the Open-Ended Question

104. Question: If the response is "yes," how did you work together?

<u>Answer</u>	<u>Number</u>
a. They underestimated my academic ability (level-quality) and tended to give me dependent roles	17
b. It went well	13
c. Some did not want to deal with foreign students	6

126. Question: If the response is "yes," what is the nature of the differences (in reference to Question 125)?

Tendencies and Preferences

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. First, African students; second, International students; third, American students	28	75.7
b. First, African students; second, American students; third, International students	7	18.9
c. First, International students; second, African students; third, American students	1	2.7
d. First, American students; second, International students; and third, African students	1	2.7

Reasons for Not Interacting (Preferring Not To Do So) with Americans

<u>Answer</u>	<u>Number</u>
a. We do not have much in common (distances in culture and experience)	13
b. There is not mutual trust in academic matters; they do not take you to heart (particularly those who have not been outside the U.S.	7
c. There are differences in life and career expectations	6
d. They relate to one on a limited basis: academic	4

Categorization of the Open-Ended Question

II. Minor/Cognate Courses

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. They were useful because I selected them on that basis	9	24.3
b. They were useful because they related to my professional goals, but they needed a lot of modification	6	16.2
c. They were usually American oriented (did not apply to the situation back home)	3	8.1
d. They were less useful, because I took them just to fulfill the requirement	2	5.4
e. Since they dealt mostly with fundamental sciences which are universal, and since I plan to teach in a university, I felt they were useful regardless of the circumstances in which they were to be applied	2	5.4

Elective Courses

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. Since I selected them, they were deemed more attuned to my future needs	10	33.3
b. They were useful because they related to my professional goal(s), but they needed a lot of modification	3	10.0
c. They were less useful because I took them just to fulfill the requirements	4	13.3
d. They were useful because they related to my future profession	5	16.7
e. Since they (courses) dealt with the fundamentals of science which are universal, and since I plan to teach in a university back home, I feel they were useful, regardless of the circumstances in which they were to be applied	2	6.7

Categorization of the Open-Ended Question

131. Question: Why do you think you found them so useful or not useful (in reference to Question 130)?

<u>Answer</u>	<u>Number</u>	<u>Percent</u>
a. They were useful because they were applicable to the type of research I will be doing	31	22.9
b. They were useful because they introduced me to the research technolgoy	7	22.9
c. They were useful because they provided practical skills for conducting research, but they needed a lot of modification	4	12.9
d. They were useful because I selected the courses on that basis	6	19.4

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