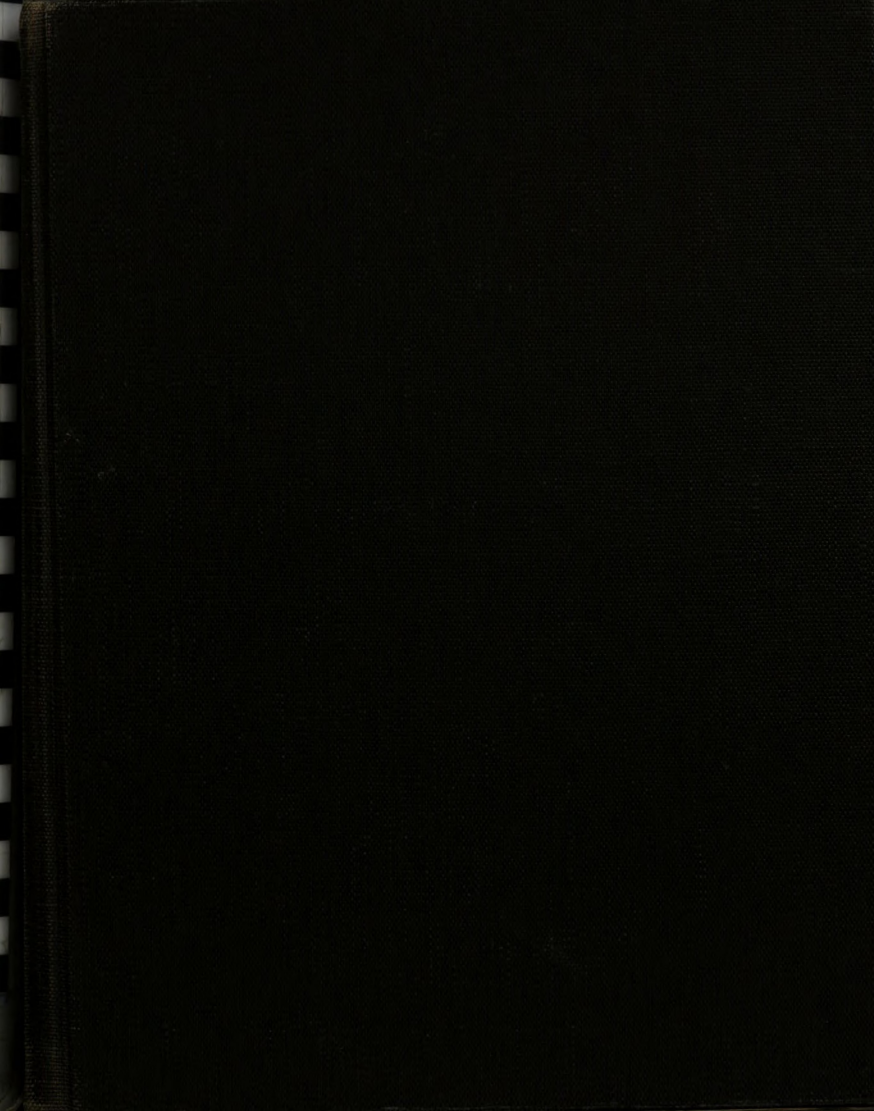






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The Perceived Relevance of Foreign Students'
Training to Their Role as Future Change
Agents in National Development

presented by

Adebayo

Ogunbi

has been accepted towards fulfillment
of the requirements for

Ph. D. degree in Education

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Date August 2, 1978



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1978

THE PERCEIVED RELEVANCE OF FOREIGN STUDENTS'
TRAINING TO THEIR ROLE AS FUTURE CHANGE
AGENTS IN NATIONAL DEVELOPMENT
(An Evaluation)

By

Adebayo Ogunbi

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Instructional Development and Technology
Department of Secondary Education and Curriculum

1978

ABSTRACT

THE PERCEIVED RELEVANCE OF FOREIGN STUDENTS' TRAINING TO THEIR ROLE AS FUTURE CHANGE AGENTS IN NATIONAL DEVELOPMENT

An Evaluation

by

Adebayo Ogunbi

Purpose

The study sought to assess the extent to which foreign students in graduate programs (in selected colleges at Michigan State University), perceived their training as preparing them to play the role of 'change agents' in the development of their respective countries.

Design and Procedures

For the student survey, a stratified random sample of 445 (250 foreign, 150 American and 45 from Instructional Development and Technology Program) was drawn from ten selected Colleges. The Colleges of Natural Science, and Arts and Letters were excluded owing to the 'change agents' role covered in the study.

The Deans of the Colleges involved in the study and some administrators were interviewed on their interpretation of the university's objectives in training foreign students. Twelve experienced faculty members were interviewed on their experiences in advising foreign students. Another eleven, suggested by students as teaching 'relevant' courses, were interviewed on their teaching style.

Results

With a response rate of 56% (comprising 251 students: 135 foreign, 90 Americans and 26 in ID & T program), 55% of which came from the Colleges of Agriculture and Natural Resources and Education; the results revealed the following:

1. foreign students were slightly older than American Students;
2. 83% of foreign students and 50% of Americans, were males;
3. both had almost the same years of work experience;
4. more foreign students than Americans held full-time jobs;
5. 90% of foreign students obtained their first degrees from their home countries;
6. they were resolved (78%), not only to return home but were legally or morally bound (90%) to assist in development programs of their countries;
7. they favored 'social objectives' more than 'personal objectives', the American students reversed this;
8. their views differed from those of the administrators on university's objectives in training foreign students.

On the relevance of programs, both groups recorded 'above average' rating. Using analysis of variance with Scheffe's technique at .05 significant level, the difference between them was not statistically significant. In terms of relevance, the content of core courses and the teaching style of the instructors were rated as average to very poor. However, the problem solving, practice-oriented activities in research, laboratory and field experience made the difference; in "above average" rating with the views of Americans being statistically significant.

Overall, foreign students were more moderate in their views than Americans.

Students in the College of Agriculture and Natural Resources were significantly more optimistic about the relevance of their programs than others. Similarly, those who were on full employment, have chosen a career, set up their own programs, or received helpful advice of concerned academic advisors were also significantly more optimistic than others.

Of the eighteen statistical hypotheses tested, only those dealing with 'choice of career', 'field of study', and 'determining own program' were supported. Of the two research hypotheses formulated, one was partially supported.

Conclusions

1. Michigan State University can offer programs relevant to the needs of foreign students if the school authorities strive to achieve that purpose (as shown in the significant difference between the College of Agriculture and Natural Resources and other colleges).
2. Students appreciated the aspect of the training programs which exposed them to problem solving, practice oriented activities (as shown by the "above average" rating given to research, laboratory and field experience).
3. They also appreciated the opportunity to plan their programs and be supervised by concerned academic advisors.
4. It was necessary for students to be clear-cut in career objectives since those who were had significantly better rating of their programs, and the assessment of program relevance would depend on it.

It was recommended that:

1. the university review and clearly define its objectives in training foreign students;
2. the curricula in various colleges and departments be revised to accomodate foreign students' interests.
3. admission of foreign students be made only to those departments and colleges where resources to meet their needs are adequately provided;
4. instructors devote more attention to the design of courses and efficient and effective use of time;
5. foreign students become more actively involved in activities likely to affect their academic interests.

DEDICATION

To my father, Ogunbi Omodunbi, and the affectionate memory of my late mother, Abiola Omodunbi, the greatest teachers I have ever known. They taught intensely by their examples, and provided the most congenial environment for the young to grow up in.

Also to all foreign students, especially those from non-Western societies, on whose shoulders rest the responsibility of translating the learning experiences into what their societies can profitably use.

ACKNOWLEDGMENTS

The design and execution of this evaluative study counted on and received the cooperative assistance of many. Though all deserve my appreciation, it won't be convenient to mention each one by name, especially all graduate students (both foreign and American) who kindly consented to participate in the study.

I shall start by expressing deep gratitude to Dr. Castelle G. Gentry, Chairman of my Guidance Committee (and the director of this dissertation), and the other members: Drs. J. David Lewis, James Page, and Stephen Yelon for their wise counsel and constructive criticisms. I am proud to say that they gave me the best assistance any doctoral student could ask for.

In the initial search for a topic for my research, thanks to Drs. Paul Witt, Robert Davis, Steven Sachs and John Fry who provided opportunity for stimulating brainstorming sessions.

I am also indebted to:

Janice Hayhow, editor, MSU News Bulletin, who gave the issue the initial focus that led to serious thoughts about the study;

Dr. Keith Goldhammer, Dean, College of Education, whose genuine reaction and interest in the issue was catalytic to the decision to undertake the study. Without his solid support, the study would not have been started;

The members of the Ad-hoc Committee of foreign students whose

several meetings and resolution made it imperative to undertake the study;

Dr. August Benson, Advisor to Foreign Students and Scholars, for his advice and assistance in supplying the list of foreign students from which the sample was drawn;

Dr. Homer Higbee, for his keen interest in and encouragement of the effort to conduct the study;

Dr. Henry Bredeck, Chairman, and the other members of the University Committee for Research involving Human Subjects, for clearance to proceed with the study;

Dr. Paul Dressel, Chairman, and the Committee for the Release of Confidential Information, for authorizing my access to documents which made the conduct of the study possible;

The Registrar's Office, for making the much needed records of graduate students enrolled in Winter 1978 available;

and the former President of the University, Dr. Clifton R. Wharton Jr. for providing me with copies of papers he delivered on the subject.

In the design and validation of the instrument used for conducting the study, Drs. Cole Brembeck, John Fry, Lawrence Lezotte, John Schweitzer and Mr. Joseph Wisenbaker assisted with helpful criticisms.

The assistance of the following students who acted as interviewers in the data gathering effort is appreciated: Mutla Chuenyane, Terezinha Maciel, Lydia Mallett, Mathias Mogeckwu, Evelyn Paolangeli, Nahid Sadeghi, Shahin Vafai, Sandi Vitek and Regina Washington.

Grateful thanks are expressed to the following administrators for their participation in the evaluation of the university's objectives

in training foreign students:

Dr. James Anderson, Dean, College of Agriculture and Natural Resources; Dr. Irving Wyeth, Director, Institute for International Agriculture; Dr. Richard Lewis, Dean, College of Business; Dr. Erwin Bettinghaus, Dean, College of Communication Arts and Sciences; Dr. Keith Goldhammer, Dean, College of Education; Dr. Lawrence Von Tersch, Dean, College of Engineering; Dr. Lois Lund, Dean, College of Human Ecology; Dr. Donald Weston, Dean, College of Human Medicine; Dr. Myron Magen, Dean, College of Osteopathic Medicine; Dr. Gwen Andrew, Dean, College of Social Science; Dr. John Welser, Dean, College of Veterinary Medicine; Dr. Ralph Smuckler, Dean, International Studies and Programs; Dr. August Benson, Advisor for Foreign Students and Scholars; and Dr. Herbert Oyer, Dean, The Graduate School.

For information on the academic advising of foreign students, the following members of faculty and administrators responded to scheduled face-to-face interviews: Drs. Glenn Johnson (Agriculture and Natural Resources), Daniel Hamermesh (Business), Lawrence Sarbaugh (Communication Arts and Sciences), David Heenan (Education), George Vandusen and John Kreer (Engineering), Linda Nelson (Human Ecology), Judith Krupka (Human Medicine), Robert Fedore (Osteopathic Medicine), Jay Artis (Social Science), and Jeff Williams (Veterinary Medicine).

Similarly, the following members of faculty provided valuable information, through interviews, on professors' teaching styles: Drs. Allan Schmid (Agriculture and Natural Resources), William Lazer and John O'Donnell (Business), Richard Farace (Communication Arts and Sciences), Sheila Fitzgerald (Education), Stephen Yelon (Instructional Development and Technology), James Beck (Engineering), Beatrice

Paolucci (Human Ecology), James Davis (Osteopathic Medicine), Jay Harman (Social Science), and Robert Langham (Veterinary Medicine).

Date analysis and interpretation was undertaken with grateful assistance of Dr. John Schweitzer, Art Tabashneck, Len Bianchi and consultants at the Office of Research Consultation (College of Education).

Part of the funding for the conduct of this study was thankfully received from the Offices of the Deans of the College of Education, International Studies and Programs, and The Graduate School while the Office of Research Consultation at the College of Education assisted with funds for computer services.

The high quality and very professional style in which Kathie Alcoze handled the typing within the limited time is commended. Thank you for making it possible to beat all deadlines.

Sincere appreciation is tendered for the financial support, through assistantships (which made the achievement possible), provided by Drs. Robert L. Green, Dean, College of Urban Development; Jack Bain, Chairman, Department of Racial and Ethnic Studies; and Maxie Jackson, Director of the Center for Urban Affairs.

A debt of gratitude is due to my cousin, Adeyemi Falade, for giving assistance where it counted most: caring for my family during my absence.

Of all statements of appreciation so far expressed, none is greater than the one that goes to my family. To my children: Ayodeji, Olubunmi, Oluwafemi (who understood), and of course, Little Modupe (who did not) but joined her brothers in granting daddy enough release time from his responsibilities as a father to complete the study.

Who else could have made it possible but my wife, Tomilola, who provided not only understanding and logistic support by playing the role of mom and dad in my absence, she also bore the brunt of typing the rough draft of the dissertation. With her cooperation, we proved that, in spite of the odds, the accomplishment was possible.

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CHAPTER I

BACKGROUND TO THE STUDY

"Education makes a people easy to lead, but difficult to drive; easy to govern, but impossible to enslave."

--Henry Peter, Lord Brougham
(1778-1868)

Introduction

The view expressed by the Hungarian nationalist, Louis Kossuth, that "It is on the sound education of the people that the security and destiny of every nation chiefly rests," seems to be universally accepted. A look at the role which education has played and continues to play in the social, political, and economic progress of industrialized nations shows evidence of this belief. Similarly, the concerted effort of leaders of developing nations in devoting a substantial proportion of their annual budgets to education (from elementary through university and including adult literacy programs) attests to their belief that national development would be a farce without educational development. Indigenous expertise which is indispensable in this undertaking would be available only when there is manpower development. This, in turn would depend on the investments made in education and training. The importance accorded this function was concisely expressed by Hanson and Brembeck when they said:

Today education is the single biggest enterprise in a developing country. It employs more people and influences directly the lives of more people than any other organization apart from

government itself. The expenditures are huge in relation to other government and private expenditures. The flow of foreign aid to education is exceeded only by the flow for military purposes.¹

Because human resources have come to be regarded as the wealth of nations, education provides a common base from which these resources would develop so that societies and nations could evolve toward modernization and progress. A commitment to this philosophy on a global scale is reflected from the activities of such international agencies as United Nations Educational, Scientific, and Cultural Organization (UNESCO), and the arms of the governments of Western nations such as the Office of Overseas Development in Great Britain and the Agency for International Development (AID) in the United States. Today, the dimensions of assistance are many and varied. They range from relief in time of disaster, through technical advice to direct financial support of economic programs. But our attention will be focused on the educational aspect which concerns the training of skilled personnel.

Though the practice in international exchange in education has a very long history, as pointed out by Schulken² and Speakman³, the popularity of training students in the Western world substantially increased after World War II. The dramatic increase in the population of foreign students, especially in the United States, was noted in the figures published in Open Doors 1970-73 (an annual publication by the Institute of International Education). In addition to the efforts of missionary and philanthropic organizations, the government contributes significantly through the AID, the Department of Health, Education and Welfare, the Department of State, and other allied agencies. Currently the population of foreign students in the United States is close to

200,000, and has stayed within this range for the past couple of years owing to a cut-back on resources for their support brought about by the need to attend to citizens of the U.S., especially the minority students. This has not in any way diminished the importance of their presence and the need to cater to their academic and social welfare. The National Association of Foreign Student Affairs (NAFSA) has gained national recognition as a body vested with the functions of meeting this primary objective. A unique feature in international exchange in education which is popular in the United States is the collaboration between government agencies and colleges and universities in the effort to provide training programs to meet the needs of foreign nationals. This point was underscored by Otto Klineberg when he remarked, with data:

Perhaps the oldest and today the largest (in terms of numbers) form of international educational exchange is the flow of foreign students to United States colleges and universities. In 1871 Howard University admitted its first foreign student, in 1969-70 that number had increased to 1,281 or 14.5% of its total enrollment, a percentage exceeded only by Massachusetts Institute of Technology among major colleges and universities in the United States, with 16.9%. But Howard University and MIT are only two of some 1,734 institutions of higher learning in the United States which, according to Open Doors 1970, report foreign students in 1969-1976. There were 134,959 foreign students reported by U.S. colleges and universities in 1969-70, 13,597 more than the previous year, or an increase of 11%.⁴

At Michigan State University, the practice of training foreign students began nearly a hundred years ago. The consistency with which it has pursued this practice over the decades has resulted in the school being well known not only in the U.S. but also abroad as a leader in international exchange in education. In tracing the history of foreign students' training at Michigan State, Madison Kuhn had this to say:

Much of the College's influence overseas has been expressed through students who came to America and to Michigan State College and returned to serve in their own lands. One of

the first was Michitaro Tsuda, 1884, who became farmer, banker, mine operator and a member of the Japanese Emperor's privy council.⁵

In an effort to broaden the scope of its land grant philosophy to global dimensions, a dramatic expansion in the enrollment of foreign students occurred after World War II as can be noted from these figures:⁶

<u>Date</u>	<u>No. of Students</u>	<u>Countries of Origin</u>
1940	40	8
1950	300	57
1960	656	83
1966	1,108	81
1970	1,211	79
1978	1,293	84

It is also significant to note that the largest population of foreign students ever to enrol at Michigan State University was recorded during the current year 1977-78, as noted in this news report:

Michigan State welcomed 278 new international students from 58 countries fall term. The largest number came from Iran, followed by the Republic of China, Japan, and Canada. International students now total 1,293 at MSU representing 84 countries. In addition, we have 85 foreign faculty and research scholars coming from 28 countries and working in 33 departments on campus. This is a record high in student enrollment at MSU.⁷

The above report is further underscored by the information on MSU alumni in the U.S. and abroad furnished by the Alumni Records Department of the Alumni Association in January 1978. The section concerning alumni in foreign countries showed that MSU's alumni can be found in nearly 120 countries around the globe totalling about 4,000. Apart from Canada, which by virtue of its proximity, carries the lion's share of 963, Asian countries such as Thailand (230), India (194),

Japan (140), and the Philippines (106) dominate the scene. The only non-Asian nation commanding a sizeable number is Brazil with 166. Further evidence of the major contribution which MSU has been making in international education can be observed from the publication which the Michigan International Week (1975) released containing brief biographies of 38 leading foreign alumni of major universities in the State of Michigan. Twenty-four of those on the list were alumni of MSU!

It is not surprising that the commitment to international exchange in education is so dynamic at Michigan State when one looks at the calibre of leadership, in the persons of John Hannah and Clifton Wharton, Jr., which the school has had during this period. The contributions which both have made to international education not only at Michigan State but also at the national and global levels have earned them a stature which commands a lot of respect. A few quotations from their statements would help to illustrate the philosophy from which their activities emanated. Pointing out an aspect of the land grant philosophy which deals with improving the quality of functions which a university performs, John Hannah emphasized in 1966 the need to change with the time when he asked:

Can the large university retain its stability, its integrity, and its usefulness to society by continuing to carry on in the same way as before, doing more and more of the same things, or must it change?

It is my belief, and I hope it is yours, that it must change, that the pressures and strains are so intense and so persistent as to make innovation mandatory. We see old models, old attitudes, old methods, old values, being challenged and changed in society all around us. Can we expect the university, itself a social instrument, to escape unchallenged and unchanged? We cannot.⁸

In his foreword to the publication The University and World

Affairs released by the Office of the Dean of International Studies and Programs in 1976, Clifton Wharton Jr. pointed out clearly that the importance which the school attaches to international education would not diminish, rather it would be viewed as a global extension of the land grant philosophy. He remarked:

We firmly believe that a university must be international in its orientation if it is to serve its students and the broader society well. The world continues to shrink; events and problems which a few decades ago seemed remote and unimportant to us, now clearly affect our lives and our future. We are truly becoming one world and our universities must reflect that reality.

Our commitment to a strong international dimension in the teaching, research and public service programs of Michigan State University is clearly demonstrated by the many activities described in this report. In keeping with our tradition, our University is engaged in processes intended to improve the lives of people in other countries--to expand educational opportunity, to increase availability of food, and to expand knowledge about the complex processes of change. As we proceed we learn through both experience and research. And the lessons learned abroad affect the spirit of our campus, the content of our courses and the general outlook of the academic community.

This is a period of re-thinking and planning. In the international field as in others we continue to review and improve--to seek better ways to meet old and new tasks. As we proceed, however, we reaffirm our commitment to keep Michigan State at the forefront of international educational and service institutions.⁹

To lend credence to the land grant philosophy, the Center for International Studies and Programs was opened in 1956 with a structure which is largely decentralized and operations carefully integrated into that of the institution's main components at the college and departmental levels. In addition, Area Studies Centers (African, Asian, Latin American, etc.) and international institutes were created to cater to regional and disciplinary interests while the Foreign Student Office was set up to perform the same functions for foreign students

and faculty on campus. How extensive the operations are can be fully appreciated if one examines the Center's past records (e.g. International Reports 1965-1973), planning seminars and working papers, annual reports, and periodic publications such as The University and World Affairs. The Foreign Student Office supplements this with University Facts and Orientation handbooks and terminal newsletters which summarize information of consequence to the foreign student and faculty. Perhaps the document that has provided a summary of the direction of international programs at Michigan State in this decade is International Programs for the Seventies: A Review of Activities and Program Priorities for the Future. In it, the dual purposes of deepening "the cross-cultural, international dimension within the university's educational programs" and also facilitating and guiding "the university's contribution to improvement in developing areas of the world," are blended with a third which emphasized the need to use what "may be relevant and valuable to our own society today"¹⁰ from the interaction. Included in the number of program activities suggested is the need to continue promoting student exchange especially at the graduate level. The report¹¹ by the Presidential Commission on Admissions and Student Body Composition in its recommendations 31 and 32, emphasized this point also. So it is not surprising that nearly 80% of the current population of foreign students are pursuing graduate programs.

What seems to be surprising is the limited attention given in the documents to this group which constitutes a viable component of the linkage envisaged. The only mention made of foreign graduates of the school suggested "finding ways to relate to foreign alumni, many of whom may be in positions to contribute well to their society's

modernization." One would have thought that institutional interaction on an on-going basis should have been established to obtain vital information needed for reviewing existing programs or starting new ones.

The Problem

After about a generation of the modern approach to international exchange in education in the nation, and a little over two decades of organized practice at Michigan State University, it is of interest to take a closer look to ascertain the extent to which the broad goals of the exchange have been accomplished. The investments already made in international exchange in education at the school, coupled with its commitment to remain in the forefront of such effort, make it imperative to reevaluate the programs (especially the section affecting foreign students) with a view to increasing its measure of effectiveness. Apparently, the presence of "better skilled indigenous hands" in the developing nations have not significantly improved conditions as UNESCO and United Nations Development Program experts¹² have pointed out. The problems of poverty, illiteracy, and disease which modernization through manpower development were expected to eradicate are still formidable in these areas. In their introduction to the publication, A Guide for the Education of Foreign Students, Benson and Kovach made a similar observation when they said:

...changes are occurring elsewhere in the world which are calling many aspects of international education into question. The needs of developing countries for education and training of their citizens overseas are changing, as it becomes apparent in many of these countries that there is an oversupply of degree holders and an under utilization of highly trained manpower, and that human resources are tending to be concentrated in urban centers, to the detriment of the rural areas.¹³

In spite of much effort already made to discourage it, some of the foreigners who completed their training have decided to remain permanently in the host countries which trained them. Though the pros and cons of the issue have been presented many times¹⁴, it seems that there is a consensus on the possibility that the kind of training could contribute to this problem.

The call for a reevaluation of the existing practices rings through in the volume edited by Schramm and Lerner, Communication and Change: The Last Ten Years--and the Next (Honolulu: The University Press of Hawaii, 1976). In it, many articles and position papers published advocated a serious reevaluation of the old paradigms and models of development since results of their use have been less than satisfactory. A new theoretical stand has been presented by many scholars, largely from non-Western societies, in appraising the problems of development. "Dependency theory," as they term it, looks at the situation in a global perspective, tracing the exploitative interrelationship between Westerners and non-Westerners which was established firmly during the colonial period. It is believed that in spite of the gains made at the political front with the independence of many of these areas, the exploitation still continues at the economic and intellectual fronts. They therefore look at development assistance from Western nations as a subtle way to continue protecting their old interests, a strategy which they believe would not work in the best interest of the developing nations.

A satirical poem by Ross Coggins published in Adult Education and Development (September 1976) titled "The Development Set" drove the point home with a message to the Western experts involved in the

development of non-Western societies:

Excuse me, friends, I must catch my jet
I'm off to join the Development Set;
My bags are packed, and I've had all my shots
I have Traveller's checks and pills for the trots!

The Development Set is bright and noble
Our thoughts are deep and our visions global;
Although we move with the better classes,
Our thoughts are always with the masses.

In Sheraton hotels in scattered nations,
We damn multi-national corporations;
Injustice seems easy to protest
In such seething hotbeds of social rest.

We discuss malnutrition over steaks
And plan hunger talks during coffee breaks.
Whether Asian floods or African drought,
We face each issue with an open mouth.

We bring in consultants whose circumlocution
Raises difficulties for every solution--
Thus guaranteeing continued good eating
By showing the need for another meeting.

In the light of the above, some pertinent general questions may be asked in connection with international exchange in education as it affects the training of foreign students at Michigan State University.

1. Given its experience and commitment, and the shortcomings inherent in the nature of institutions' practices described by Dressel and co-authors in such volumes as The Confidence Crisis and Return to Responsibility, are the university's goals translated into concrete training programs with built-in mechanisms to ensure effective implementation?

2. To what extent do the goals of the university agree with those of the foreign students? Do they perceive the programs as preparing them for the tasks they would face on returning home?

3. To what extent do the conditions under which they train contribute to "transferability," i.e., how do they train in an affluent society to ensure effective performance in a setting where

resources are very limited?

4. How do faculty members handle foreign students in the training effort to ensure that the knowledge and skills so gained can be profitably used?

5. How much are institutional constraints such as structure, limitation of resources, and meeting the objectives of other constituencies, imposed on its capacity to realize the objectives set out in the international exchange in education section? In short, how much chance has the program to succeed when it has to compete for time and money with other programs which are primarily state-supported?

Purpose

The purpose of this study, therefore, is to assess the extent to which foreign students in graduate programs at Michigan State University perceive their training as preparing them to meet the objectives of playing the role of "change agents" in the national development of their respective countries.

Products of the Study

It is expected that the following products would emanate from the study:

1. A summary of the findings
2. Recommendations on measures to take to improve graduate programs involving foreign students at Michigan State University
3. Implications of the study for further research

Research Question

An examination of the parameters of individual performance in any undertaking usually considers motivational elements such as attitude--which shows how much effort the individual would invest in the undertaking; knowledge and skills--which show his ability, the cumulative results of his aptitude, training and experience and the dimensions of his response to task difficulty. It is assumed that no training would be regarded as comprehensive unless it assesses the above elements. Since one of the primary objectives of the university is to train foreign students to play the role of effective "change agents" in the development programs of their respective societies, it is pertinent to examine their training programs from this perspective. Like other students, foreign students generally aspire to earn a high grade point average (GPA) and an eventual diploma, but some specific questions need to be asked. For instance, what attitudes, knowledge, and skills are inculcated in the training:

1. to ensure that foreign students are encouraged to enter into and function in a new role;
2. to communicate positive feelings about the concept of change, particularly the need to address problems at home;
3. to make certain that they acquire the information needed for effective problem solving, working with people, leadership ability;
4. to guarantee that the training has the potential of benefiting not only the students but also those with whom they may come in contact as well as the society in general?

To resolve the above questions, a comparison will be drawn between what the school claims to offer in the training programs and the

foreign students' perception of what they are getting.

The Significance of the Study

The products of the study may be useful to the following people and organizations:

1. Future foreign students who plan to attend Michigan State University would undoubtedly benefit from any reforms introduced into programs to ensure a greater measure of compatibility with and relevance to their personal and societal needs.

2. Guided by its land grand philosophy, the university has been receptive to the concept of change in the effort it makes to strive for excellence. The results of the study may assist the administration in reevaluating its policies and programs as they affect the interest of foreign students in such areas as admissions, training, and a theory of instruction to guide future planning of programs involving international exchange in education.

3. Since the university depends, in large measure, on the faculty for the execution of the training programs, they would be interested in the results of the study as it affects their roles as instructors and academic advisors of foreign students.

4. By virtue of the significant contributions which Michigan State University has made to international exchange in education, many agencies providing aid to developing countries such as UNESCO and AID have sponsored these programs through cooperation with the university. The study's findings may help them to evaluate whether their objectives are being met.

5. Perhaps those who may be interested most in the results of

the study would be governments of developing nations which count on the products of this kind of training programs in meeting their manpower development needs. The results may be used in assessing the real worth of training at MSU (reflected from the experiences of those students who attended) with a view to reviewing their policies regarding future training of students at MSU in particular and overseas training in general.

6. Since the aspect of international exchange in education treated in the study has not received much attention in past research studies, scholars in cross-cultural research in education and social processes may be interested in the findings to ascertain from the Michigan State University experience if any new light is shed on the subject of education and training across cultures. This may enable them to sharpen the focus of their future research undertakings on issues of great import to the subject.

Rationale for the Study

The fundamental reasons why the study is undertaken are briefly stated below.

1. In the many research studies already undertaken on the subject of foreign students, only a few have dealt with the relevance of the training they are receiving to their professional need and that of their societies. In some¹⁵ of these studies, the question about relevance has been raised while in others recommendations made have included the need to ensure that the training received is appropriate to the professional role and environmental setting in which it would occur.

2. Since Michigan State University from its past records and its stated policy, intends to remain in a leadership position in international exchange in education, the study would be one of the useful evaluations needed for assessing how well its plans to help developing nations in manpower training is working.

3. It has been observed that one of the factors contributing to such problems as "brain drain," "culture shock," and "re-entry shock" is lack of relevance of training programs to the needs of foreign students. Observing the question of relevance in the design and evaluation of the program would be expected to minimize these problems. A study dealing with relevance would, therefore, be needed to shed light on this issue. It is expected that the measure of success of this program can be enhanced while factors contributing to failure may be better understood and considerably reduced.

4. The need to ensure that the most appropriate kind of training is provided (which calls for this kind of evaluative study), is underscored by Goldhammer when making remarks about his experiences in a trip made to some Asian countries in 1977:

The lessons for both developed and developing nations are apparent. More than literacy is needed! Diplomas and credentials are not enough! Education can and must be a means for helping people become sufficiently capacitated to build better lives for themselves and achieve greater prosperity for their countries.¹⁶

5. The foreign students, as direct beneficiaries of the training programs, are in a fitting position to participate in the evaluation especially as it relates to the question of relevance.

Delimitation of the Study

The study would be limited to graduate students (both foreign and American) who are currently enrolled in selected colleges at Michigan State University. As the theory of change is now commonly associated with development efforts in the non-Western world, the role of change agents is regarded as pertinent to the study and the colleges included are those which offer programs where professionals trained can be expected to acquire the skills necessary to play this role. The deans of these colleges and top administrators who participate in the administration of international exchange in education are included.

Limitations of the Study

By confining the population affected by the study to graduate students in selected colleges in the university, the possibility of generalizing the results to all graduate students in the school, or for that matter, in the nation is drastically curtailed. The importance attached to the "change agent" role in the study imposes a limitation that cannot be ignored since it is recognized that not all colleges offer programs that are oriented to this concept.

Because psychological elements such as people's attitude, behavior, and perception are variable in character, it has been recognized that the longitudinal approach is a better methodology of research to use in assessing them. Over time, a trend can be revealed which would be a more reliable predictor of "events" than a single-shot study. As in developmental research, periodic measurements would reveal how relatively steady or variable is the factor being measured.

Therefore, there is a limitation in how much a single study of this kind can reveal about any trend in foreign students' perception of the relevance of their training at Michigan State University.

The study depends primarily on the subjects' opinions in a survey. A detailed examination of their academic records and professional activities would undoubtedly provide additional data to back up or refute the views they may have expressed in the survey. Data such as actual knowledge or skills acquired during training would give some tangible indication of their accomplishments in relation to stated objectives. If the objectives of a training is to make a subject a driver, his capacity to drive should be assessed in addition to asking him to respond orally or in written form to questions about driving.

Perhaps the most concrete evidence of the worth of the training provided to foreign students at MSU would be obtained from an evaluation of the performance of the graduates in their respective professional roles in their home countries. Examined over a period of time, the measure of their effectiveness can then be assessed from the tangible contributions they make such as important positions occupied, decisions taken, programs set up, how they were executed, and the extent to which the society benefited from such programs.

Whenever people find themselves in an environment quite different from the one to which they are accustomed, the tendency to adapt arises. By developing a mechanism for adapting to living conditions, social relations and coping with different values and expectations in an affluent society, foreign students' capacity to judge the relevance of their training to home country conditions accurately may be limited.

Assumptions About the Study

Since most non-Western nations which have recently regained their independence have begun to engage in development programs calculated to change the quality of their lives for the better, it is assumed that their overseas-trained personnel would constitute agents of change in these endeavors.

A good number of foreign graduate students are responsible adults who have participated in or are still participating in development programs in their respective countries. Therefore, they can identify programs likely to help further this effort, the rationale being that the more mature they are, the more they can benefit from such programs. This is also reflected in the composition of foreign students of which over 80% are graduate students.

It is anticipated that foreign students, by virtue of being older and with more years of work experience, are mature enough to give their opinions as candidly as possible. In spite of language and other socio-cultural differences, they are perceived as capable of performing this function.

It is also assumed that the top faculty and administrators interviewed would be equally as candid in expressing their views regarding the university's objectives and their teaching styles in training foreign students at MSU. As experienced instructors and administrators with wide exposure in the international field, their judgments can be depended upon in this evaluation.

Since graduate students would be asked similar questions regarding the university's objectives, it is assumed that the higher the degree of correlation in their views and those of the administrators,

the greater is the probability that their opinions reflect fact.

A Philosophical Base for the Study

The three primary goals of international exchange in education as enunciated by Michigan State University are "institution building," "manpower development," and "knowledge sharing." It is this third component that the paragraph would concentrate on. In preceding paragraphs, it was pointed out that a rethinking is going on regarding the whole concept of technical assistance to developing nations after years of less than satisfactory results.

Among questions raised by this experience was the reliability of the experts' knowledge of these social systems and the appropriateness of the knowledge and skills being shared with these areas. This is an aspect of the age old epistemological question that philosophers have been asking for centuries. Those engaged in this reevaluation are treading the same path of "quest for certainty" which, unfortunately, has eluded their predecessors. Skeptics doubted that any of our beliefs can be supported by enough evidence to make them certain. Rationalists such as Descartes and Plato regarded sense data as unreliable and bent their efforts toward finding that information which defied any questioning, i.e., which is "absolutely true." Since their efforts did not yield meaningful fruit, Empiricists such as Bacon, Locke, and Hume decided to take the opposite route by relying essentially on sense experience as a basis for knowledge. By being down to earth and practical, the social context of the experience was regarded as important. In spite of the progress made through the accumulation of scientific knowledge, their conclusion was similar to that

of the Rationalists--the sense experiences did not provide enough evidence to support their thesis as the source and basis of what we know. They acknowledged a drastic limitation of information about ordinary experience. In short, neither the Rationalists nor the Empiricists could be certain that they had attained permanent truth or perfect knowledge.

In the context of the above, coupled by the fact that Western and non-Western societies are two different worlds profoundly influenced respectively by Positivism (scientific knowledge emanating from observable phenomena, experience and facts) and Metaphysics (encompassing magic, religion, parapsychology), one can appreciate the difficulties an expert in one world would have in attempting knowledge transfer across the boundaries of the other especially when philosophers of the same world did not see "eye to eye" on issues of great concern to them. Simply summarized, the point being made from a philosophical viewpoint is analogous to two individuals who, by virtue of their capability of speaking the same language, discovered from interaction, that they did not agree on an issue. Imagine the problem they would have if they could not speak the same language! This is probably the reason why the discipline of Sociology is evolving a branch which concentrates on studying the relationship between thought and society. In this area called Sociology of Knowledge, efforts are made to show how ideas relate to the context of history and society which produced them. Karl Manheim¹⁷, one of the leading writers on the subject, emphasized this point when examining the relationship between epistemology and the special sciences. He pointed out that the latter depends on the former to provide "the basic justification for the type of knowledge

and the conceptions of truth and correctness which these others rely upon in their concrete methods of procedure, and affects their findings." He indicated that the former also is interpreted in the context of the latter, and then added:

The problem is thus made more difficult by the fact that the very principles, in the light of which knowledge is to be criticized, are themselves found to be socially and historically conditioned. Hence their application appears to be limited to given historical periods and the particular types of knowledge then prevalent. (p. 128)

He simplified this illustration in Ideology and Utopia when he remarked:

"It is not the consciousness of men that determines their existence, but on the contrary, their social existence which determines their consciousness."

Theoretical Frames of Reference for the Study

It is recognized that a descriptive study of this kind needs a theoretical foundation on which to anchor its design, analysis and interpretation. William Asher put it succinctly when he remarked

A good theory attempts to explain what the problem is, what the variables are that constitute it, and how they are interrelated. With this theoretical framework as a guide, the investigators can select the dimensions of the problem which need to be observed, described and reported. The theory tells the researchers what measuring instruments will be needed and what analyses will be made.

A good theory also suggests to them what results might be expected and gives them a basis for interpretation of the analyses and alternative explanations that may be suggested.¹⁸

Therefore, the study would rely on theoretical elements from different disciplinary orientations to provide a framework within which the analysis and interpretation of the problem being investigated would be made. From social science (communication), the theory of change which encompasses both "development" and "innovation" would be employed to

account for the need to provide assistance on the part of Western nations and the effort to seek and accept the assistance on the part of non-Western nations. Similarly, that part of communication theory dealing with the sharing of meaning and the role which socio-cultural factors play in it would be relevant to the problem being examined in this study. The psychological theory of cognitive dissonance (Festinger) would be employed in interpreting subjects' reactions to their learning experiences.

The theory of cultural relativism from anthropological studies would be employed to account for the differences in experiences of foreign students as compared with Americans and the recognition of the validity of these experiences for their (foreign students) perception of and attitude toward the learning experiences to which they are exposed.

At the core of the theoretical explorations is that aspect of the theory of learning dealing with the transfer of training. At least one of the leading assumptions in international exchange in education (especially the training of foreign students) is that the trainees would be able to use their "acquired knowledge and skills" in solving problems in their societies. A summary of this component of the learning theory would greatly illuminate the problem.

Theory of Change (Social Change)

Theory of Change (Social Change) would be summarized here using the "guides" delineated by Talcott Parsons¹⁹, and Rogers and Shoemaker²⁰. Parsons takes a systems view of the concept and examines it from the structural-functional analytical perspective. A social system possesses functional elements which help it in maintaining equilibrium as well as

structural elements which enable it to readjust to that state of equilibrium after it has been disturbed by external factors. Changes can be occasioned by agents within the social system (immanent change) or external to it (contact change). The idea bringing about this change can be originated within the system (selective change) or outside it (directed change). This paradigm particularly fits the role which foreign students are called upon to perform as outlined in the study. As "change agents" who are also part of their social systems, they would be expected to act as catalysts in recognizing the need for change and by virtue of their overseas training and homophilous characteristics (i.e., sharing the same socio-cultural values), bring new ideas that would complement development efforts. Of the four dimensions of change pointed out above, they would be expected to perform the role of "selective contact change agents." The need to bring about change for the better (in the social system) also occasions the application of the concept of "innovation" and the "diffusion" process upon which its spread would depend. The measure of success likely to be realized in the use of this approach is a function of the extent to which the source (the change agent) and the receiver (the rest of the social system) share a common "meaning." The closer the source and receiver are in communication skills, attitude and knowledge, in addition to belonging to the same social system and sharing the same cultural heritage (Berlo's model),²¹ the greater is the probability of reducing the disparity inherent in the structural, contextual, denotative, and connotative dimensions²² of interpreting meaning. Even the "connotative" dimension is further clarified with Osgood's semantic differential²³ technique which suggested three scales (Evaluation:

good-bad; Potency: strong-weak; and Activity: passive-active). The above outline serves to illustrate the magnitude of the problem involved when social change through interhuman interaction is contemplated. Fabun succinctly summarized it when he said "Common words do not have meanings--only people do. And sometimes they don't, either."²⁴

This view seems to be supported by Murphy when describing the wide disparity in human characteristics in his book Personality when he remarked

...we do not really see with our eyes or hear with our ears. If we all saw with our eyes, we should see pretty much alike; we should differ only as far as retinal structure, eyeball structure, etc. differ. We differ much more widely than this because we see not only with our eyes but with our midbrain, our visual and associative centers, and with our systems of incipient behavior, to which almost all visual perceiving leads. (p. 333)

The theory of cognitive dissonance, as explained by Leon Festinger in his book of the same title, states that "dissonance" exists in the cognitive elements (beliefs, attitudes, and behaviors) of an individual when these elements are inconsistent with one another. A tension or discomfort is created which the individual will strive to reduce either by changing the dissonant element or reducing its importance, changing his behavior, or adding more consonant elements until a balance is restored. Festinger's two main hypotheses associated with this theory state that a person who is in a state of dissonance would be motivated to work toward its reduction since the state is "psychologically uncomfortable." Similarly, he would strive to "avoid situations or information which would likely increase the dissonance" (A Theory of Cognitive Dissonance, p. 3). A familiar example often quoted is that of a habitual smoker who is exposed to the information that

smoking causes cancer. The knowledge would make him uncomfortable and he has one of these options: stopping the habit, refusing to believe it is true, looking for evidence to support his position, or discredit the source from which the information came. In general, the individual tries until the cognitive elements are in consonance. Applying the theory to this study, one can see the likelihood of expressing less negative feelings about a training program which one decides to undertake. It is unlikely that those who play major roles in setting up their programs, or who had to pay their tuition fees to go through the training would turn around and regard the decision as unintelligent, even if evidence shows that it is.

Cultural Relativism

Cultural Relativism is a concept borrowed from anthropological studies, and is included in the theoretical framework because of the importance attached to socio-cultural factors in the study. As pointed out earlier, effective communication takes cognizance of factors of the social system within which it is to occur, and the cultural values of the members of the system and those participating in the interaction. Stated in a nutshell, Cultural Relativism (which Melville Herskovitz wrote eloquently about in anthropological literature), postulates that "Judgments are based on experience, and experience is interpreted by each individual in terms of his enculturation."²⁵ Recognition of, and respect for this judgment seems to be the central thesis advocated in the theory. What is "good" for one individual or group in a given setting and at a given point in time may not necessarily be "good" for another individual or group in the same setting and time, or even

for the same individual or group at another setting or time. Factors of time, space, and the unique learning experiences of individuals or groups become critical to the assessment of what is "right" or "wrong" in each given situation. Right from birth, children are socialized on what to look at, when to look, where to look, and how to look. The same operation applies to the other senses (i.e., what to hear, smell, taste, etc.). By the time they are grown up, the stamp of socio-cultural identity is indelible on the pattern of their perception and behavior. This developmental process is clearly emphasized in the poem by Dorothy Law Nolte (distributed by Similac Industries--manufacturers of baby foods) titled Children Learn What They Live:

If a child lives with criticism, he learns to condemn.
 If a child lives with hostility, he learns to fight.
 If a child lives with ridicule, he learns to be shy.
 If a child lives with shame, he learns to feel guilty.
 If a child lives with tolerance, he learns to be patient.
 If a child lives with encouragement, he learns confidence.
 If a child lives with praise, he learns to appreciate.
 If a child lives with fairness, he learns justice.
 If a child lives with security, he learns to have faith.
 If a child lives with approval, he learns to like himself.
 If a child lives with acceptance and friendship, he learns
 to find love in the world.

In the current rethinking going on in connection with the theory of development and modernization, Schramm summarized what Eisenstadt thought was wrong with the "old model:"

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.²⁶

In short, there are varying socio-cultural values and strategies which each society employs to maintain a steady state, and the recognition of their worth to those whose lives are guided by them becomes the focal philosophical point of "cultural relativism." As emphasized by Herskovitz,

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 to judge and destroy those that do not dovetail with our own. . . Evaluations are relative to the cultural background out of which they arise.²⁷

A universal factor in human existence is the struggle by individuals and groups to be capable of "controlling those resources of the environment to ensure survival and improvement in the quality of life." The fact that there are wide variabilities in the quality and quantity of these resources suggests that strategies for managing them would vary too. The awareness that these variabilities could be equally as valid in each situation has not been fully appreciated as Herskovitz pointed out:

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.²⁸

This may account for the observation made by Rogers and Shoemaker when defining "cultural relativism" as "the viewpoint that each culture should be judged in light of its own specific circumstances and needs." And they went on to explain:

No culture is actually "best" in an absolute sense; each culture works out its own set of norms, values, beliefs and attitudes that are best for itself. Conditions in a less developed country may therefore seem strange and unsuitable to

a Western observer, when many of these conditions result from centuries of experiment, trial and error, and evolution.²⁹

Herskovitz provided one of the reasons why the Western model of development and modernization which has been christened "the dominant paradigm" needs reevaluation as far as its application in non-Western societies is concerned. He remarked

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 automaton, nor ever has been, nor at least while he persists as we know him, will ever be.³⁰

In summary, the theory advocates a scientific approach to the perception of phenomena--a suspension of judgment, a disciplined detachment, an effort on the part of the observer to "step into the shoes" of those involved with a view to seeing the situation as they would.

Learning Theory--Transfer of Training

As noted in the subheading, this summary will concern only that component of the collective body of knowledge about learning and motivation which deals with the concept of "transfer." Since it is one of the goals of training foreign students at Michigan State University to equip them with the knowledge and skills which would enable them to tackle problems in their societies effectively, it is essential to know what the theoretical underpinnings of the "transfer of learning" are as research findings would corroborate them. A psychological principle which found acceptance in American beliefs and practices is functionalism. When applied to the theory of learning it tends to be

concerned with the end product of an undertaking. Hilgard described it succinctly when he said:

The philosophy of America was based on individual ambition, a strong pragmatic spirit, and a practical, "success-oriented" attitude. Knowledge is worthwhile only insofar as it enables the successful solution of practical problems.³¹

The works of scholars in psychology and education such as John Dewey, James Angell, Harvey Carr (of the Chicago school) and also Robert Woodworth and James Cattell (of the Columbia school) contributed immensely to the prominence which functionalism received in the field of education. Its emphasis on the transfer of training is a synthesis of the positions of Thorndike and Guthrie (transfer depends on degree of likeness between new and old), Hull (equivalence of stimuli and equivalence of response). Since the settings are different and problem-solving is obviously advocated, the cognitive dimension as advocated by Tolman and the Gestalts (i.e., transfer depends on extent to which learners have access to the relationships) cannot be ignored. Essentially, transfer of training deals with the consequences which current learning would have on the subsequent or previous learning. These can either be positive or negative, i.e., subsequent learning may be facilitated or interfered with. Similarly, transfer effects may be proactive (i.e., the effect is on subsequent learning) or retroactive (i.e., the effect is on previous learning).

So we have a simple illustration:

		Consequence of transfer	
		Positive	Negative
Direction of Transfer	Proactive (forward)	a	c
	Retroactive (backward)	a	d

Then, there is also the form of transfer which may be stimulus generalization, response generalization, or semantic generalization.

Stimulus generalization is said to take place when the same response which is elicited by one stimulus is also elicited by other stimuli similar to it. The closer the subsequent stimuli to the original one, the greater is the likelihood of eliciting the same response. Response generalization is similarly interpreted: correct response to a given stimulus tends to reinforce related responses that may be given in the future. The semantic generalization component deals with the aspect of meaning attached to either stimulus or response. Where a given stimulus is set within a category, a mention of the category may elicit the response originally associated with the given stimulus.

Osgood attempted to synthesize this in a model which he called the "transfer surface,"³² designed to help in predicting the direction of transfer and its consequences when a stimulus is given. What the graph clearly demonstrated was that maximum positive transfer occurs when two tasks involve the use of similar stimuli eliciting similar responses, while maximum negative transfer results from two tasks involving the use of similar stimuli in which opposite responses are anticipated. However, there is a limitation in how helpful the model would be since we would be dealing, in this study, with the question of transfer of "rules" and "strategies" which are indispensable ingredients in the acquisition of learning sets for "problem-solving." The role of learning sets is summarized by Travers:

There are facilities in solving problems of a particular class. They appear to involve the learning of strategies and also flexibility in attempting different solutions. They do not

necessarily involve the verbalization of the rules applied, as is evident from the fact that learning sets can be demonstrated in animals other than human beings. Out of this work have emerged studies of the factors that facilitate the shifting of strategies and rules for solving problems. Older children show a great capacity to make such shifts although young children and other primates are slow. The difference between the older children and the young children and other primates is suspected to be attributable to the ability of the older children to use language in the solution of problems.³³

A dimension of complexity is added when it is realized that the study incorporates a cross-cultural component, and the conditions under which the learning experience occurs are far removed from the setting of eventual application, and finally the differences in language (a potent tool in understanding and problem-solving) further complicates the problem. Perhaps the study that illuminates the situation was undertaken by Campione and Brown where two colors and two letters of the alphabet were used in experiments: the first focusing attention on colors while the second added the dimension of letters. Travers synthesized it as follows:

In the first experiment he learned to attend to color rather than to the letters, and this tendency to attend to the color will transfer to the task in the second experiment. Attention factors seem quite transferable and probably are transferable in daily life. . . Now let us consider what happens when the experimenter changes the form of the task in the second experiment, that is, switching either from a simultaneous presentation to a successive presentation or the reverse. When this happens, transfer of what is learned in the first task to the second task is highly disrupted. Transfer takes place best when the form of the two situations remains the same. This phenomenon is quite a familiar one in daily life. A problem about which one has knowledge but set in an unfamiliar context may appear to be baffling. . . Indeed, in Campione's series of experiments the effect of context overwhelms every other factor influencing transfer of training.³⁴

What Campione and other researchers suggest is to have learners practically employ the problem-solving strategies in a variety of situations, having thoroughly mastered the principles. This way, the rules

would have undergone extensive tests to allow broader generalizations to be made. It seems, therefore, that a sanitized laboratory setting would be inappropriate for the acquisition of the knowledge and skills.

Hypotheses Associated with the Study

Among the many variables to be examined, these are considered central to the study: field of study, culture, dominant group, change agent, and level of development--all being some of the indicators of the variability existing in the subjects' social-cultural environment. There are also variables characteristic of individuals which help in the evaluation of their perception, attitude and behavior. In this study, such co-variables would include age, work experience, goals, etc. The analysis would depend on the interaction effects of these variables on the dependent variable. Two major hypotheses and eighteen working hypotheses (for statistical analysis) would be presented. At the end of each statistical hypothesis, in brackets, are the numbers identifying the questions related to each in the instrument followed by a rationale for its inclusion. It is expected that a summary of the results of the test of these working hypotheses would help in the "assessment" of the acceptance or rejection of the two major research hypotheses.

Research Hypothesis No. 1: Learners who grew up in socio-cultural environment (A), went on to acquire knowledge and skills in socio-cultural environment (B), and expect to return to (A) to apply it will tend to see little relevance in their training unless the programs are specifically designed to accomplish the objective of transferability.

Research Hypothesis No. 2: Learners' age, exposure to the world of work, academic performance, and anticipated future roles are positively related to their perception of program relevance. That is, the older the learner, the more years of work experience he gets, the better his performance, the more clearly defined his future roles, the greater are his chances of seeing the relevance of the training programs to his needs.

The rationale for the two research hypotheses can be obtained from the rationale which accompanies each working hypothesis that follows.

Working Hypothesis No. 1: Subjects classified in the study as "foreigners" would rate their training as less relevant to their needs than subjects classified as "Americans" (questions 35-55, 58 and 59).

Rationale: This hypothesis is based on the principle that schools, being powerful socializing institutions, are established by the society to help it in realizing its goals, which include inculcating in the learners values which are unique to it. This way, its continuity is preserved. As subjects affected by the study are from divergent cultural backgrounds, cross-cultural differences are considered strong determinants of assessing transferability of concepts, principles, rules and strategies from Western learning environments to non-Western ones.

Working Hypothesis No. 2: Subjects who perceive themselves as potential change agents would rate their training as less relevant to their needs than those who do not perceive themselves in this regard (questions 15 and 16, 35-55).

Rationale: In Training for Change Agents³⁵, the Havelocks sketched an outline of the attitudes, knowledge, and skills which an effective change agent should possess. Acquisition of these qualities require a special approach to training which emphasizes social goals more than personal (individual) goals. The test of this hypothesis would help in ascertaining the extent to which subjects perceive themselves as preparing for this role and whether or not the programs offered in the school are likely to help in fulfilling this objective.

Working Hypothesis No. 3: Subjects classified as non-white would rate their training as less relevant to their needs than subjects who are classified as white (questions 35-55 and 58).

Rationale: In any given society, the norm of behavior is often the behavior acceptable to the dominant group. In American society, the values, goals and expectations of the dominant group are the standards against which the relevance of schools' programs are normally measured. Since the dominant group happens to be white Americans, it is essential to know from the responses of non-white subjects, the extent to which the programs offered serve non-white interests.

Working Hypothesis No. 4: Subjects classified as not "well-to-do," i.e., whose chances for upward mobility are limited, would rate their training as less relevant to their needs than those classified as "well-to-do" (questions 35-55, 61 and 62).

Rationale: In general, as an affluent society, the United States exhibits the values and expectations of high social class people. Michigan State University, as a by-product of this social phenomenon, reflects these values and expectations in its policies and practices. It is of interest to know how subjects with low

socio-economic status would react to these policies and practices embodied in the training programs especially when it is realized that a large number of American minorities and majority of people from non-Western nations are poor.

Working Hypothesis No. 5: Among foreign subjects, those who are committed to returning home to join in the development effort would rate their training as less relevant to their needs than those without this commitment (questions 11, 12 and 35-55).

Rationale: It has been clearly pointed out earlier (under the theoretical framework section) that practices regarded as the norm in one culture may not be so in another and models successfully employed in one may fail dismally in another. In the transfer of training section, the effect of context was regarded as strong. The more different they are, the greater is the likelihood that the programs offered would be irrelevant, unless this factor is carefully considered in drawing up the programs.

Working Hypothesis No. 6: Subjects from nations that are not yet highly industrialized would rate their training as less relevant to their needs than others (questions 35-55 and 59).

Rationale: In spite of socio-cultural differences that may exist, nations that are industrialized would relate more to the programs offered in the school than those which have not yet attained this level of advancement. The interest here is to see how the views of subjects from Canada, Australia and other European countries compare with those from the U.S. It would be essential to know what differences, if any, there would be in the views of subjects from emerging powers from non-Western nations such as China and Japan in

the far East, Iran in the East, Nigeria in Africa, and Brazil in Latin America when compared with those from the U.S.

Working Hypothesis No. 7: Foreign subjects who have not spent enough time to become very familiar with the U.S. educational system or the people's life style would rate their training as less relevant to their needs than others (questions 9, 10 and 35-55).

Rationale: The theory of dissonance postulates that the more resources of time and toil one invests on a task, the more valuable it tends to become and the less inclined the individual would be in "seeing" what is "wrong" with it. So, it is anticipated that foreign subjects who have spent at least five years in the U.S. or who had their bachelor's degree in a school in the U.S. would tend to relate more with the programs offered than others.

Working Hypothesis No. 8: Foreign subjects who believe in relying on self-generated effort in promoting development would rate their training as less relevant to their needs than those without this orientation (questions 14 and 35-55).

Rationale: Dissonance theory equally applies here. The more inclined one is to rely on external aid and the Western model of development, the more one would view the programs offered favorably. Those who are "westernized" in their orientation would be expected to look to Western culture, society and strategies of modernization as a reference model.

Working Hypothesis No. 9: Subjects with three years or more of full-time work experience in administrative or professional capacity would rate their training as less relevant to their needs than those with less than three years of full-time work experience (questions 4,

5 and 35-55).

Rationale: In the "training for transfer" section of the theory commented on earlier, emphasis was laid on practical application of rules and strategies in a variety of situations if transfer is to be ensured. Similarly, the amount of exposure one has to the world of work would significantly help in making a realistic assessment of which needs would be relevant and which would not. Hence, it is anticipated that those with this experience would be better placed in discerning the relevance of their training to their needs than the others without this experience.

Working Hypothesis No. 10: Subjects with jobs or clear career goals would rate their training as less relevant to their needs than others (questions 6 and 35-55).

Rationale: Those working full-time or on leave of absence expecting to return to the job, or have clearly defined their career goals by the time they entered their programs, have a reference point against which the relevance of their training could be conveniently measured. So they are better placed to "see" the utilitarian value of the programs which they are going through.

Working Hypothesis No. 11: Of the ten colleges samples, subjects from the other nine would rate their training as less relevant to their needs than subjects with majors in Agriculture and Natural Resources (questions 1 and 35-55).

Rationale: Michigan State University was originally established as a land grant agricultural college. Today the dominant role played by agriculture is shown through the extensive academic, professional and service oriented programs provided by the college. No other college

in the university commands as much attention and resources. With this advantage, it is anticipated that subjects from this college are likely to derive greater satisfaction from their programs when compared with others who did not share this privilege.

Working Hypothesis No. 12: Subjects who are thirty years or older would rate their training as less relevant to their needs than those who are under thirty years of age (questions 35-55 and 56).

Rationale: Age is an important factor to consider when examining the question of experience in many aspects of life: work, education, etc. The older one gets, the more one is exposed to the game of human survival and the better placed one becomes in making an informed evaluation of what would be relevant to one's needs.

Working Hypothesis No. 13: Subjects who rate the content of their programs, the overall performance of their academic advisors and instructors as average or lower would also rate their training as less relevant to their needs than others (questions 51-53).

Rationale: In human relations, the positive effect of high empathy, warmth and respect from helper to helpee has been established. Similarly in communication theory the necessity for a high level of "homophily" between two engaging in an interaction is emphasized if meanings are to be shared. If the advisor provides genuine support and encouragement in time of need, the positive feeling which emanates from this interaction may rub off on the program.

Working Hypothesis No. 14: Subjects who either did not or were not allowed to play a major role in drawing up their programs would rate their training as less relevant to their needs than others who were not so affected (questions 49 and 50).

Rationale: The theory of cognitive dissonance also applies here. Subjects who had a major hand in drawing up their programs would be expected to give careful consideration to courses and other activities likely to help in the realization of their objectives, given the resources available. Consequently, they would be less inclined to condemn what they have prepared and would be unlikely to see the shortcomings inherent in such programs.

Working Hypothesis No. 15: Subjects who are financially supported (by scholarship, fellowship, etc.) would rate their training as less relevant to their needs than those who pay their own fees (questions 7 and 35-55).

Rationale: The theory of dissonance would be called into play here as well. Because those who pay their fees have a personal investment of their hard earned money in addition to time in the undertaking, they would strive to derive maximum benefit from it. One would expect them to examine the usefulness of courses they pay for more than those who are financially supported, thus eliminating a good measure of the irrelevance.

Working Hypothesis No. 16: Subjects who grew up in a rural setting in their countries would rate their training as less relevant to their needs than those from an urban setting (questions 35-55 and 60).

Rationale: The explanations offered for Hypotheses 4 and 6 above would apply. The higher the social class of majority of people in a given society, the more urbanized they tend to become; similarly, the more industrialized, the more urbanized. Since a majority of Americans live in urban environments and Michigan State University is also located in an urban setting, the programs provided would

reflect this reality. As those who train in them would be expected to function in urban settings, others who look forward to operating in rural settings may not receive adequate attention. It is therefore of interest to see if the responses of subjects from this setting would back up this speculation.

Working Hypothesis No. 17: Subjects whose overall evaluation of graduate programs at MSU is rated as fair or worse would also rate their training as less relevant to their needs than others (question 55).

Rationale: When individuals make favorable or unfavorable comments about something which is to be evaluated, it is, in large measure, a reflection of how their interests are affected by it. The programs are hardly going to be rated as good or better if from their experiences, their needs have not been well served.

Working Hypothesis No. 18: Subjects with less than 3.26 GPA would rate their training as less relevant to their needs than others not in this category

Rationale: A major reward mechanism in the assessment of student performance in their training programs at MSU is the grade point average (GPA). Those with high GPAs are expected to derive satisfaction from this accomplishment and may be less inclined to consider their training as less relevant than those who did not share this experience.

Definition of Terms

Attitude will be used in this study as Milton Rokeach defined it in the Encyclopedia of the Social Sciences:

An attitude is a relatively enduring organization of interrelated beliefs that describe, evaluate and advocate action with

respect to an object or situation, with each belief having cognitive, affective and behavioral components. Each one of these beliefs is a predisposition that, when suitably activated, results in some preferential response toward the attitude, object or situation, or toward others who take a position with respect to the attitude itself. (p. 145).

Emphasis would be laid on the cognitive aspect of the definition especially the extent to which subjects perceive their training as useful or otherwise.

Brain Drain would be used as Walter Adams succinctly defined it in the introduction to the subject in his book The Brain Drain:

The term itself is loaded, pejorative, suggestive of loss of a vital resource, without compensation. This interpretation is supported by illustrations that seem to show that human capital, as a strategic resource, is flowing out of economies that need it most into economies already well supported with trained, capable, scientific and administrative personnel. (p. 1)

He then illustrated with many examples, one of which was:

France takes pride in her aid to former colonies, yet the new state of Togo has sent more physicians and professors to France than France has sent to Togo. (p. 2)

Change Agent: Everett Rogers in Communication of Innovations defined the change agent as a "professional who influences innovation-decisions in a direction deemed desirable by the change agency" (p. 227). His emphasis on his playing the role of a link between two systems is pertinent here. "As a bridge between two differing systems, the change agent is necessarily a marginal man with one foot in each of the two worlds" (p. 229). The term is conceived broadly to incorporate all architects of change. In agreement with the Havelocks, the term also recognizes that the change is not a haphazard but a planned one. Therefore, all graduate students enrolled in disciplines that are change oriented are the potential "change agents" with which the study would deal.

Change (especially Social Change) was defined by Rogers as "the process by which alteration occurs in the structure and function of a social system" (p. 7), and he proceeded to define social system as "a collectivity of units which are functionally differentiated and engaged in joint problem-solving with respect to a common goal" (p. 28). The study seeks to examine how foreign students trained abroad could become instruments for what he termed induced immanent change. "Immanent change" he also defined as occurring "when members of a social system with little or no external influence create and develop a new idea, which then spreads within the system" (p. 9). The factor of contact through training then constitutes the element of inducement (see the foregoing paragraph under "theoretical framework").

Culture: Benjamin Wolman's definition in the Dictionary of Behavioral Science would apply in this study. He described culture as "The totality of manners, customs, values, of a given society, inclusive of its socio-economic system, political structure, science, religion, education, art and entertainment" (p. 85). The theory of cultural relativism which is closely associated with this concept has been dealt with earlier under "theoretical framework."

Developing Nations: This term is used for want of a better one. So is the opposite term--"Developed Nations." The latter carries a connotative meaning of a static condition or that the nations so described have reached the top of the coveted plateau and would remain there until the "developing nations" climb up to join them. If change occurs all the time and all societies and cultures are dynamic, then all nations are "developing." In this study, developing nations would refer to those states, though lacking in most of the resources and the

strategic know-how to promote their effort in the direction of modernization, nevertheless demonstrate a commitment toward realizing this goal. They are generally characterized by cultures which place heavy accent on humanistic values as contrasted with technological values characteristic of Western nations. A large number of these nations, at some point in their past history were colonial territories to some European nations.

Development as used here refers to "change at the social system level" defined by Rogers and Shoemaker³⁶. Very pertinent is his (Rogers)³⁷ revised thinking on the topic. He defined development as:

A widely participatory process of social changes in a society intended to bring about both social and material advancement (including greater equality, freedom and other valued qualities) for the majority of the people through their gaining greater control over their environment.

The most concise definition which has the most appropriate application in this study is provided by Adiseshiah:

Development is rightly defined as growth accompanied by change. It is important not to destroy the unity of these two aspects of a single process which must be closely linked in action, with growth invoking change of structure which in turn will promote growth. Such changes which are necessarily slow, require action in depth which in the final analysis, amounts to developing human resources through education and training. The latter are the main prerequisites for the development of abilities of each individual and for the participation of all in the introduction and application of science and technology which are a driving force of progress in modern civilization.³⁸

Education as used in the study would refer to the transmission of attitudes, beliefs, values, and accumulated knowledge and skills involving the physical, mental, and moral development of the individual. This is broad enough to incorporate the concept of training. In short, education would be viewed as an instrument for the socialization of the young and the framework within which their enculturation would be accomplished.

Foreign Student would be used in this study to describe a non-U.S. citizen enrolled in courses of study at Michigan State University. When describing them as a group the term "foreigners" would be used interchangeably with "foreign students."

Homeostasis would be used as Cannon described it in his article "Self-Regulation of the Body" in Buckley's (ed.) volume Modern Systems Research for the Behavioral Scientist but the meaning of the concept would be applied to the social system. Quoting the definitions of Pfluger, Fredericq and Richet, he explained that living beings have to maintain a steady state (stability) if they are to survive the vicissitudes of the environment. Like the living organism, the social system is "open." Its capability to adapt is a necessary condition for stability. And unless stability is maintained, the negative forces from its environment are strong enough to bring not only its disturbance but its eventual destruction or what Schrodinger described as "maximum entropy" or "inert state of equilibrium" (closed system) (Buckley, p. 144). The learned patterns of reaction described by Schrodinger as "negative entropy" help the organism to stay alive. The same can be said of the social system.

Knowledge as employed in this study would refer to access not only to information but the appropriate kind of information which would make the learning experience meaningful and rewarding. A useful change agent training is expected to ensure acquisition of knowledge for tackling problems of social change by teaching the techniques of information packaging, retrieval, dissemination and utilization, and how to marshall human resources to this end.

Learning would be used as Hilda Taba defined it, especially in

the social context, in Curriculum Development: Theory and Practice as "the way in which an individual acquires socially standardized behavior. Among these are not only the approved ways of behaving and believing but also mode of thought and concepts which direct perception and understanding."

Perception: The definitions in the Dictionary of Social Science by Bartley and Allport are pertinent to the use to be made of the term in this study. "The changed relationship between the organism and external world of objects which is brought about by the assignment of meanings to the previously new and undefined sensory experiences." The social system would be viewed as the collective organism in this respect. Bartley sees the term as occupying an intermediate position between simple and complex behavior, while Allport describes it as "the way things look to us, or the way they sound, feel, or smell." Quoting Hallowell in Sherif's Social Psychology, Herskovitz showed the meaning of perception within the framework of culture:

Dynamically conceived, perception is one of the basic integral functions of an on-going adjustment process on the part of any organism viewed as a whole. . . In our species, therefore, what is learned and the content of acquired experience in one society as compared to another constitute important variables with reference to full understanding, explanation or prediction of the behavior of individuals who have received a common preparation for action.³⁹

Race would be used in this study dichotomously to denote the dominant group in American society who are described as Caucasian or "white" and the others who are non-white. Emphasis is placed both on the biological component and on the social aspect of the interpretation. One of the study's key questions is to find how the racial differentiation of other subjects relate to or differ from that of the dominant

group (in the American society). As the dominant group is assumed to be the main beneficiary of the programs of graduate training provided by the school, it would be of interest to know how much of non-white interests are catered to in the programs.

Re-entry Shock is used to describe the reactions which foreign students register when exposed to their cultures after a period of absence from them. In many cases the reaction is negative and if it persists over a long period may be instrumental to the decision on the part of those who experience it, to return to the host country or go elsewhere. It is generally agreed that fear of "re-entry shock" or the actual experience is one of the major factors accounting for the "brain drain."

Relevance: This term is multi-dimensional in scope but for the purpose of this study, would be used as Bruner interpreted it in The Relevance of Education. He described it as the "thumb-worn symbol in the modern debate about the relation of education to man and society." He then went on to explain:

The word has two senses. The first is that what is taught should have some bearing on the greivous problems facing the world, the solution to which may affect our survival as a species. This is social relevance. Then there is personal relevance. What is taught should be self-rewarding by some existential criterion of being "real" or exciting or "meaningful." (p. 114)

This study would place more emphasis on the first interpretation while not ignoring the importance of the second. In addition, the study would examine the relevance of the training to the objectives outlined for it by the university. In short, the study would examine the graduate programs in terms of relevance to: 1) the school's stated objectives; 2) the graduate students' goals and backgrounds; and 3) the

social and economic needs of the non-Western world.

Skill may be defined as the effective coordination of the appropriate attitude, information with appropriate psychomotor behavior in the performance of a given task. This may range from the use of cognitive competencies in problem-solving to exhibition of manual dexterity.

Society: This term would be used interchangeably with "nation" which emphasizes a level of commitment to a common identity. As Rustow put it, it is "a human group bound together by common solidarity--a group whose members place loyalty to the group as a whole over any conflicting loyalties."⁴⁰

Training: A narrower interpretation of education, it is often used to describe the kind of learning associated with professional competence in a given function. An appropriate definition is supplied by the Havelocks when treating the subject of "transferability": "training implies the implanting of attitudes, knowledge and/or skills into the trainees for some good purpose, or a combination of good purposes."⁴¹ The "purpose" in this study would be meeting students' individual goals, and by inference through their future change agent roles, meeting the goals of society. In short, the study is interested in the social goals likely to be served by the individual's training. The narrower scope of this term lies in the exclusion of "moral development" from the functions. It cannot be gainsaid that the goals of society and those of the individual have to be congruent with each other for the desired progress (development) to take place.

Organization of the Rest of the Study

Chapter II which follows would be devoted to a review of literature and research studies done on the subject of foreign students' training in the U.S. Emphasis would be laid on that portion which is most pertinent to this study which is: the "relevance" of the content of what they learn, how they are using the acquired knowledge and skills in the field and how they feel about the two phases--the learning, and the application aspects. To bring the point home to the population directly involved in the study, the contributions made to knowledge on the subject from Michigan State University would be carefully summarized with emphasis on how much attention has been devoted to the part of the subject central to this study. A chronological order would be observed in presenting the information so as to place them in perspective to other events occurring at the same time.

Then, studies on the change process and the role of "change agents" are to be reviewed with emphasis on what the procedures should be in training the agents to ensure their maximum effectiveness.

Chapter III will deal with the "design" and "methodology" involved in the study. The population affected would be defined and the sampling procedures employed carefully explained. Reasons would be offered for the adoption of survey methodology and the steps taken to develop the instrument used would be outlined. The actual conduct of the survey would be briefly described pointing out factors which facilitated or hindered the exercise. Finally, the statistical analysis to be employed would be explained.

Chapter IV would be devoted to the analysis and interpretation of the data which are expected to be reported in charts and tables.

The hypotheses tested would be examined for results that make any difference.

Chapter V in the usual tradition, would cover summaries and conclusions about the study. Some recommendations would be made based on the findings of the study and the implications of this for further research would be examined.

The rest of the report would contain "references" made in the study and an appendix of documents or information (relevant to the conduct of the study) which may help other researchers or critics to make a fairly objective assessment of the findings.

FOOTNOTES TO CHAPTER I

¹John W. Hanson and Cole S. Brembeck. Education and the Development of Nations (New York: Holt, Rinehart & Winston, 1966), p. vi.

²Emma Walker Schulken. "A History of Foreign Students in American Higher Education from its Colonial Beginnings to the Present: A Synthesis of the Major Forces Influencing Their Presence in American Higher Education," Ph.D. dissertation, Florida State University, 1968.

³Cummins E. Speakman, Jr. International Exchange in Education (New York: Center for Applied Research in Education, 1966).

⁴Otto Klineberg. International Educational Exchange: An Assessment of Its Nature and Its Prospects (Mouton: International Social Science Council, 1976), pp. 200-201.

⁵Madison Kuhn. Michigan State: The First Hundred Years--1855-1955 (East Lansing: The Michigan State University Press, 1955), p. 468.

⁶Annual Report: "International Studies and Programs: Michigan State University" (East Lansing: Office of International Studies and Programs, 1973), p. 31.

⁷"Our Numbers Grow." News and Notes, Foreign Students--Foreign Scholars, Vol. 6, No. 2 (Nov. 1977), p. 1.

⁸Robert H. Davis et. al. Commitment to Excellence: A Case Study of Educational Innovation (East Lansing: Michigan State University Press, 1976), p. iii.

⁹"The University and World Affairs" (East Lansing: International Studies and Programs, 1976), p. 6.

¹⁰"International Programs for the Seventies: A Review of Activities and Program Priorities for the Future" (East Lansing: Office of International Studies and Programs, 1970), p. 6.

¹¹"Admissions and Student Body Composition: The Report to the President of Michigan State University" (East Lansing: Michigan State University, 1971), p. 41.

¹²a) UNESCO Fellowship programs to Indian, Iran, Japan and Cameroons, evaluated, showed these results.

b) Bradford Morse, the UNDP administrator, presented a paper on campus fall term 1977 dealing squarely with this problem.

c) Erskine Childers, Director of Information, UNDP, in a recent article entitled "Facing the Challenge of Contact Deprivation" in the Dec. 1977 issue of Intermedia (Vol. 5, No. 6), pp. 11-14, stressed the same point, adding that the UN in its 1974 New International Economic Order advocates more interaction between developing nations since they share similar problems) as an alternative to the current practice.

d) Wilber Schramm and David Lerner. Communication and Change: The Last Ten Years--And the Next (Hawaii: University of Hawaii Press, 1976), pp. 15-59.

e) George A. Axinn. "The Development Cycle: New Strategies from an Ancient Concept," International Development Review, Vol. 19, No. 4 (1977), pp. 9-15.

¹³August G. Benson and Joseph W. Kovach. A Guide for the Education of Foreign Students: Human Resources Development (Washington, D.C.: AID/NAFSA, 1975), p. iv.

¹⁴a) Walter Adam. The Brain Drain (New York: Macmillan Co., 1968).

b) Man Singh Das. "The 'Brain Drain' Controversy in a Comparative Perspective," Social Science 46 (Jan. 1971), pp. 16-25.

c) William A. Glaser. Brain Drain and Study Abroad (New York: Columbia University, 1974).

¹⁵Some of the studies asking questions about, or recommending the need for relevance in the reevaluation of existing practices include:

a) Otto Klineberg. International Educational Exchange (Mouton: International Social Science Council, 1976), p. 204.

b) Alberto Regueira. "Educational Courses in Economic Development: Some Characteristic Aspects," Analise Social 4 (1966), pp. 315-319.

c) The Tenth Mohonk Consultation with International Students. A Proposal for Pre-departure Seminars (Mohonk Lake, New Plaza, New York: The Mohonk Trust, 1973).

d) College Entrance Examination Board. The Foreign Graduate Student: Priorities for Research and Action: A Summary of a Colloquium held at Wingspread, Racine, Wisconsin, 16-17 June 1970 (New York: 1971).

¹⁶Keith Goldhammer. "Dean's Message," College of Education Alumni Newsletter, Michigan State University, Spring 1977, p. 2.

¹⁷Karl Mannheim. "The Nature and Scope of the Sociology of Knowledge" in James E. Curtis and John W. Petras (eds.), The Sociology of Knowledge: A Reader (London: Gerald Duckworth & Co., 1970), pp. 109-130.

¹⁸William J. Asher. Educational Research and Evaluation Methods (Boston, Toronto: Little, Brown and Company, 1976), p. 135.

¹⁹T. Parsons. "Some Considerations on the Theory of Social Change" in S. N. Eisenstadt (ed.) Readings in Social Evolution and Development (New York: Pergamon Press, 1970), pp. 95-139.

²⁰Everett M. Rogers and F. Floyd Shoemaker. Communication of Innovations: A Cross-Cultural Approach (New York: The Free Press, 1971), pp. 6-18.

²¹David Berlo. The Process of Communication (New York: Holt, Rinehart & Winston, 1960), pp. 40-72.

²²Berlo, ibid., pp. 190-216.

²³C. E. Osgood. "Probing Subjective Culture," Parts I and II, Journal of Communication, Vol. 1 (1974), pp. 21-35 and Vol. 2 (1974), pp. 82-100.

²⁴Don Fabun. Communications: The Transfer of Meaning (Beverly Hills, California: The Glencoe Press, 1968), p. 31.

²⁵Melville Herskovitz. Cultural Relativism: Perspectives in Cultural Pluralism (New York: Random House, 1972), p. 15.

²⁶Wilbur Schramm and Daniel Lerner. Communication and Change: The Last Ten Years and the Next (Hawaii: The University Press of Hawaii, 1976), p. 46.

²⁷Herskovitz, op. cit., p. 11.

²⁸Ibid., p. 22.

²⁹Rogers and Shoemaker, op. cit., pp. 325-326.

³⁰Herskovitz, op. cit., p. 71.

³¹Ernest R. Hilgard and Gordon H. Bower. Theories of Learning (New Jersey: Prentice Hall, Inc., 1975), p. 283.

³²Robert M. W. Travers. Essentials of Learning (New York: Macmillan Publishing Co. Inc., 1977), pp. 395-396.

³³Ibid., p. 417.

³⁴Ibid., p. 400.

³⁵Ronald G. Havelock and Mary C. Havelock. Training for Change Agents (Ann Arbor: The University of Michigan Press, 1973), pp. 59-84.

³⁶Rogers and Shoemaker, op. cit., p. 11.

³⁷Everett Rogers in Reviews in Anthropology 2 (1975b), pp. 345-358.

³⁸Malcolm S. Adiseshiah. It is Time to Begin: The Human Role in Development: Some Further Reflections for the Seventies (Paris: UNESCO, 1972), p. 11.

³⁹Herskovitz, op. cit., p. 18.

⁴⁰Dankwart Rustow. Encyclopedia of Social Sciences, Vol. 5, p. 7.

⁴¹Havelock and Havelock, op. cit., p. 46.

CHAPTER II

REVIEW OF LITERATURE

"I have always thought the actions of men the best predictors of their thoughts."

--John Locke

Introduction

The review of literature for this study will be undertaken using the two key concepts around which the study is designed. The first concerns the issue of "relevance." Studies dealing with foreign students would be broadly examined especially as their interests are affected in the United States. Within this framework, the review would concentrate on those that touch on the issue of relevance and the extent to which it is treated. The findings and recommendations made would be summarized. A closer look will then be taken of the trend at Michigan State University with a view to discovering how close to or further away from the national scene the research effort in the school (on the subject of foreign students) has been. A chronological perspective would be observed for the MSU review, so as to make the research efforts easier to place within developments in the U.S. and around the world. This, hopefully, would increase the significance of the contribution to knowledge on this subject, and the pertinence of recommendations made either to improve conditions or for further research. The second aspect of the review would deal with research on "change agents" especially what findings are regarded as significant regarding

steps to take in training them to ensure a most effective performance in their respective professional roles. The importance of this section can be appreciated when it is realized that this review would serve as a reference point against which the results of the study would be measured. It is expected that readers' understanding of the recommendations to be made in the light of these findings would be improved.

Research on the Subject of Foreign Students in the U.S.

There is abundant evidence to show that a very extensive quantity of research has been done on this subject. One only needs to consult sources such as Maegher¹, and Tysee² for exclusive bibliographic compilation. Others have taken the time to evaluate a large volume of available literature accompanied with valuable bibliography. Such efforts include Cormack³, Breitenback⁴, Du Bois⁵, Cussler⁶, Spencer⁷, and Walton⁸. By far the most comprehensive evaluative treatment of this subject comes from Spaulding and Flack⁹ with 433 of the citations concisely annotated and over 100 (unannotated) listed as "additional references." The last volume focused primarily on the period from 1965 to 1974. The general features that emerged were divided into seven categories, described by Spaulding and Flack as: a) quantitatively large; b) methodologically uneven; c) conceptually and theoretically unfocused; d) topically wide-ranging but seldom interrelated; e) in results and findings, diverse, sometimes contradictory, and only in some instances significant or original; and f) in policy recommendations, broad, seldom mutually related, encompassing a wide spectrum, and within it emphasizing some recurrent themes while ignoring others.¹⁰

As there was intensification of the effort to encourage international exchange in education after World War II, a significant increase in the population of foreign students visiting the U.S. resulted. Following this increase was a curiosity to know how the foreign student felt about the U.S. Even today, over thirty years later, the tendency to ask a foreigner how much he liked the U.S. is still very popular. It is therefore not surprising that most of the research done in the late forties, fifties, and early sixties were concerned with foreign students' attitudes, the image of the U.S. as they perceived it, as well as how they proceeded to adjust to conditions in the host country. Cormack put it in proper perspective when describing the human side of the U.S. experience in World War II as analogous to the G.I. who married an Italian girl with a misunderstanding setting in as soon as the latter could communicate in English! She then remarked

We were still in the exchange kindergarten in the late 1940's, however, and understanding was scarcely evoked for conjugal relations. The U.S. government exchange programs were frankly designed to increase exposure to life American-style, a favorable image the ipso facto result. As our international status became more secure and our responsibilities more clear, most programs were increasingly devoted to the accommodation of students from developing countries. The major purpose, thus, shifted to "helping others help themselves" through intellectual technical assistance at home and abroad. . .As increasing numbers of foreign students came to the United States, foreign student advisors and community volunteers actively involved in their accommodation became interested in their "adjustment"...¹¹

Among the many studies dealing with the subjects of foreign student attitudes, adjustment and social relations, those of Du Bois¹² and Selltiz¹³ stand out. Hardly is any research involving this topic undertaken without due homage to them. Du Bois, in her study examining factors affecting the adjustment of foreign students, postulated four phases of adjustment characterized by high expectation (peak) at the

start, frustration (depression) and high expectation (peak) toward the end of the sojourn. The work of Lysgaard¹⁴ brought out the "U curve" hypothesis which has been researched more than any other phenomenon in studies involving foreign students. Coelho¹⁵ described the low point at the end of the first year as characterized by "culture crisis." Gullahorn and Gullahorn¹⁶ extended this hypothesis by suggesting a "W" curve since, they contend, the process of adjustment back to their own culture follows a similar pattern. Since a large number of Peace Corps volunteers have not experienced this adjustment process when they went abroad, and some foreigners whose background and cultural values were close to that of the U.S. did not report this experience, it has been suggested that the preparation and training which they go through may be an influential factor in by-passing this experience. It all shows the kind of result which extensive research on the same subject can bring. Walton¹⁷ provides a concise summary of research on attitudes toward the U.S. from studies by Gardner in Beacon of Hope¹⁸, Selltiz et. al.¹⁹, Morris and Davidsen²⁰ when she said:

Americans as people are definitely liked. It is important to Americans, the social scientists tell us, that this be so and encouraging to find that it is.²¹

She, however, qualifies that the

generally favorable reactions to American life and society do not carry over to the United States as a political entity or to American foreign policy²²

as shown in the studies by Du Bois (1956), Riegel (1953), Gardner (1960) and Pool²³. Though a number of important factors have been advanced as determinants of attitudes about the U.S. in the foregoing studies, it is in Selltiz (1963) that the importance of the factor of the foreign

students' background (socio-cultural, etc.) was revealed. The study's findings were put in perspective in chapter 9 (with the same title) which carefully integrated it into existing major studies (pp. 242-297).

√ Another aspect of the foreign students experience in the U.S. is the "brain drain" (or is it "brain gain"?) problem. This topic attracted the largest literature review in Spaulding and Flack (see page 514, 76 citations). The debate has brought the topic in sharp focus to such an extent that one hears of the "push-pull" factors in examining what causes the foreign student to remain in a host country. The list often includes being young, spending an extended period of time in the country, limitation in employment opportunities, and the attractive offers to be commanded in the host country, by comparison. Contributions by Das²⁴, "Committee on International Migration of Talent" chaired by Charles Kidd²⁵, Cervantes²⁶, Asher²⁷, and Baldwin²⁸ are a few of the many studies that illuminated the subject. As a result of these studies, a better understanding of the problems involved in international migration of talents was developed. Another issue that attracted the attention of researchers at a later date was that of the academic performance of foreign students. It has been found in many studies such as those by Uehara²⁹, University of South Carolina Office of Admissions³⁰, Burgess and Mark³¹, Burke³², and Martin³³ that proficiency in English language is a reliable predictor of academic success. Spaulding and Flack reviewed other studies showing the influence of other factors affecting their performance (see page 514 for the list). In the study conducted by Clark³⁴ involving 144 Ghanaian students, factors influencing academic achievement and satisfaction included government, financial support, being 30 or older, married

and not expecting to stay longer than 3 years in the U.S. Ohuche's³⁵ study dealt with the same subject. He ran a survey among 1,426 undergraduate and 456 graduate Nigerians in the U.S. and found out that previous educational background was not an accurate predictor of academic achievement even though those with higher school certificates performed better than those without it. There was no difference in the performance of graduates who obtained their first degrees in Nigeria compared to those who had it in the U.S. What is reassuring is the evidence that given a good mastery of English language, in spite of differences in educational and socio-cultural background, foreign students by and large perform just as well as American students in their chosen fields.

By comparison with the above examples, what seems to be the most important reason why foreign students seek education abroad--to obtain the kind of education needed for discharging responsible functions in their societies--has not received adequate attention among researchers. Walton pointed this out clearly in her opening paragraph under the title "What Students Learn and How They Use It"³⁶:

From the literature it is difficult to determine what specific gains in knowledge are made by foreign students in the United States, although it is clear that students are attracted here because of an expectation that they will acquire knowledge Scott (1956)³⁷, Beals and Humphrey (1957)³⁸, Rathore (1958)³⁹, CRS-Tokyo (1958)⁴⁰.

It can be observed that attention has been drawn to this aspect of the problem of foreign student education in the U.S. The most concise description of the problem is presented by Wharton⁴¹ (1959), and Klineberg⁴² (1976). Wharton employed the logic of transposition when describing the magnitude of the problem confronting foreign students

specializing in Agricultural Economics. He remarked:

The major criticism of their U.S. experience is that most U.S. courses are devoted to solving U.S. problems which are totally dissimilar from those of Asia. (p. 13)

And he went on to ask:

How well would the average American student perform if he were required to study toward a Masters or a Doctoral degree in an Asian institution where the lectures are given in an Asian language, where the textbooks are written in strange Oriental characters, where the subject matter and examples are non-Western or alien, and where the whole method of instruction, relationship between teacher and student, and contact between student and student are entirely different? (p. 14)

Almost twenty years after this question was asked, the same note was sounded in the comment made by Klineberg:

Graduates of universities in a developing country (A) arrive to do advanced work in a large university in a highly industrialized country (B). The educational program in B is geared to the interest and occupational opportunities of its own nationals; the visitors may (and often do) feel that what they are taught is irrelevant to their own needs and to their country's future. (p. 260)

And he went further to explain:

In the case of the United States, for example, the important question is raised as to whether the difficulties encountered by many foreign students may be due to the fact that education is oriented to the American situation, and whether the curriculum should be revised so as to make it more relevant to the needs of foreign students. Certainly very little has so far been done in this respect, and decisions as to whether, when and how such modifications should be introduced pose very difficult problems for professors and administrators.

He pointed out the global dimension of the problem when he said:

In a recent study of students from developing countries now attending universities in Europe (Klineberg and Ben Brika, 1972), it was found that many of them complained in the very terms raised in the American reports; the training received was felt to be too remote from the tasks they would be called upon to perform on their return to their own country. In France, Austria, and Yugoslavia large numbers of these students feel frustrated because of the irrelevance of their studies. (p. 14)

From the foregoing observations, it seems that the problem of American education being unsuited to non-Americans is nothing new. As important as it is, however, few studies have been devoted to examining the problem in the same vigor that is characteristic of other problems such as "Impression of U.S.," "Social Adjustment," "The Brain Drain," and "Academic Performance." Of the little literature on the topic, most were presented between 1966 and 1973. It is significant to note that this period coincides with the period of social unrest in the country when students and minorities were protesting inequities and demanding their fair share of the benefits accruing to the nation. The clamor for equal educational opportunity was accompanied by a call for "relevance" in the curricula offerings at various levels of the educational system.

When Melby⁴³ made his submission to the House Committee on Education and Labor Task Force in 1966, he identified three factors as critical to the fulfillment of foreign students' objectives in coming to the United States. The most critical of the problems encountered was the relevance of the education they received to their needs and future functions. In a similar vein, the submission by the Education and World Affairs Study Committee on Foreign Student Affairs⁴⁴ in their paper "The Foreign Student: Whom Shall We Welcome?" to the same body specifically stressed that both admission policies and training provided should consider manpower needs of countries involved and the relevance of the training in meeting such needs.

Regueira⁴⁵ in evaluating the courses designed for economic and social development pointed out that one of the faults in the program was the lack of relevance of the content to participants' countries needs.

In the effort to modify a Ph.D. program, Ronkin⁴⁶ suggested that preparation for dissertation should be undertaken with candidates on topics of relevance to their countries. Miller's⁴⁷ study which examined the on-the-job behaviors of foreign students' advisors noted that an area of weakness in the discharge of their functions was in academic advising.

Having examined training programs in Rural Sociology, Schuler⁴⁸ suggested setting up training centers in each of the regional areas of the non-Western world as a solution to the problem of irrelevance of programs offered in the U.S. and Prince⁴⁹ supported this idea by pointing out that the disparity between the world view of Westerners and non-Westerners makes it necessary to train the latter as mental health workers in a setting compatible with their world view--at home. Schmidt and Scott⁵⁰ in reviewing the major problems involved in the agricultural training of non-Westerners in Western countries, pointed out the lack of relevance of such training to the needs of the visitors. The Tenth Mohonk Consultation with International Students⁵¹ offered a proposal for Pre-departure Seminars which was advised to be integrated into the curriculum to ensure participation because of what was believed to be the inadequacy of U.S. education in equipping the foreign student with what is needed to apply the skills acquired when they get home.

A few exceptions where satisfaction was expressed regarding relevance of training came in studies involving Asian students. Johnson's⁵² findings came from the interview of 38 Asian alumni of the University of Oregon. None complained about the relevance of quality of education received. Another study sponsored by the East-West Center⁵³

also dealt with 36 Asian alumni of the University of Oregon. They were equally satisfied with their training, regarding it as relevant to the Asian situation.

The study by Swan⁵⁴ examined how Filipino graduate students in Agriculture and Home Economics perceived the objectives, policies, and procedures of their training. These views were compared with those of their academic advisors and senior officials in their home countries. It was shown that a consensus on these views resulted in satisfactory performance among participants. Even though no direct mention was made of "relevance," the consensus from the three groups is a clear indication of relevance of the program to the students interviewed.

While major concern for the relevance of programs has received a lot of attention in such programs in which agencies and government were involved, it seems that few universities have taken it upon themselves to examine this very closely. Spaulding and Flack made an appropriate observation on this question:

The paucity of research on foreign students' perception of quality and relevance of academic programs would appear to reflect the somewhat limited approach to dealing with foreign students in the academic departments of most colleges and universities.⁵⁵

The MSU Tradition in Research Involving Foreign Students

A brief survey of research conducted at MSU since the end of World War II on the subject of foreign students bears a very close similarity, trend-wise, to the foregoing national review.

A study of Latin American students in 1946 by Brothers⁵⁶ asked the opinions of the U.S. which the respondents viewed favorably. In

her summary, however, she was disappointed by their reactions regarding economic cooperation with the U.S. and she remarked:

The fact that the majority of the trainees went back from this country wanting to develop complete economic independence on the part of their own countries is a negative result of the Agricultural Training Program. . .As many of the trainees will be leaders in the fields of agriculture and economics. . .it is disappointing that they did not see the need for developing inter-American trade relations. . . (pp. 91-92)

Cardwell⁵⁷ (1951) examined the adjustment and adaptation level of a group of Hawaiian students on campus through interviews and observer participation. Evidence showed that they could cope very well.

Asar⁵⁸ (1952) wanted to know what images of India and U.S. a group of Indian students had. The positive image of the U.S. emerged. The same can also be said of the follow-up study on Latin American (30 Brazilians) students conducted by Witt⁵⁹ in 1955. Her interview of the students at home still yielded a positive impression of the U.S. During the decade of the fifties, however, two studies were conducted by researchers associated with MSU. In 1955, the Useems⁶⁰ published the results of their now popularly quoted study of the Western-educated Indians. The significance of the study at a time when many studies were centered around how foreigners viewed the U.S. lies in its bold venture in examining the consequences of Western education on the non-Westerners. Its findings were among the first to shed light on the question of relevance since it was noted that few (less than 10%) of the trained hands were employed in the field they trained for and their capacity to be innovative was limited. Their recommendations which called for flexibility in curricula to ensure relevance are no less valid today than over twenty years ago when they were offered. They suggested:

...if the foreign student is older and is either on leave from a position or knows exactly where he will be employed upon his return, then specialized training, oriented toward the cultivation of specific skills applicable to the Indian position he'll be returning to are called for. . . (p. 209)

They went further to add that younger students or those without a career receive training employing a methodology where "principles" and "practical experience" are emphasized.

Four years after this publication, the results of another important study conducted by Wharton⁶¹ (who later became the President of MSU, 1970-77) was released. It dealt with the problems encountered by Asian students in a specific field--Agricultural Economics. Its analysis, conclusions and suggestions for improving programs for training Asian students titled "Possible Remedies" (pp. 47-53) are still valid today. For instance, his suggestion bearing on the question of relevance in curricula emphasized the point that

The experience of non-American agriculture should be welcomed. Professors should be encouraged to raise their sights to problems other than those of their state or even the United States. Administrative and promotional recognition should be given for overseas service in the same fashion as any other self-improvement activity. The benefit to the profession and to knowledge would be considerable. "American agriculture is not world agriculture" cannot be stressed too frequently. To teach courses in ignorance of related phenomena in other parts of the world is myopic in the extreme. (p. 50)

The decade of the sixties brought many studies and reports which were very enlightening as they deviated from the old traditional path of examining attitude and adjustment. The contribution by Higbee⁶² came at such an opportune time when a new cadre of professionals, whose tasks would be the exclusive welfare of foreign students, started to emerge in the administrative personnel list of many colleges and universities. The national survey, conducted under the auspices of the

National Association for Foreign Student Affairs (NAFSA) covered a sample of advisors, foreign students, and some university officials. Among the many measures recommended, some of which have already been implemented in many schools, was the need to devote more attention to the academic advising of foreign students with a view to ensuring relevance. That advice seems as valid now as it was seventeen years ago.

A dimension of foreign student problems not commonly addressed in research which had a bearing on the problem of relevance was the congruence between the objective and the actual education received. Sheneman⁶³ focused attention upon this study which examined foreign students who were enrolled in the schools of social work nationally. The comparison yielded results which indicated limited agreement thus leading to the suggestion often made that the school's objectives and those of the students and sponsors should be aligned together.

Koo⁶⁴ turned his investigation around by finding out how American students react to the presence of foreign students and the opportunity for contacts. A significant contribution came from Porter⁶⁵ who developed a very extensive inventory for identifying foreign students' problems. With the cooperation of 108 foreign and 50 American students, the concurrent validity of the inventory was successfully tested when it was run with the Mooney Problem Checklist College Form. The product, which was christened MISP (Michigan International Student Problem) has been used effectively in related studies.

The problem of adjustment reverberated again, this time involving subjects associated with foreign students--their wives. Diaz⁶⁶ wanted to know what factors facilitate or inhibit steady adjustment

among Latin American student' wives. Of note was the language problem and individual personality characteristics--those who are outgoing finding it relatively easier than those without this attribute. Gullahorn's⁶⁷ study dealing with reports from 5,300 Fulbright and Smith-Mundt grantees examined what she called International Communication and Professional Consequences. Though laden with heavy doses of statistical analysis, the study did not show results that could be regarded as meaningful to the problem currently being investigated.

The first study from MSU to touch on the concept of "change" and the "relevance" of training programs was conducted by Frank⁶⁸. Subjects were 381 foreign students (AID-sponsored) from 52 countries surveyed at the communication seminars intended to prepare them for their homeward journeys.

Significant to mention in the design of the study was what he called "measure of Change Agent Efficacy" which is similar in interpretation to the "potential Change Agent Role" being examined in this study. The interesting thing to note in the correlation and analysis of variance used in handling the data was the relationship established between "high expectation of success in introducing change" and "favorable attitude toward past change operations." Perhaps the finding to watch for is a high correlation between "high relevancy" of program with "high expectations of change agent ability." In short, those who thought their programs were appropriate also had high hopes of their capacity to bring change about. Though the real proof of this attribute would be shown when the students began to function at home, the positive feeling about the experience would undoubtedly be a welcome preparation for the Herculean task that would be faced. He offered a

useful description of the characteristics of those who had high expectations of their capacity to introduce change. In addition to being treated to a program that is relevant, they were comfortable with the idea about change in the past. They entertained few physical obstacles and expected their supervisors to go along with their views as far as the concept of change is concerned. The agreement of the supervisor is similar to the consensus about objectives expressed in the study by Swan among Filipino students mentioned earlier. The same meaning could be discerned from the studies about returnees reviewed by Orr⁶⁹ in which he found that the extent to which the returnee could use his training depended on the "job setting" which would include the amount of support coming from supervisors and colleagues, and the extent to which the idea of change had been supported in the past. The suggestion that a closer cooperation be established between the officials of the government or sponsor, the university, and the student seems pertinent in the light of the corroboration of results from these studies.

A volume which examined the role of education in the development efforts of non-Western nations was edited by Hanson and Brembeck⁷⁰. Though not directly related to the problems of foreign students in the U.S., it provided background information and insights about some of the many factors militating against development processes in these areas. This provides a perspective from which a better understanding of the problems of foreign students could be developed.

Studies such as Bennes⁷¹ and Satyanarayana's⁷² brought back the socio-psychological elements involved in the relationship and social interaction of foreign students and Americans, student and non-student

alike. The contributions to the literature by Benson⁷³ and Miller⁷⁴ in 1968 were significant in the focus they placed on the officer responsible for the social adjustment and academic welfare of the foreign student--the Foreign Student Advisor. An important finding which has implications for the present study was that of Miller who pointed out that the officers surveyed acknowledged doing very little in the area of academic advising--a factor which may influence the degree of relevance. The extent to which academic departments are doing a satisfactory "job" will be determined, at least at MSU, from this study.

In the same year Walter Adams⁷⁵ edited a volume on the subject of international intellectual migration which at that time was notoriously called "brain drain." The book represented a major step in the critical evaluation of the problem from a variety of perspectives. What is germane to this study, however, was the summary of the conclusions of the participants at the conference which clearly identified "irrelevance" of training programs as one of the key factors occasioning "brain drain."

Both Akutsu⁷⁶ and Guchte⁷⁷ used foreign students as subjects in carefully designed studies in communication and speech and audiology. The significance of this kind of disciplinary approach to evaluating foreign students' problems, if consistently pursued, may yield results which would help in delineating the characteristics likely to be unique to foreign students. Differences not only along disciplinary lines but also among regional groups may help in providing clues about teaching strategies likely to bring the best results with given foreign students under given circumstances.

A second study which came very close in theme to the present one (in addition to Frank's) was conducted by Ford⁷⁸ (1969). Unlike Frank's study which looked ahead at what foreign students could do with what they had (relationship between program relevance and capacity to introduce change), Ford concerned himself with the learning experience that they were going through--how their capacity to adapt was influenced by the relevance (to their needs) of what they were learning, as they perceived it. The framework for the study was set when he joined in the observations about lack of adequate research on "relevance" made by Cormack⁷⁹, Walton⁸⁰, Overton⁸¹, and others as he remarked:

There have been very few attempts to assess the academic experiences of the foreign students (and especially those from the developing nations as a distinct category) in terms of the actual or perceived relevance of what they are learning in the United States to what they will be doing once they return to their own country. . . (p. 4)

With an "in-depth interview" technique, he gathered data from 15 Asian students from the College of Education at MSU and analyzed these along three categories of adaptional style. The negative-anxious style as characteristic of those who

were highly dissatisfied with their experiences within the academic environment here. . . who have decided to quit. . . highly critical of the content of their academic programs and of their relationships (or lack of it) with members of the faculty. (p. 44)

The negative-accommodating, according to him, shares the same negative feeling but differs in their reaction:

they are less apt to place the blame for these conditions of which they are critical on the university or the faculty. . . They adapt accordingly by trying to make the best of the situation as they perceive it. (p. 45)

The positive are

those who believe what they are learning here is readily transferable to their home country and also those who have decided to remain in the United States. . . (p. 45)

The results of his investigation showed in interaction with faculty:

Ten of the students were judged as seeming to be generally dissatisfied (i.e., more dissatisfied than satisfied) with their relations with members of faculty, and of these ten, nine fell within the adaption style I and II (negative). (p. 64)

On the issue of relevance, only four of the fifteen saw "high relevance" in the educational experiences which they went through. And among the four, one adapted negatively, which showed that other factors can still bring dissatisfaction even if the content of the programs are relevant. Two of the tentative hypotheses he suggested have been incorporated into the list which would be tested in the present study. That is:

(a) If the student has waiting for him a job he wants to return to (especially one involving planning and development) he is more likely to view as low the relevance of his educational experiences in this country and to adapt in a negative way to the university environment. (abstract)

(b) The greater their opportunity for intense and meaningful interaction with faculty and other graduate students (especially encounters related to academic concerns which involve their own career goals) the lesser the tendency for these students to react to the college environment in a negative-anxious style. (abstract)

In short, those who had jobs waiting and those who interacted satisfactorily with faculty and fellow graduate students adapted positively.

Since the start of the seventies, however, studies of perception, attitude and personalities--Restivo⁸² (1971), Weston⁸³ (1973), Van Nierkerk⁸⁴ (1975); problems of adjustment (e.g. Saudi students)--Jammaz⁸⁵ (1972); patterns of interaction with Americans--Asch⁸⁶ (1975); and "brain drain"--Shin⁸⁷ (1972), Gardner⁸⁸ (1976), were prevalent. It

would be observed that the question of the relevance of foreign students' educational experiences as they study here or when they return home to use "the knowledge" so gained at home has not received the attention it rightly deserves.

The relieving notes came from a workshop, the report of which was edited by Benson⁸⁹, and the survey conducted by Mackson⁹⁰. The workshop organized by AID/NAFSA, focused on "human resources development" and a segment of the report was devoted to "Developing a Program of Relevant Education through Cooperative Efforts between Campus and Sponsor."

Mackson's study shifts gears to examine graduates of 27 Agricultural Engineering departments around the country in their respective functions in their home countries. Of the 305 contacted, only 77 responded to the questionnaire mailed out to them. This group comprised one bachelor's, 43 Master's and 24 Ph.D. degree holders, and the rest being those without degrees. The results of the survey showed that in terms of relevance of training to positions and functions, only three thought an engineering degree was not necessary. Continued professional development through information sharing on research in the field were requested by 60% of respondents while 40% requested support for additional short training programs or tours to keep abreast of developments in the field.

A point stressed which raised the question of the training's relevance to societal objectives was the need for training in "intermediate technology"--the cadre of the personnel who know how to implement the planning and development. His summary statement of the subjects' reaction took cognizance of this defect:

They feel that they were adequately trained theoretically but in general would have liked a few more applied courses. (p. 831)

Since all respondents belong in the same profession--engineers--one wonders what the reaction would be if they were from one of the branches of Social Science. What strikes one is the very favorable reaction from engineers as compared to a not very favorable reaction from students in Education as reported by Ford. This area is undoubtedly in need of further research to illuminate the peculiar characteristics of varying academic and professional disciplines.

In summary, the foregoing review of research showed a sample of the large volume of studies conducted on the subject of foreign students in the U.S. It also showed how, by comparison, very little attention in research efforts was paid to one of the most pertinent questions for justifying the utility of the exercise: the training of foreign students in international educational exchange.

Literature on the Role and Training of Change Agents

This section of the literature review will rely primarily on the works of two authorities on research on the change process--Rogers⁹¹ and Havelock⁹². Their works, Communication of Innovations: A Cross-Cultural Approach, and Training for Change Agents are significant for this review because the former took the pains to synthesize research on diffusion which includes a chapter on the change agents. Results of hypotheses that have been supported or rejected was included in the appendix. The latter went one step further to prepare guidelines for the design of programs of action for training change agents based on the results from research and the concurrence of leading scholars

of the change process.

The Rogers and Shoemaker Evaluation of Change Agents

In Communication of Innovations they outlined the role, in sequences, which the effective change agent would be expected to play. This basically is to form a link between two systems or what Ingrid Eide⁹³ termed as "link," or "bridges between two cultures." The description provided by Rogers and Shoemaker seems to fit the foreign students in their role as change agents squarely:

As a bridge between two differing systems, the change agent is necessarily a marginal man with one foot in each of the two worlds. His success in linking the change agency with his client system lies at the heart of the process of planned change. (p. 229)

Translated into the context of this study, the success of foreign students (especially those from developing nations) in becoming effective instruments of social change lies at the heart of their training goals in the U.S. The list used, which was adapted from Lippitt⁹⁴ and others (1958) and an earlier publication by Rogers and Svenning⁹⁵ (1969), covers the salient events involved in the role. A good change agent is expected to--

- a) develop a need for change,
- b) establish a change relationship,
- c) diagnose the problem,
- d) create intent to change in the client,
- e) translate the intent into action,
- f) stabilize change and prevent discontinuances, and
- g) achieve a terminal relationship.(pp. 229-230).

This is similar to the guide provided by Havelock⁹⁶ in which he listed relationship, diagnosis, acquisition, choosing, acceptance, and self-renewal as the stages through which the change agent goes with the client to ensure successful installation of the innovation. However, we will explain the seven stages outlined by Rogers and Shoemaker as they relate to this study.

a) To develop a need for change means to raise the client's level of awareness of the need to improve the existing condition. This is essential because of the general attitude of resignation which those going through the experience in the developing countries may have.

b) The initial contact for the establishment of a relationship is crucial if a lasting interaction is to develop. A bad impression such as lacking credibility or being untrustworthy is enough to kill the relationship before it starts.

c) As soon as the first two phases are established, a foundation is laid to enable the change agent to analyze the client's problems with a view to suggesting alternative measures to be taken to solve them. His capacity to do this successfully would depend on how much he can evaluate the problem from the perspective of the client. The need to be homophilous or empathetic comes in here.

d) Before the intent to change is created in the client's attitude, a measure of rapport must have been established. When the change is client-centered, he is encouraged to claim credit for bringing it about.

e) Translating the intent into action is probably the most difficult aspect of the process as this is the evidence that the client

is committed to the idea of change.

f) The dexterity of the change agent in "stabilizing the change and preventing discontinuances" would show if the logistics for installing and managing it are realistic, convenient to the client and arranged to generate a feeling of willingness to continue with it.

g) The final phase--terminating the relationship--is essential since the proof of the change agent's success is not to be needed for the change process to continue.

In terms of the present study, the foreign student needs to create the awareness of development in the citizens of his country. An awareness that no condition is too bad to improve is a prerequisite to mobilizing people about their problems. To be fatalistic in orientation is incompatible with the concept of progress. Unfortunately, a good number of people in developing nations have this inclination.

Richard de Charms and Marion Muir pointed out in 1978 edition of Annual Review of Psychology (pp. 101-103) that "learned helplessness" develops when individuals or groups discover that they are incapable of controlling the events affecting their lives. The experience is often accompanied by a tendency to give up and "live with it."

The change agent may not have much problem in establishing a relationship since he can easily be regarded as one of them--the exception is usually where one functions as a representative of a government which has a bad image with the masses. By being highly trained, a higher social class may act as a deterrent to homophilous interaction. This aspect of the foreign student's function would have to be tactfully handled.

The diagnosis of the problem can be done much more conveniently

by the foreign student since he shares part of the experience in his growth and development. The same factors mentioned above may minimize the effectiveness of his functions.

From the examples he gives in the discharge of his functions he can create not only the intent to change but also practically execute this intent. As they begin to adopt the new ideas, the genuineness of his intentions would show in the reinforcing reactions he gives. Unlike a change agent external to the system, he may establish credibility and trustworthiness and become (as part of the system) one of the opinion leaders.

The above summary suggests some qualities which a change agent should possess to play his role well. To be empathetic or homophilous with the client is indispensable. To create a positive impression means the change agent should be adept in human relations. To command a client's trust, he must be credible or at least be perceived to be credible, not only among the masses of the client system but also among its opinion leadership. Since the goal of the change agent is to interact so well with the client that he is motivated to continue without his (change agent) services, he must be an effective teacher and communicator. The extent to which the client can continue without the support of the change agent depends, among other things, on his (the client's) ability to "run the show," i.e., diagnose the problem, come forth with solutions, try them, and evaluate the results.

A dozen hypotheses have been tested in varying degrees and some of them which have been overwhelmingly supported have direct implications for this study. These are:

1. "Change agent success is positively related to his client orientation rather than change agency orientation." All the six studies dealing with this question completely support it. In short, if foreign students, as change agents, are to succeed, the relevance of their training programs to home needs (client system) is indispensable.

2. "Change agent success is positively related to the degree to which his program is compatible with the client's needs." This is still an extension of the first hypothesis. Unless training programs are compatible with home needs of foreign students, the efforts invested in the training may be doomed. All ten studies examining this hypothesis gave it overwhelming support. The other hypotheses to be mentioned are also supported even though fewer studies have tested them.

3. "Change agent success is positively related to his homophily with clients." The two studies which tested this were in support. So one would expect the training of foreign students to enhance their capacity to relate instead of alienating them from the system.

4. "Change agent success is positively related to his credibility in the eyes of his clients." Only one study has dealt with this and supported it. It seems unlikely that foreign students' credibility would be maintained or increased if after their training in the U.S., they look more like "foreigners" in their land, than legitimate citizens. The fact that so much research time has been devoted to "brain drain" and much effort is now being devoted to "re-entry" workshops and seminars to minimize the "shock" is proof that their credibility may be in question when they cannot adjust comfortably on arriving back home.

The Havelocks' Guidelines for Training Change Agents

Havelock and Havelock attempted to answer the question often asked after reading research reports--"So what?" They believed that something should be done to improve the chances of change agents being better trained to discharge their functions. The book was put together specifically to help both change agents and their trainers both in education and other fields where the products are expected to assist in bringing about improvement with less tears. The book was the outcome of the efforts at a national conference--Conference on Educational Change Agent Training (CECAT). The impressive list of participants--scholars and administrators from a variety of disciplines but with a common orientation--committed to the improvement of the quality of training for change agents. While all the chapters carry valuable information, our attention will be directed to chapters I, II, III and IV for the purpose of this study.

Chapter I dealt with what we know about the change process. This study will be specifically concerned with A and D interpretation of the change process, that is, Change as a Problem-Solving Process, and Change as a Linkage Process. It cannot be gainsaid that the training of foreign students is intended to prepare them to solve problems of their societies from their respective professional or academic perspectives. By leaving their societies to study in the U.S., they have become a "link" between their cultures and that of the West.

Chapter II dealt with goals of training. Some studies pointed out earlier indicated a lack of concensus in goal definition between the university, the student, the sponsoring agency and the home government development efforts. The problem of relevance and

transferability is discussed at an early stage so that all participants in the endeavor have a clear direction of the expected outcome. The summary (pp. 47-49) which dealt with how to choose appropriate goals is enlightening both to the trainer and to the trainee. Attention should be paid to the illustration on page 48 which delineated three dimensions of goals--the life historical (past experience) dimension, psychological wholeness (attitude, knowledge, or skill) dimension, and the transferability (individual, learning to learn and teach, and changing the back-home) dimension. The illusion that often characterizes foreign students' reaction when they suspect that their training was not geared toward the object of their mission would be greatly reduced if this outline is considered.

Chapter III provides criteria for judging the adequacy (or lack of it) of existing programs in the fifteen principles that a good training design should deal with (pp. 51-58). These are: structure, relevance, specificity, generality, reinforcement, in-process evaluation and feedback, openness and flexibility, linkage, involvement, cost effectiveness, redundancy, synergy, train for psychological wholeness, train for transferability, and compatibility. Any program that scores high on each of these principles, especially those underlined would have removed a good deal of the problems which foreign students encounter academically.

Chapter IV went further to help with directions on how a good program is to be set up or the existing one to be improved. The strategic measures suggested are of value not only to the foreign students but also to their professors, academic advisors, and the administrators who would formulate the policies. Realizing that implementation of

change in an organization that is change-resistant is a tough assignment, change agents among faculty and administration are supplied with guidelines to ensure installation within the institution.

Some of the hypotheses pointed out in Rogers and Shoemaker were further corroborated from the vote of participants on the importance of their use as propositions in the change process. From the problem-solver perspective of change, these were strongly supported (i.e., regarded as either essential or very important) (pp. 8-12).

1. "The user's needs is the paramount consideration in any planned change activity" (41 of 48 strongly supported, two questioned the validity of the proposition).

2. "Users' needs cannot be served effectively until an effort has been made to translate and define those needs into a diagnosis which represents a coherent set of problems to be worked on" (40 of 50 strongly supported, no opposition).

3. "User-initiated change is likely to be stronger and more long lasting than change initiated by outsiders" (36 of 40 strongly supported, seven questioned the validity of the proposition). In the Linkage view of change process, these are pertinent (pp. 24-32).

4. "To be truly helpful and useful, resource persons must be able to simulate the user's problem-solving process" (38 of 45 strongly supported with four questioning its validity).

5. "Effective utilization requires reciprocal feedback" (42 of 47 strongly supported with only one questioning its validity).

6. "Resource systems need to develop reciprocal and collaborative relationships not only with a variety of potential users but also with a large diverse group of other resource systems" (40 of 48

strongly supported with only one questioning its validity).

7. "A willingness to listen to new ideas (openness) is an important prerequisite to change. This applies to resource persons and users" (48 of 53 strongly supported and no one questioned its validity). This last proposition raises questions about the reciprocal feedback between foreign students as a group and those who train them.

Other propositions outside of the two categories which have a bearing on the study include:

8. "A willingness to make an effort to adapt innovations to one's own situation is an important prerequisite to effective utilization (a dimension of openness)" (49 of 53 strongly supported and no one questioned its validity).

9. "Anticipated profit (reward) is a major incentive for diffusers and users of innovations" (34 of 49 strongly supported and no one questioned its validity).

10. "New ideas and innovations which clearly contradict pre-existing values will not get very far in a user system, whereas those which appeal to cherished values will" (31 of 41 strongly supported, with three questioning its validity).

The above summary of salient features from the volumes by Rogers and associate, and the Havelocks are intended to illuminate the problems of foreign students as potential change agents, and as trainees. Within this framework, a clearer picture would emerge in the analysis of the data so as to improve the chances of making logical and research-supported conclusions.

Briefly, what has emerged in the review as related to foreign students in the U.S. is that extensive research has been done on the

issue of attitude, images, adjustment, social relations and academic performance. Most of the time the yardstick of evaluation has been the American experience whereas it is expected that they would not only return to their countries but also function effectively there. Ironically, few studies have been conducted to ask how effective the preparation for this mission has been.

The outline synthesized from Rogers and Havelock showed that planned change is the key if predictable outcome is to be anticipated. Change agents who are expected to play significant roles in bringing this about have to be trained in a context consistent with this philosophy. Like the message in the title of the poetry on children quoted in Chapter I--"Children Learn What They Live."

Foreign students, acting as change agents, would be only as effective as they are trained to be; the paper qualifications which they may present as proof of having made it through the system notwithstanding. A program which proposes to train efficient drivers can be regarded as effective only to the extent that the graduates operate vehicles skillfully and safely. If results show that their performance places human lives in jeopardy, the fact that they may be "licensed" drivers would be irrelevant in the evaluation of the program's effectiveness.

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CHAPTER III

DESIGN AND METHODOLOGY

"I call a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war."

--John Milton
(1608-1674)

Introduction

Though the study is designed primarily to survey the perception of foreign graduate students toward the relevance of the training programs which they are going through, key factors that affect the adoption of these programs are taken into consideration. A holistic view of the problem is taken so that the reaction of the foreign students can be placed in proper perspective. Therefore, a survey methodology is employed in obtaining both quantitative (from closed-ended questions) and qualitative (from open-ended questions) responses not only from foreign students but also from American students. The administration and faculty are involved in the study via face-to-face interviews. Their roles in what programs are adopted is significant. The choice of survey methodology stems from the fact that it is widely used in social research. A very large proportion of studies reviewed in Chapter II were conducted with this technique. As a result of the many uses into which it has been put, its weaknesses have been revealed. These include difficulty in controlling the variables,

especially when human intervention is involved. The problem of ensuring uniformity in the data gathering process can be a difficult one when more than one person is involved. It is equally hard to predict the effect of two people interacting in a face-to-face setting. Similarly, the problem of social desirability sets in when sensitive questions are asked. Socio-cultural factors and language proficiency are critical when dealing with foreign students. These and other factors are taken into consideration in the design of the study. The weaknesses of survey methodology are being compensated for by sophisticated statistical tools for analysis. Better data gathering procedures are introduced to minimize, if not eliminate the problems. For instance, effects likely to be created by socio-cultural differences are taken care of by ensuring that foreign student interviewers contact their own kind. Effort was made to match them by zone except two where no one was available to assist. Similarly, among American students, white interviewers contacted white subjects while minority interviewers did the same with minority subjects. Instructions were given to terminate the survey if a foreign student was not proficient in the use of English language.(see Appendix C1). Also care was taken to draw up and pre-test the instruments.

Population

As indicated above, the population comprises students, faculty, and administrators. The population of graduate students currently enrolled (Winter Term 1978) at MSU is about 8,000, out of which a little over 1,000 are classified as foreign students. Within this population, the study would concern only graduate students from selected colleges

whose programs are perceived to be directly change-oriented in intent as distinguished from those which are essentially academic. As a result of this qualification, graduate students from the Colleges of Natural Science (Physics, Chemistry, etc.), and Arts and Letters (English, History, etc.) were excluded from the survey. This is not to imply that products of these two colleges cannot be involved in change-oriented activities; it only implies that this is not one of the primary motives for their training. The inclusion of American students in the population is to help in clearly identifying viewpoints that may be unique to foreign students when compared with the total population. Attention is focused on foreign graduate students because they are generally considered as needed to fill the manpower gap in the socio-economic development of the emerging nations. Studies have shown that their rate of return home is comparatively higher than those of students coming for their first degrees. In addition, key organizations concerned with the training of foreign students such as the Institute for International Education (especially its Committee on Educational Interchange Policy), the Committee on Foreign Student Affairs of the Education and World Affairs have adopted a policy of favoring the training of graduate students because, apart from a higher rate of return which graduate students have recorded, their impact on the development process would be more far-reaching especially when they are involved in the planning and policy-making aspect of the process.

For the face-to-face interview, the deans of the selected colleges as well as the deans of International Studies and Programs and the Graduate School, and the foreign student advisor constitute the

population of administrators covered by the study. The rationale for including the top administrators is to help corroborate the statements of policy regarding the objectives for training foreign students in the school. Additional viewpoints about problems affecting foreign students in each college would be entertained in this interaction. The college deans interviewed are of

- i Agriculture and Natural Resources;
- ii Business;
- iii Communication Arts and Sciences;
- iv Education;
- v Engineering;
- vi Human Ecology;
- vii Human Medicine;
- viii Osteopathic Medicine;
- ix Social Science;
- x Veterinary Medicine.

The role that the faculty would play in the study would come from the answer to one of the questions in the survey instrument. Question number 34 asked the respondents to identify by course number, the courses which they considered most relevant and to name the professor who taught them. These names and course numbers would be assembled, by college, and the professor who receives the largest number of mention would be interviewed regarding his or her teaching style in the course pointed out. It is hoped that the information they supply would be of immense value in the "recommendation" section of Chapter V which would deal with "summary and conclusions" of the study. Another role to be played by faculty is to have a selected

number of them with many years of experience in advising foreign graduate students respond to a set of questions on the academic advising of non-Americans. It is anticipated that their responses would be useful to other faculty members playing similar roles, administrators who need information for formulating policies on training foreigners, and the latter (foreigners) in understanding how to approach the academic advisor for better results. Probably most important to the study is the opportunity to compare the professors' viewpoints with those of the students (gathered from the survey).

Sampling Procedures

To facilitate the generalizability of survey results, it is a common practice to resort to some sampling techniques in the data collection effort. For this study, a stratified random sample of the students was undertaken. This was necessary because they vary significantly in terms of socio-cultural values as well as in the level of the development of their respective societies. Two broad categories were identified in the population in response to the variable of culture: American and Foreigners. Among American students two sub-categories are created: white and non-white. This emphasis would make the comparative analysis of data from American students more clearly understood in relation to the responses from foreign students. A better understanding of the experiences that may be regarded as peculiar to foreign students would therefore develop.

Another point of interest were the regional groups into which all foreign students were classified for the purpose of this study. In each regional area (described as zones), a country or two countries

stood out as "star" by virtue of the progress they made in economic and social development as well as their percentage of the total population representing the zone. The five zones delineated under the division of "Foreigners" were:

Zone A: Latin America, including West Indies and Mexico, the leading country being Brazil. The zone's population on campus was 179 of which 127 participated in the study.

Zone B: The Middle East, including Iran and Turkey but excluding Israel, the leading country being Iran. Their population on campus was 411 but only 243 of these were to participate in the study.

Zone C: Africa South of the Sahara, the leading country being Nigeria. Only 92 of the 126 students in this category are covered in the study.

Zone D: Asia, the leading countries being China and Japan but the concentration of Chinese and Japanese students in the Natural Sciences drastically reduced their representation in the study. Only 226 of the 390 in this category participated in the study..

Zone E: Euro-Canadian, including Australia, New Zealand and Israel, the leading country being Canada. This group had a population of 168 of which 97 were involved in the study. The rationale for including Israel in this zone was that she shared closer relationship with the West than with her Arab neighbors.

In proportion to the number representing each stratified unit, random samples were selected. The total original sample of 250 was distributed in this manner:

Zone A - 40

Zone B - 80

Zone C - 30

Zone D - 70

Zone E - 30

Total - 250

In each of the zones, the leading countries had a population which was roughly half of the total. The random sample in each zone took this factor into consideration to facilitate the analysis of the data later on. By being about 50% of each zone's sample, correlation matrices and analyses of variance tests would be run to see if there were significant differences in the views expressed by subjects from leading countries in comparison with the others in each zone.

Among American graduate students, nearly 6,000 are affected by the study. This group is subdivided into two categories:

Whites - 5,217

Non-whites - 600

A random sample of 100 was selected from the white subgroup; 50 were selected from the non-white subgroup to make a total of 150. The proportion of the non-whites in this sample was significantly increased to make it possible to obtain a better picture of their viewpoints as compared to their white counterparts and also to foreigners. The design also took into consideration the reactions of 45 graduate students currently enrolled and willing to participate in the survey from the Professional Programs in Instructional Development and Technology. The discipline was given this attention in the study because one of the primary objectives of training professionals in the field was to

equip the trainees with the skills needed to play the role of "change agents" in education thus leading to the improvement of the quality of learning and teaching.

Instrumentation

To begin with, it is necessary to acknowledge the difficulty inherent in the effort to measure such abstract concepts as "perception" and "relevance." Since this is not an experimental study, it would be designed in such a way as to make it possible to draw inferences from the analysis of the data. The study would rely on data from instruments. The first two were intended to be used in the face-to-face interaction with the deans and other top administrators mentioned earlier. One of the two was a set of open-ended questions pertaining to the academic interests of foreign students as catered to by the college. The second was a list of ten objectives dealing with why the university adopted a policy of training foreign students. These objectives were derived from school records and policy statements by the officials in the past (see Appendix A1). These were expected to be rank-ordered in accordance with the deans' perception of the importance of these objectives as the university claimed to present them. The third instrument was a set of questions to be responded to by faculty in their capacities as academic advisors (see Appendix E1). The fourth instrument was a questionnaire to which each student in the sample responded. It was designed to elicit information on three critical areas: respondent's background such as age, sex, professional field, work experience, educational experience, and cultural experience, kind of financial support, etc.; his reaction

to some key variables such as plan to return home, objectives for pursuing graduate education, seeking of external aid by developing nations, why MSU was chosen for graduate training, his potential as a change agent; and his reaction to the question of relevance of program derived from an assessment of the curriculum, professor's teaching style, and interaction with his academic advisor. One of the questions asked subjects to identify a course by number either in the core or cognate area and list the name of the professor who taught it (question 34 in the questionnaire). The results were tabulated (see Appendix F1) and the "leading" professor in each college was given a number of questions to respond to regarding their teaching strategies (see Appendix F2). The results were similarly summarized (see Appendix F3). At the end are three open-ended questions which asked each respondent to identify one item provided by the school which a) facilitated learning, b) inhibited learning, and c) to suggest one thing that the school should do to improve current graduate training. The answers to these questions were summarized in Appendix G.

The variables outlined above are considered important in the evaluation of respondent's reaction to his academic experience in the school. Some studies already referred to in Chapter II showed the importance of those variables.

Preparation of the Questionnaire

Since the study depends, in large measure, on the data from the survey of students, care has been taken in drawing it up. In addition to the literature review which helped in identifying key variables pertinent to the study, the first draft of the instrument was submitted to three social scientists for their responses to the questions

and an evaluation of the clarity of their construction. Where the three were positively in agreement regarding clarity, the questions were retained; otherwise they were subjected to rewording. A second step taken was to submit the questionnaire in a class for graduate students in survey research methods for critical evaluation. After the first critique and rewriting, it was resubmitted for final comments and a rating on a seven-point scale. Since the students were in the population to be surveyed, it provided a measure for assessing possible reaction of the target population. The higher the correlation of their responses with their rating on each question, the better were the chances of improving the construct validity of the instrument. Their suggestions were employed in modifying the instrument before the final version was pilot-tested among a sample of 25 American and foreign graduate students who resided in Owen Graduate Center at MSU. The same seven-point scale ranging from "excellent" to "very poor" was provided after each question to help in the evaluation. In addition, they were asked to time themselves and record the amount of time it took them to complete the exercise. After the first pilot test, the suggestions offered were used in making necessary corrections before it was re-tested among the same sample with a view to improving its measure of reliability. Questions that were rated as "good," "very good" or "excellent" by majority of those participating were approved for use in the study. Further evidence of the face validity of the instrument was obtained by asking those who checked the question that they were potential change agents in a face-to-face interaction if they perceived themselves as playing this role. They all responded in the affirmative. A final test of the instrument's validity would

be conducted after the data had been collected. A correlational analysis would be run on the subjects who, in the survey saw themselves as potential change agents and those who planned to return home to participate in the development programs of their countries; the rationale being that "change agents" should be willing to go home. A sample of the instrument is in Appendix B.

Another measure taken to ensure reliability of data collected was the careful training of interviewers who were engaged in contacting subjects in the sample, distributing (largely by mail) the questionnaires and collecting some of them. Procedures followed in handling this exercise were contained in the guidelines given to each participant at the end of the training to ensure a relatively uniform pattern of interaction with the respondents (see Appendix C).

Most of the questions are closed-ended (except number 34 which asked subjects to mention a course which they regarded as most relevant to their needs, and number 63 which asked for the identification of one factor helping or hindering students' learning effort, and to suggest one thing to be done to improve). Some questions demand discrete responses such as "age in years;" others are checklists from which respondents are expected to select appropriate responses. Rating scales in the form of rank-ordered statements or scales in which each step is briefly explained are provided to assist respondents in selecting positions that match theirs. The curriculum and the professor's teaching style, for example, are assessed with a combination of a checklist of relevant items or events and a seven-point scale ranging from "excellent" to "very poor." The strength of the instrument lies in the descriptive style in which the questions are

structured, thus enabling respondents to have a better conception of the options available and which are closest to their experiences or opinions.

Conduct of the Interviews and Survey

The interviews with the deans and other top administrators were conducted in Fall Term 1977. The procedure was simple. An appointment was scheduled with each one at a convenient time (see Appendix D1). The researcher conducted the interview by briefly introducing himself and the topic. He then asked for a rank-ordering of the ten objectives on the checklist. This was later followed by the open-ended questions which the respondents were free to answer as amply as they could. The answers were audiotaped and the salient points presented were summarized along with the final results of the rank-ordered objectives (see Appendix D2). Similarly, selected faculty with many years experience as major professors or academic advisors to foreign students were interviewed, one from each college, in the study. Their responses were summarized to be used when "recommendations" are made. A comparison of their position with the views expressed by the students would be made in the analysis (see Appendix E2 for a summary of their answers).

The survey of students was conducted in Winter Term (February-March) 1978. Where those in the sample had telephones, initial contact was made by phone and in the event of a refusal to participate, the interviewer proceeded to contact the respondent next on the list of all graduate students supplied. For convenience, the list was sub-classified into categories of Americans (by ethnic groups) and Foreigners (by nationalities).

The team of interviewers involved in the survey comprised eight graduate and one undergraduate (senior) students. These were made up of five foreigners and four Americans. Effort made to secure the participation of a representative from each zonal area did not materialize as the Asian and Euro-Canadian zones were not represented. In the case where the subject agreed to participate, the instrument was hand-delivered (if close enough) or sent by mail with a self-addressed and stamped envelope for returning the questionnaire. Information summarizing the purpose of the study and instructions on the procedures for conducting the survey have been referred to earlier (see Appendix C).

The rate of return recorded was 251 out of 445 sampled (56%). The percentage was lower among foreign students (53%; Americans 59%); 26 of the 45 I.D.&T. students also responded. This may be regarded as only fair since a higher rate of return was anticipated by virtue of the fact that a large proportion of the subjects were reached on the phone and agreed to participate in the survey. Factors militating against a higher rate of return, particularly among foreign students, may be the amount of time which they have to devote to studies in addition to coping with the problems of adjustment to a new academic and social environment. Coupled with language problems, foreign students may be quiet and aloof when it comes to the question of involvement in campus activities. The same attitude of limited involvement may be said of graduate students in general (as was shown in a recent report in the State News, April 24, 1978), but the returns showed a higher response rate among Americans. Another factor that may account for this trend is the political conditions of some of the

regional areas. Students from these areas, in an effort to protect their security, may be inclined to harbor feelings of suspicion regarding the purpose of the study.

Variables of Importance to the Study

The following independent variables are considered important to the study:

1. Culture: American
Foreign
2. Dominant Group: American - white
- non-white
Foreign - leading country
others in the zone
3. Role: potential Change Agent
potential Non-Agent of Change
4. Field of study: Agriculture and Natural Resources
Other Colleges participating in the study

Covariables which the study would deal with are:

5. Demographic characteristics:
 - Age, Sex
 - Socio-economic Status
 - Environmental Setting in which subject grew up
6. Background experience:
 - Educational system attended
 - Number of years and kind of work experience
 - Academic performance
7. Position regarding some issues:
 - Plan to return home

- Contribution to development effort
- Foreign aid to developing nations

The dependent variable is the relevance of training inferred from students' personal and social goals, the curriculum, professors' teaching style, and interaction with academic advisors. The examination of the relationship between the independent and covariables and the dependent variables was undertaken in the light of stated and corroborated university objectives.

Statistical Method Used in the Analysis

For a detailed analysis of the data from the study, an analysis of variance method was employed. The main and interaction effects of selected independent variables and some covariables were tested with ANOVA, using regression approach¹. The statistical hypotheses were tested with ONEWAY ANOVA, using Scheffe's procedure at .05 level of significance. The rationale for these selections lay in the increasing popularity which the use of ANOVA has gained in social research. Kerlinger² succinctly expressed this view when he declared: "We emphatically state that there is no better way to study research design than through an analysis of variance approach." Since scientific research attempted to explain phenomena by showing the relationship between two or among more than two variables, analysis of variance came in as a fitting tool in this endeavor. In addition, it made possible a simultaneous comparison of the sample means of selected variables to give us an idea whether statistical differences exist in the data gathered. By helping to show the "between" group and "within" group variabilities, it is possible to make inference about the likelihood that the means of the populations from which the samples were derived were the same. The

employment of the "regression approach" provided the additional advantage of seeing the main, covariate, and interaction effects (just as in multiple regression analysis), with each effect showing what additional input was made by the variable to the "explained" effect after other effects have been adjusted for.

In the ONEWAY ANOVA, Scheffe's technique was well suited to the test. It was both accurate and capable of handling data from unequal group sizes; by using a "single range value for all comparisons, which is appropriate for all possible linear combinations of group means,"³ it made the graphic representation of the means clearer to understand.

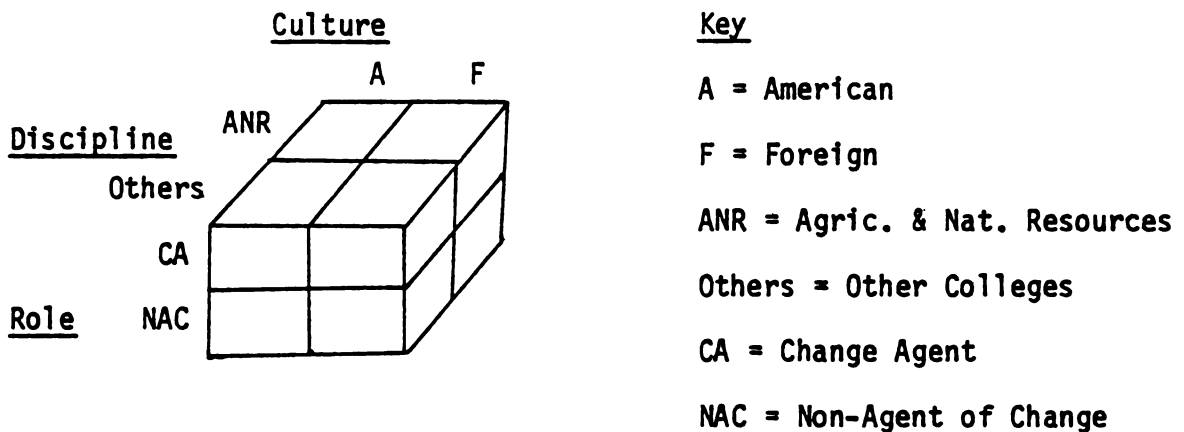
The shortcoming inherent in the method was compensated for by random sampling process used and the sample size which was sufficient to offset the deficiency.

First, the analysis showed the trend in contingency tables, the means and the standard deviations. From the frequency distributions shown in percentages of the total, it was possible to see which views were favorable and which were not; it also showed the relative measure of support given to key questions under curriculum, teaching style, and interaction with academic advisor.

Correlation matrices were employed to identify which of the key independent variables interacted positively, negatively, or neutrally with each other in the data manipulation. For instance, it was interesting to know if the perception of "change agent role" correlated positively with belief in self-generated effort in development, or with "plan to return home" because it was inconceivable to expect one to be a "change agent" at home unless one went back there and contributed one's quota to the development effort.

To further reveal differences and strengths of interaction among subgroups, the key independent variables such as "culture," "discipline," and "role" were cross-tabulated with demographic characteristics, background experiences and opinion regarding some issues. These helped to determine the relationship of these factors to the views expressed about the training programs.

The model of analysis which dealt with some of the independent variables employed a three-way ANOVA. For example:



All the statistical hypotheses expected to be tested in the study have been structurally designed to use a one-tail test. For instance, the first hypothesis expected foreign students' training in general to be less relevant to their needs than to those of Americans. A comparison of the views expressed by the foreigners and Americans would reveal this trend. Similarly, the same steps were taken with regard to the other hypotheses (see Chapter I, pp. 32-40). For convenience in the reading of the results, the data were reported graphically in charts and tables. Inferences were made from the results whether the two research hypotheses were supported or not.

FOOTNOTES TO CHAPTER III

¹Norman H. Nie, et. al. Statistical Package for the Social Sciences (New York: McGraw-Hill, 1975), pp. 410-419.

²Fred N. Kerlinger. Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1973), p. 148.

³Norman H. Nie, op. cit., p. 428.

CHAPTER IV

RESULTS, ANALYSIS AND INTERPRETATION

"Give me a fish and I shall feed for a day;
teach me to fish and I shall feed for the
rest of my life."

A Popular Chinese Adage

Limitations

Before the results are presented, it is necessary to outline a list of limitations which came to light from the data analysis which would help the reader in placing the results and their interpretation in proper perspective.

1. It was pointed out, in the preceding chapter, that the response rate of those who participated in the survey was about average (56%). Among reasons for non-response given were the fact that graduate students, being generally busy, had little time to attend to extra-curricular activities and some of the content of the questionnaire was such that called for thoughtful responses, something that would require an investment of a good measure of time.

2. Cultural and socio-political factors were influential in the variability that was observed among foreign students who participated. According to the zonal units into which they were divided, the Latin Americans (Zone A) posted 80%, Africans (Zone C) posted 83%, Euro-Canadians (Zone E) 53%, Asia (Zone D) 50%, while the Middle East (Zone B) had only 49%.

3. Another factor which may have accounted for the variability was the disposition and enthusiasm of some of the interviewers (especially those who handled the Latin American and African Zones). It should be noted that the investigator could not get interviewers from these regional areas: Zone B, D and E. This may account for the comparatively lower rate of return.

The same variability was observed among American students with white respondents posting a higher rate (72%) than minorities (50%).

4. The response rate to some easy questions was high (e.g. identification of field of specialization--99%), while it was low in some (e.g. questions about content of courses and professors' teaching style--50%). It may be noted that these questions did not apply to all students. There were some who have not spent a sufficient amount of time or taken enough courses in their programs to make a reliable evaluation; others were reluctant to pass judgment on their programs or their instructors.

5. In addition, some of the respondents were not proficient enough in the use of English language to answer some of the questions satisfactorily. This may be one of the reasons for the 49% rate among Middle East students.

6. In some colleges or academic departments, not all of the issues applied. For instance, the flexibility involved in the choice of courses in some departments did not apply in the Colleges of Human and Osteopathic Medicines.

7. There were questions intended exclusively for foreign students and a few meant only for American students. The high rate of non-response to some questions may be understood in this context.

8. From the frequency distribution of the data, two of the ten colleges which participated in the survey were responsible for about half of the respondents, and these were the College of Agriculture and Natural Resources, and the College of Education.

9. Another factor to take into consideration is the use of survey as a research methodology. In spite of its popularity in social research, survey techniques have the inherent shortcoming of depending on respondents' opinions which may not be consistent over time.

10. The problem of internal validity of the results is tempered by the fact only a few (6) who participated in the pre-test fell in the sample for the actual survey.

11. The problem of external validity (i.e., the generalizability) of the results was already anticipated in the limitations discussed in Chapter I. The results can be generalized only to the ten colleges which participated in the survey.

Since the study laid emphasis on cultural differences between foreign and American students, the results would be presented in this dichotomy to facilitate a quick comparison by the reader. Where appropriate, the data would be collapsed to show the characteristics and views of those who participated in their capacities as students.

Results

It is essential to present the key for interpreting the data of the socio-cultural subdivisions into which the subjects who responded to the survey questionnaire were classified.

Cultural Background:Sub-units:

Americans: W = White Americans

0

NW = Non-white Americans:

1 = Black Americans

2 = Mexican Americans

3 = Native Americans

4 = Hispanics

5 = Asian Americans

Foreigners: Zone: A = Latin America

0 = Brazil

1 = The rest of Latin America

B = Middle East

2 = Iran

3 = The rest of the Middle East

C = Africa

4 = Nigeria

5 = The rest of Africa

D = Asia

6 = China and Japan

7 = The rest of Asia

E = Euro-Canadian

8 = Canada

9 = The rest of Europe & Australia

The first table would show the general breakdown of participants in the survey.

Table 1.--Frequency Distribution of Respondents Tabulated According to College and Socio-Cultural Background.

	Discipline										
	0	1	2	3	4	5	6	7	8	9	Total
American Students											
W	10	4	4	41	1	5	6	1	11	5	84
NW	1	0	1	8	1	2	2	5	5	0	25
Foreign Students											
Zone: A	15	6	3	6	0	0	1	0	0	2	33
B	5	3	3	10	3	0	0	0	5	0	29
C	12	1	1	4	4	1	0	0	2	0	25
D	11	9	3	5	2	0	3	0	3	1	37
E	9	1	1	3	0	0	0	0	3	1	18
Total	63	24	16	77	11	6	10	6	29	9	251
%	25.1	9.6	6.4	30.7	4.4	2.4	4.0	2.4	11.6	3.6	100%

Key: 0 = Agriculture and Natural Resources 5 = Human Ecology
1 = Business 6 = Human Medicine
2 = Communication Arts and Sciences 7 = Osteopathic Medicine
3 = Education 8 = Social Science
4 = Engineering 9 = Veterinary Science

Clearly shown in the table was the fact that four colleges accounted for over three-quarters (77%) of the subjects who responded; and these were from Agriculture and Natural Resources, Business, Education, and Social Science. A closer look would reveal that two of the four (Agriculture and Natural Resources, and Education) were responsible for about 58% of the return.

It should also be noted that the majority of subjects from the College of Agriculture and Natural Resources were foreign students,

outnumbering Americans in the ratio of 5:1 while the latter dominated the former in the College of Education in the ratio of 2:1. With a Chi square test at .05 level of significance, the frequency distribution was statistically significant for American students (.00) but not for foreign students (.08).

Five groups were created for the sample's distribution according to level in the program: those pursuing master's, educational specialist, professional certificate, doctoral, and post doctoral programs. As would be observed, both master's and doctoral candidates each had 110 respondents, accounting for nearly 90% of the sample, as revealed in Table 2. The distribution was statistically significant for both Americans (.04) and foreign students (.00).

Table 2.--Cross-tabulation According to Socio-Cultural Background and Level in Program.

	Level in Program					
	0	1	2	3	4	Total
American Students						
W	39	2	12	31	0	84
NW	8	2	6	9	0	25
Foreign Students						
Zone: A	16	0	3	14	0	33
B	17	0	0	12	0	29
C	14	0	1	10	0	25
D	14	0	3	20	0	37
E		0	0	14	2	18
Total	110	4	25	110	2	251
%	43.8	1.6	10.0	43.8	.8	100%

Key: 0 = Master's (of Arts and Sciences)
 1 = Educational Specialist
 2 = Graduate Professional
 3 = Doctoral (Ph.D., Ed.D.)
 4 = Post doctoral

The distribution in terms of years of work experience acquired before starting a graduate program was even. There was little disparity between foreign and American respondents. Both had about one-quarter of the sample (22% and 26.9%, respectively) who had no work experience at all. A small difference (28.4% and 18.5%) was noticed among those whose work experience was less than three years. The proportion was almost equal (24.8% and 23.1%) among those with over three years but less than five years work experience. A slight disparity (6.4% and 13.9%) was noted among those with experience between five and seven years, while those above seven years were relatively equal (18.4% and 17.6%).

Table 3.--Cross-tabulation According to Socio-Cultural Background and Years of Full-Time Work Experience.

	Work Experience					Total
	0	1	2	3	4	
American Students						
W	24	14	21	13	12	84
NW	5	6	4	2	7	24
Foreign Students						
Zone: A	6	7	9	4	7	33
B	5	8	7	4	4	28
C	4	14	4	0	2	25
D	12	7	8	1	9	37
E	4	4	6	0	4	18
Total	60	60	60	24	45	249
%	24	24	24	10	18	100%

Key: 0 = no experience at all
 1 = less than three years experience
 2 = from 3, and up to 5 years experience
 3 = over 5, and up to 7 years experience
 4 = over 7 years experience

The distribution was not significant for the two groups. With regard to the nature of work performed, 42.9% of foreigners were employed in government operations while only 31.3% of Americans reported the same. In contrast, about half of Americans (52.5%) were in the teaching profession as compared to 39.1% of their foreign counterparts.

Table 4.--Cross-tabulation According to Socio-Cultural Background and Kind of Work Performed.

	Kind of Work Performed						Total
	0	1	2	3	4	5	
American Students							
W	16	7	32	2	0	3	60
NW	9	1	10	0	0	0	20
Foreign Students							
Zone: A	14	5	9	1	0	0	29
B	10	0	11	2	0	0	23
C	11	2	10	1	0	0	23
D	9	5	10	2	0	0	26
E	5	3	5	0	1	0	14
Total	74	23	87	7	1	3	195
%	38	12	45	3	0	2	100%

Key: 0 = public or government (civil service, business, etc.)
 1 = private sector (business, industry, etc.)
 2 = education (public or private)
 3 = non-profit organization
 4 = self-employed
 5 = other kinds of employment

At .05 level of significance, the χ^2 test showed no significant difference between American and foreign students.

More foreign students surveyed (20.9% and 26.1%, respectively) engaged in executive and professional roles in their employment than Americans (12.5% and 10%, respectively) in similar categories. One thing unique about the distribution was that no foreign student responded as belonging to categories other than the eight identified, whereas nearly 19% of American students reported this. The data are presented in Table 5 below.

Table 5.--Cross-tabulation According to Socio-Cultural Background and Classification of Work Performed.

	Classification of Work Performed								
	0	1	2	3	4	5	6	7	Total
American Students									
W	7	4	4	29	0	3	2	12	61
NW	3	4	2	5	1	1	0	3	19
Foreign Students									
Zone: A	6	4	3	18	1	0	1	0	30
B	4	2	2	12	1	1	0	0	22
C	3	11	2	7	0	0	0	0	23
D	8	2	3	11	1	1	0	0	26
E	5	5	2	2	0	0	0	0	14
Total	34	38	18	79	3	6	9	15	195
%	17	19	9	41	2	3	5	8	100%

Key: 0 = executive, administrative, managerial
1 = professional (doctor, lawyer, engineer, etc.)
2 = technician (computer specialist, etc.)
3 = teaching (elementary, high school, college)
4 = sales (advertising representative, etc.)
5 = clerical (secretary)
6 = crafts (construction, mechanic, etc.)
7 = other kinds of positions

The above data distribution was statistically significant (.00) for American students only.

This position was reversed in the distribution in accordance with "choice of career." The differences were significant (.00) for foreign students, whereas they were not for American students. Nearly thirty percent (28.3%) reported as being on full employment while 22.5% were on leave of absence from a full employment. This is in contrast to Americans' 19.4% and 8.3% respectively for these two categories. However, a majority (61.1%) of Americans were decided on what career to pursue. More of them (11.1%) than foreign students (7.2%) were undecided.

Table 6.--Cross-tabulation According to Socio-Cultural Background and Choice of Career.

	Choice of Career					Total
	0	1	2	3	4	
American Students						
W	13	8	52	10	0	83
NW	8	1	14	2	0	13
Foreign Students						
Zone: A	18	4	10	0	0	32
B	9	7	6	3	2	27
C	3	13	9	0	0	25
D	8	5	19	2	1	36
E	1	2	10	5	0	18
Total	60	40	118	22	3	233
%	24	16	50	9	1	100%

Key: 0 = currently employed full-time
 1 = on leave of absence from a full-time position
 2 = decided on the career to pursue
 3 = not decided on the career to pursue
 4 = not preparing for a career

The above was statistically significant (.00) for foreign students only.

Similar to the responses posted earlier on "the kind of work," over half (54.2%) of foreign students surveyed were sponsored by government while less than one-fifth of this (19.7%) were self-supporting. Among Americans, however, nearly half (49.5%) were paying their own fees while about a third (31.2%) received some kind of financial support from the government. The result was also statistically significant (.01) for foreign students. Table 7 below revealed the distribution.

Table 7.--Cross-tabulation According to Socio-Cultural Background and Financial Support.

	Financial Support					Total
	0	1	2	3	4	
American Students						
W	22	1	9	43	9	84
NW	12	0	0	11	2	25
Foreign Students						
Zone: A	24	3	3	3	0	33
B	18	1	5	5	0	29
C	13	7	0	5	0	25
D	16	3	7	7	4	37
E	6	1	0	8	3	18
Total	111	16	24	82	18	250
%	44	6	10	33	7	100%

Key: 0 = government (scholarship, loan, etc.)
 1 = private organization (e.g. Ford Foundation)
 2 = parents and relatives
 3 = self-supporting
 4 = other sources

Some Demographic Characteristics of Respondents

In terms of age, foreign students were slightly older than their American counterparts. In the category of the "under 25", nearly 20% of Americans and 8.5% of foreigners participated. About 60% of Americans (64 subjects) were under 30 as compared to 49% of foreign students (71 subjects). Among the "senior" members of the graduate student population surveyed, only 6.5% (7 subjects) of the Americans were over 40 years of age, while the foreign students recorded 10.6% (15 subjects).

Table 8.--Cross-tabulation According to Socio-Cultural Background and Age.

	Age					Total
	0	1	2	3	4	
American Students						
W	17	35	16	12	3	83
NW	3	9	5	3	4	24
Foreign Students						
Zone: A	3	12	8	6	4	33
B	4	9	8	6	2	29
C	0	13	7	3	2	25
D	5	16	3	7	6	37
E	0	9	5	3	1	18
Total	32	103	52	40	22	249
%	13	41	21	16	9	100%

Key: 0 = under 25 years
 1 = 25 - 29 years
 2 = 30 - 34 years
 3 = 35 - 39 years
 4 = 40 years and above

The Chi square statistical test conducted showed that the result was not significant for either foreign or American students surveyed.

With respect to sex distribution among those who participated in the survey, the ratio of male to female among foreign students was 83:17, whereas it was about 50:50 among American students. In some areas such as Africa and the Middle East, the number of women was almost nil, but the result was not statistically significant. Table 9 showed the distribution.

Table 9.--Cross-tabulation According to Socio-Cultural Background and Sex.

	Sex		
	0	1	Total
American Students			
W	41	43	84
NW	13	12	25
Foreign Students			
Zone: A	28	5	33
B	26	3	29
C	24	1	25
D	29	12	37
E	15	3	18
Total	172	79	251
%	69	31	100%

Key: 0 = Male
1 = Female

In terms of "where students grew up," there was a statistically significant difference between American students (.00) and foreign students (.07) surveyed.

Among Americans, 31% were born and raised in the rural area while 69% grew up in the city. This distribution is similar to that of foreign students who reported 25.4% and 74.6% respectively for the two categories, as can be observed in Table 10.

Table 10.--Cross-tabulation According to Socio-Cultural Background and Where Students Grew Up.

	Location					Total
	0	1	2	3	4	
American Students						
W	10	15	16	30	8	79
NW	3	2	3	6	7	21
Foreign Students						
Zone: A	4	4	8	7	10	33
B	1	1	7	6	10	29
C	10	1	7	3	4	25
D	5	1	10	5	16	37
E	3	2	5	6	2	18
Total	36	30	56	63	57	242
%						100%

Key: 0 = rural farm area
1 = rural non-farm area
2 = town or city (pop. 20,000-50,000)
3 = suburban area (50,000-1 million)
4 = large city (over 1 million)

The data reported on respondents' socio-economic status revealed some differences between foreign students and their American counterparts. The result, as shown in Table 11 below, was statistically significant for foreign students (.00) but it was not for American students (.15). In short, a significantly larger number of foreign students surveyed reported not as well-to-do as the Americans who participated.

Table 11.--Cross-tabulation According to Socio-Cultural Background and Socio-Economic Status.

	Socio-Economic Status					Total
	0	1	2	3	4	
American Students						
W	17	27	13	0	22	79
NW	1	4	4	0	15	24
Foreign Students						
Zone: A	10	4	4	4	11	33
B	5	4	1	2	16	28
C	2	1	1	2	18	24
D	19	1	3	3	10	36
E	4	2	0	8	4	18
Total	58	43	26	19	96	242
%	24	18	11	8	39	100%

Foreign Students

Key: 0 = parents completed high school or higher
1 = parents can finance college training
2 = parents own two houses in town or city
3 = parents own a car
4 = parents not as well-to-do as 0 to 3 above

American Students

Key: 0 = parents have a Master's degree or higher
1 = parents own home valued \$30,000 or higher
2 = parents' yearly earning is \$20,000 or higher
3 = parents not as well-to-do as 0 to 2 above

Progress Made in the Programs

Two items were examined in the study regarding the measure of progress made by respondents who participated in the survey. The first was their grade point average, obtained directly from the records in the Registrar's Office, thus constituting the accurate data used in the study. The second was a determination of the percentage of the programs already completed by all subjects.

The results from the grade point averages showed that 86.1% of foreign students, and 85.7% of Americans who participated scored 3.26 or higher. However, a point of difference was noticed in the records of those who scored between 3.76 and 4.0. About half (46%) of Americans surveyed were in this category as compared to nearly one-fifth (18.3%) of the foreign students, even though the results were not statistically significant.

Table 12.--Cross-tabulation According to Socio-Cultural Background and Grade Point Average.

	Grade Point Average					Total
	1	2	3	4	5	
American Students						
W	25	15	5	5	3	53
NW	4	2	3	0	1	10
Foreign Students						
Zone: A	5	7	10	4	1	27
B	3	4	7	0	0	14
C	3	6	6	1	0	16
D	5	6	10	5	0	26
E	1	5	3	1	0	10
Total	46	45	44	16	5	156
%	29	29	28	11	3	100%

Key: 1 = 3.76 - 4.00
 2 = 3.51 - 3.75
 3 = 3.26 - 3.50
 4 = 3.01 - 3.25
 5 = 3.00 and below

Since the reliability of subjects' views regarding their training programs would be, in addition to other factors, a function of how much of the program they have completed, it was considered necessary to ask them. Their responses showed that about 56% of Americans, and 70% of foreigners have completed more than three-fifths of their programs. The results were not statistically significant for either foreign or American students.

Table 13.--Cross-tabulation According to Socio-Cultural Background and Percentage of Program Completed.

	Percentage of Program Completed					Total
	0	1	2	3	4	
American Students						
W	11	10	15	17	30	83
NW	4	4	3	7	5	23
Foreign Students						
Zone: A	3	4	3	8	15	33
B	2	4	0	6	15	27
C	3	3	5	5	7	23
D	7	3	2	9	16	37
E	0	1	2	4	11	18
Total	30	29	30	56	99	244
%	12	12	12	23	41	100%

Key: 0 = up to 20% completed
1 = 21 - 40% completed
2 = 41 - 60% completed
3 = 61 - 80% completed
4 = 81 - 99% completed

Some Characteristics Unique to Foreign Students

A few questions were directed to foreign students exclusively to obtain additional information about their background. In terms of comparing previous educational experience with that of the U.S., their responses showed that nearly three-fifths (57.4%) had their first degree or both bachelor's and master's degrees outside of the U.S. while only about one-tenth (9.2%) obtained these in the U.S. The remaining one-third (33.3%) had one degree in their homeland and the second in the U.S. The difference, from the Chi square test, was statistically significant (.04).

Table 14.--Cross-tabulation According to Regional Groups and Where Subjects Obtained Bachelors and Masters Degrees.

	Where Previous Degrees Were Earned			
	0	1	2	Total
Foreign Students				
Zone: A	0	13	20	33
B	2	6	20	28
C	6	10	9	25
D	5	9	23	37
E	0	9	9	18
Total	13	47	81	141
%	9	33	58	100%

Key: 0 = B.A., M.A. in the U.S.
1 = B.A. in home country, M.A. in the U.S.
2 = B.A., M.A. in home country

With regard to the respondents' familiarity with the U.S. educational system, one-third (33.6%) thought their educational systems were either "very much different" or "completely different," while another one-third (34.4%) thought of them as somewhat similar. Only 5% of those who responded thought their systems were exactly the same. However, there was no statistically significant difference in the distribution.

Table 15.--Cross-tabulation According to Regional Groups and Familiarity with U.S. Educational System.

	Extent of Similarity					Total
	0	1	2	3	4	
Foreign Students						
Zone: A	2	6	14	9	2	33
B	2	5	6	9	4	27
C	0	3	5	6	4	18
D	2	10	13	6	1	32
E	1	9	6	1	1	18
Total	7	33	44	31	12	128
%	5	28	34	24	9	100%

Key: 0 = exactly the same as in the U.S.
 1 = very much similar to that of the U.S.
 2 = somewhat similar to that of the U.S.
 3 = very much different from that of the U.S.
 4 = completely different from that of the U.S.

In response to the question about length of stay in this country, three out of five foreigners who participated in the survey reported spending less than four years. In fact, over one-third (35.2%) spent less than two years. The distribution showed that no one from Latin America in the sample stayed longer than six years. In contrast, over 80% of students from Canada and Western Europe have spent four or more years. The results revealed a statistically significant (.00) difference between those who have spent up to four years and those who spent less than that.

Table 16.--Cross-tabulation According to Regional Groups and Length of Stay in the U.S.

	Length of Stay in the U.S.					Total
	0	1	2	3	4	
Foreign Students						
Zone: A	13	15	5	0	0	33
B	10	14	1	3	1	29
C	11	4	4	5	1	25
D	11	3	15	6	2	37
E	5	0	6	5	2	18
Total	50	36	31	19	6	142
%	35	25	22	14	4	100%

Key: 0 = less than 2 years
 1 = from 2 and up to 4 years
 2 = over 4 and up to 6 years
 3 = over 6 and up to 8 years
 4 = over 8 years

Asked about their plans to return home, about four out of every five (78.2%) of foreign students who participated were positive about this idea. Roughly one-fifth (18.2%) was undecided while only two percent has decided to remain permanently in the U.S. Of the two subjects in this category, one is from Canada while the other is from Southeast Asia. The statistical test on this distribution revealed a significant difference (.00) between those who were resolved to return home and those who were not.

Table 17.--Cross-tabulation According to Regional Groups and Plans to Return Home After Completing Program.

	Plans to Return Home					Total
	0	1	2	3	4	
Foreign Students						
Zone: A	27	3	3	0	0	33
B	22	4	3	0	0	29
C	22	2	1	0	0	25
D	21	4	9	2	1	37
E	3	3	10	1	1	18
Total	95	16	26	3	2	142
%	67	11	19	2	1	100%

Key: 0 = will return home
 1 = shall return home
 2 = may return, but not decided
 3 = shall not return home
 4 = will not return home

When asked to react to the question about their roles when they return home, nearly 90% of the participants believed they had a legal or moral obligation to contribute their quota toward the development of their countries. The ten percent which did not share in this belief came largely from Canada and Western Europe. The difference between those committed and those who were not was statistically significant (.00).

Table 18.--Cross-tabulation According to Regional Groups and Commitment to Participate in Development Programs.

	Commitment to Development				
	0	1	2	3	Total
Foreign Students					
Zone: A	17	13	0	0	30
B	9	17	1	0	27
C	11	14	0	0	25
D	9	15	1	3	28
E	2	0	5	3	10
Total	48	59	7	6	120
%	40	49	6	5	100%

Key: 0 = legally bound (by contract)
 1 = morally bound (believe it is necessary)
 2 = not decided
 3 = don't believe it is necessary

Proficiency in the use of English, which is believed to be one of the major problems confronting foreign students, showed in the distribution as problems which may be peculiar to some regional areas. A large majority of the 45 subjects (73%) who reported having less than two years of English language use were from Latin America, the Middle East, and Southeast Asia. In contrast, over 90% of the subjects from Africa have been using the language for over six years. A similar trend was revealed among subjects from Western Europe and Canada. A statistically significant (.00) difference was recorded between those who had over six years of use and those who did not.

Table 19.--Cross-tabulation According to Regional Groups and Proficiency in the Use of English Language.

	Years of Use of English Language				
	0	1	2	3	Total
Foreign Students					
Zone: A	21	2	1	7	31
B	11	3	3	12	29
C	2	0	0	23	25
D	11	2	7	16	36
E	0	0	3	10	13
Total	45	7	14	60	134
%	34	5	10	51	100%

Key: 0 = less than 2 years of use
 1 = two years up to 4 years of use
 2 = over 4 years and up to 6 years of use
 3 = over 6 years of use

Among foreign students who participated, responses to the question about seeking foreign aid showed that they favored the idea of their nations depending more on indigenous resources and less on external aid. About half (50.8%) wanted very small aid while one-fifth (20.6%) wanted no aid at all. But the difference was not statistically significant.

Table 20.--Cross-tabulation According to Regional Groups and Attitude Toward Seeking Foreign Aid.

	Attitude Toward Seeking Foreign Aid					Total
	0	1	2	3	4	
Foreign Students						
Zone: A	2	17	7	4	1	41
B	9	8	2	4	1	24
C	7	15	0	1	0	23
D	2	20	7	5	1	35
E	6	4	2	1	0	13
Total	26	64	18	15	3	126
%	21	51	14	12	2	100%

Key: 0 = rely only on indigenous effort
 1 = welcome only a limited amount of aid
 2 = welcome about 50% of aid needed
 3 = seek aid for most of development programs
 4 = actively seek aid for all development programs and emulate Western development models.

Additional Issues of Importance

Other issues which were pertinent to the study included the student's own career objectives, reasons for selecting MSU among many schools, and an assessment of the university's objectives in training foreign students. The first and second were considered as motivational factors likely to affect how students would interpret their roles, assess the relevance of their training programs, and the capacity of the schools in assisting them to realize these objectives. The third was intended to ascertain the measure of congruence in the university's statements of purpose and students' understanding of them.

With regard to students' career objectives, a little over half

(52.4%) of Americans supported personal objectives which emphasized training to prepare students for the world of work, qualify them for better paying jobs and comfortable life, and enable them to enjoy the prestige which the status would bring. These objectives were regarded as more important than the social objectives which stressed the need to acquire knowledge and skills to solve societal problems, use the experience to acquire leadership position, win friends and influence people for the common good, and acquire the skills which would ensure getting into positions where they could be of service to their fellow men. Only one-quarter (25.7%) of Americans favored this second category over the first while about one-fifth (21.9%) regarded the two sets of objectives as equally important. The foreign students, on the other hand, had only 14.2% in support of personal objectives while about 40% favored social objectives, and 45% regarded both as equally important. The Chi square test conducted using the data showed statistically significant (.03, .04) difference among foreign and American students, respectively.

Table 21.--Cross-tabulation According to Socio-Cultural Background and Students' Objectives.

	P	S	B	Total
American Students				
W	47	19	14	80
NW	8	8	9	25
Foreign Students				
Zone: A	3	18	11	32
B	3	8	18	29
C	1	11	13	25
D	8	11	17	36
E	5	8	5	18
Total	75	83	87	245
%	30.6	33.8	35.5	100%

Key: P = personal objectives are more important
S = social objectives are more important
B = both sets are equally important

Choice of MSU

The answers to the question regarding the choice of MSU vary in some dimensions between American and foreign students. Both of them unanimously identified "reputation of the program" as the most important reason why the school was selected over others. A Chi square test of this result showed that there was a statistically significant (.01) difference among foreign students who regarded this as the most important reason. There was no difference among American students who answered the question.

Table 22.--Cross-tabulation According to Socio-Cultural Background and Reputation of Program as Reason for Choosing MSU.

	1st	2nd	3rd	4th	5th	6th	Total
American Students							
W	29	27	15	2	2	0	75
NW	11	9	2	0	1	0	33
Foreign Students							
Zone: A	11	10	3	2	0	0	26
B	11	4	1	1	3	0	20
C	16	3	0	1	0	0	20
D	10	14	7	2	0	0	33
E	5	6	4	1	0	0	16
Total	93	73	32	9	6	0	213
%	44	34	15	4	3	0	100%

Key (range): 1st = most important reason
5th = least important reason
6th = other reasons

From then on, different reasons were selected in order of their importance. The foreign students saw "reputation of faculty" in their fields as the second most important reason. American students selected reasons that were not included on the list as the next most important. A tally of these "other" reasons showed that proximity of the school to their homes was the most popular reason, followed by the fact that the school was the first to offer them admission. In some cases, it was the only school offering the program of their interest in the state (e.g. Veterinary Medicine). Another point made which a few foreign students shared was the influence of relations (e.g. husband attending or employed by the school). There was no statistically

significant difference in the views of foreign or American students for each of the two reasons.

Table 23.--Cross-tabulation According to Socio-Cultural Background and Reputation of Faculty as Reason for Choosing MSU.

	1st	2nd	3rd	4th	5th	6th	Total
American Students							
W	6	23	32	6	4	0	71
NW	6	8	8	0	1	0	23
Foreign Students							
Zone: A	6	9	9	4	0	0	28
B	4	8	0	2	2	0	16
C	2	8	3	2	0	0	15
D	6	12	7	7	0	0	32
E	6	6	5	0	0	0	17
Total	36	74	64	21	7	0	202
%	18	37	32	10	3	0	100%

Key (range): 1st = most important reason
5th = least important reason
6th = other reasons

Table 24.--Cross-tabulation According to Socio-Cultural Background and Other Reasons for Choosing MSU.

	1st	2nd	3rd	4th	5th	Total
American Students						
W	39	4	4	1	1	49
NW	10	0	0	0	0	10
Foreign Students						
Zone: A	2	2	2	0	1	7
B	5	2	1	0	0	8
C	3	0	0	0	0	3
D	6	1	1	0	0	8
E	6	2	1	1	0	10
Total	71	11	7	2	2	95
%	75	12	7	2	2	100%

Key (range): 1st = most important reason
5th = least important reason

What foreign students considered the third most important reason for selecting MSU was the "relationship of foreign schools or governments or organizations with the school." This point was unimportant to Americans as it was relegated to the last position. The result was statistically significant for both foreign (.00) and American students (.00) who participated. However, the significance was for entirely different reasons.

Table 25.--Cross-tabulation According to Socio-Cultural Background and Relations with Governments and Institutions as Reason for Choosing MSU.

	1st	2nd	3rd	4th	5th	6th	Total
American Students							
W	1	0	12	6	19	8	46
NW	0	0	5	1	7	1	15
Foreign Students							
Zone: A	13	2	6	1	0	0	22
B	4	2	4	1	1	0	12
C	5	3	2	0	4	0	14
D	1	3	10	1	9	1	24
E	0	1	0	0	6	4	11
Total	24	11	39	10	46	14	144
%	17	8	27	7	32	9	100%

Key (range): 1st = most important reason
5th = least important reason
6th = other reasons

Both foreign and American students surveyed placed "financial assistance" in the form of assistantships and fellowships as the fourth most important reason. The result was statistically significant (.00) for American students only.

"Fair tuition" was placed 5th and 6th respectively by American and foreign students who responded to the question. In short, both groups regarded this item as among the least important reasons why they chose to come to MSU. The statistical test conducted on the data showed that there was a significant difference (.00) between the foreign students participating in the survey who considered this item as unimportant and those who did.

Table 26.--Cross-tabulation According to Socio-Cultural Background and Financial Assistance as Reason for Choosing MSU.

	1st	2nd	3rd	4th	5th	6th	Total
American Students							
W	7	16	10	12	11	4	60
NW	4	2	6	1	4	0	17
Foreign Students							
Zone: A	2	5	5	3	1	0	16
B	0	2	5	2	1	1	11
C	1	1	5	1	2	1	11
D	6	4	10	3	4	1	28
E	1	1	3	2	3	1	11
Total	21	31	44	24	26	8	154
%	14	20	29	15	17	5	100%

Key (range): 1st = most important reason
 5th = least important reason
 6th = other reasons

Table 27.--Cross-tabulation According to Socio-Cultural Background and Fair Tuition as Reason for Choosing MSU.

	1st	2nd	3rd	4th	5th	6th	Total
American Students							
W	6	9	15	19	10	1	60
NW	1	2	5	3	4	1	16
Foreign Students							
Zone: A	0	1	5	1	8	0	15
B	2	1	8	2	0	0	13
C	1	3	5	2	3	0	14
D	5	6	12	1	4	0	28
E	0	2	2	7	3	1	15
Total	15	24	52	35	32	3	161
%	9	15	32	22	20	2	100%

Key (range): 1st = most important reason
 5th = least important reason
 6th = other reasons

University's Objectives

The third issue on which the opinions of all students were sought was the "purpose" of the school in admitting and training foreign students. Ten statements, adapted from Reginald Smarts'¹ list of goals, and the university's statements of policy on international exchange in education contained in published documents were presented dealing with this subject and they were asked to rank order them from 1 to 10 according to how important they thought the school regarded these statements. The same questions were put to the deans of the colleges from which the sample students were selected. They were asked to arrange the statements in order of importance from the perspective of the university's policy in international exchange in education. The results obtained from the two groups (students and administrators) showed a lack of agreement in the positional placement of many of the statements. The ten statements are presented below.

Foreign students are trained at MSU:

- a = to assist their countries in manpower development
- b = to acquire knowledge and skills for solving society's problems
- c = to tackle problems of poverty, illiteracy and disease
- d = to train skilled hands who would act as change agents in national development
- e = to provide opportunity for cross-cultural experience
- f = to help MSU maintain its international reputation and contacts
- g = to enable them to secure better paid jobs and comfortable life

h = to help them acquire leadership skills, win friends and influence people

i = to build bridge of friendship, understanding and international cooperation

j = because those admitted are qualified and fulfilled requirements

The results are shown in Figure 1. From the illustration, it could be observed that the views of students both foreign and American seem to flow in the same direction, both regarding the most important purpose of training foreign students here as "to help MSU maintain its international reputation and contacts." A statistical test conducted on the data on this statement indicated that there was no significant difference between the position taken by foreign students and their American counterparts. A point of contrast can be noted in the evaluation which the administrators gave this statement--regarding it as one of the least important purposes. Both student groups agreed that the least important reasons were to enable students to "use their skills in securing better paid jobs and comfortable life" and also to use the acquired skills in "securing leadership positions, winning friends and influencing people." A Chi square test conducted on these two statements revealed no significant difference between foreign and American students on the first statement, but a statistically significant (.03) difference was recorded for American students in the second. The views of the administrators were more closely aligned with those of the students on the two statements, though not as negative as theirs. The three groups regarded "building bridge of friendship, understanding and international cooperation" as moderately important with students

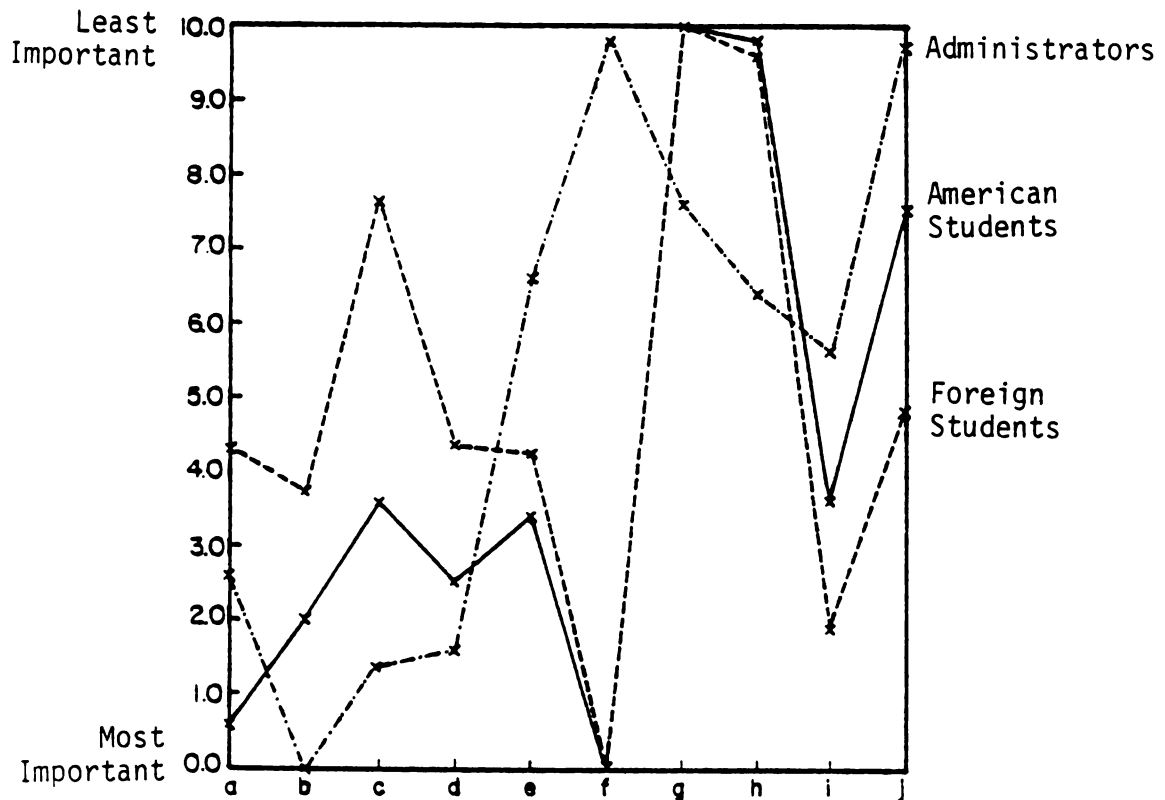


Figure 1.--Objectives of Training Foreign Students at MSU as Perceived by Administrators and Students.

KEY

- a = to assist developing nations in their manpower development.
- b = to acquire knowledge and skills for solving society's problems.
- c = to tackle problems of poverty, illiteracy, and disease.
- d = to train skilled hands to act as change agents in national development.
- e = to provide opportunity for cross-cultural experience.
- f = to help MSU maintain its international reputation and contacts.
- g = to enable trainees secure better paid jobs and comfortable life.
- h = to help them acquire leadership skills, win friends and influence people.
- i = to build bridge of friendship, understanding and international cooperation.
- j = because those admitted qualified and fulfilled all requirements.

leaning more on the positive side. Other statements on which their views came close were in the training of skilled hands who would act as change agents in national development, which ranged from strong to moderately important. Similarly, "providing opportunity for cross-cultural experience between Americans and foreign students" was rated as moderately important even though the administrators tended to be on the negative side. Assisting non-Western nations in manpower development was regarded as positive but a close look at the chart (Fig. 1) shows that the views of foreign students were not as strong as those of the American students and the administrators. There was a statistically significant (.00) difference between the views of Americans and those of foreign students. The statement "to acquire knowledge and skills to solve society's problems," was regarded as important by all groups surveyed. The administrators regarded it as the most important reason for training foreign students here while the latter groups were not as optimistic in their reaction. No statistically significant difference was found in the views of both foreign and American students on the assessment of the statement. A disparity in the position of the three groups came on the objective of tackling "problems of poverty, illiteracy and disease which are major obstacles to progress." Both the administrators and American students were positive while the foreign students were not as optimistic (compare the position of the administrators, second most important, with that of the foreign students, eighth position out of ten). However, there was no statistically significant difference in the position of American students when compared with their foreign counterparts.

Evaluation of Course Content, Teaching Style, and Academic Advising

Three approaches were taken to evaluate training programs provided at Michigan State University. These are by no means the only steps to take. However, it is expected that the evaluation of the quality of programs offered would carefully consider, among other things, the content of courses, how instructors handle the teaching of these courses, and the general academic counseling which the student receives from his major professor.

The first was examined using the structural elements commonly employed in drawing up students' programs, i.e., a required number of credit hours in selected courses in the core area, the cognate, electives, research design and methodology (where required), the conduct of actual research (where required), and laboratory or field experience practice (where required). These were cross-tabulated on the questionnaire with a set of key concepts which are considered necessary for the training of change agents, and these are: practical problem-solving skills, effective leadership skills, effective communication skills, ability to work well with people, ability to adapt content of courses to individual experience, provision of appropriate learning resources, and treatment of the concept of change.

A correlational analysis, using Pearson Product Moment technique revealed a weak linear relationships among the variables involved. The highest positive correlation in the whole analysis had a coefficient of .36 in the interaction between "American students" and "Active Student Participation in Laboratory and Field Experience" activities. At .05 level, this result was statistically significant (.00). Similarly, the highest negative correlation recorded had a coefficient of -.31 in

the interaction between "Progress in the Program" and "Student Input into the Design of Programs." The result was also statistically significant (.00). Instead of linear relationship, emphasis was laid on the analysis of variance with a view to revealing the differences among the variables. The one way analysis of variance conducted with Scheffe technique at .05 level of significance revealed differences that were statistically significant in the responses of American students in such areas as "actual research conducted" and also in "laboratory and field experience" activities. By comparison, there were no differences in the subjects' responses when such items as courses in "core," "cognate," "electives" and "research design and methodology" were tested.

When "teaching style" was examined, statistical tests on responses to the same structural elements of "actual research," "laboratory and field experience" revealed significant differences between American and foreign students. In terms of statistical importance, other elements were relegated to the background. The strengths and weaknesses of the ten teaching strategies examined in this category fluctuated in response to the elements they were associated with, the strongest positive answers coming from "actual research" conducted. It should be pointed out, however, that strategies such as "active student participation," "relating teaching to real world problems," "emphasis on learning by doing," and "concern for student progress" seemed to be more positive support than others.

On the role of the major professor, his overall performance was rated as above-average even though there was no significant difference between the views of American and foreign students. A positive linear relationship was revealed between the role of the major professor, the

extent to which students made input into the design of their programs, and the overall evaluation. In short, the better the academic advising received, the more input the student makes to the design of his program, the more positive the general evaluation of the programs.

Among the independent variables that had influence on the general evaluation, "cultural background" was outstanding. As the tables and charts to be presented would reveal, significant differences could be observed in the responses of the American students when compared with foreign students on items dealing with "research." Other variables to mention include "potential change agent role" (as reflected in "student's objectives"), "choice of career," "discipline" (as shown by colleges), and to some extent, "work experience." The following variables had no influence on the results: age, grade point average, "where students grew up" (whether rural or urban), "source of financial support," and the "socio-economic status" of student's parents. Some variables which were specifically associated with foreign students such as "whether or not they were returning home," preparedness to "participate in development effort," "proficiency in English language" (as reflected by the number of years of using it), and the "length of time already spent in the U.S." did not make a difference in the evaluation either.

The tables and charts to be presented were derived from the means of data computed in the one-way analysis of variance tests performed using Scheffe's methodology at .05 level of significance. The two major groups of students who participated in the study were further subdivided. American students were divided into six (0 to 5) groups, comprising Whites, Black Americans, Mexican Americans, Native Americans,

Hispanics and Asian Americans. However, the number of minorities who responded was so small that in some analyses, their groups did not show up. Foreign students were divided into five zones: Latin America, Middle East, Africa, Asia and Euro-Canada; and two sub-units in each zone comprising the leading country and the others combined. Most of the charts presented would show the American subdivisions which featured in each response and the ten sub-units into which the zones were divided. For a quick comparison, 0 and 1 represent Brazil and the rest of Latin America; 2 and 3, Iran and the rest of Middle East; 4 and 5, Nigeria and the rest of Africa; 6 and 7, China and Japan, and the rest of Asia; 8 and 9, Canada and the rest of the European countries. It would be easy also to compare the responses of the White Americans represented by "0" with either the minorities (1 to 5), or the Euro-Canadian zone (8 and 9). This brief explanation is necessary since most of the charts would feature these sub-units. The sub-group means computed with Scheffe's technique (at .05 level of significance), were employed in assessing the range of respondents' reactions. The reader should note the interpretation of the results as illustrated in the figures. Owing to the scaling of the responses in the instrument which placed "0" as "excellent" and "5" as "very poor," the plotting showed better results lower down on the graphs while very poor ones ascended on the scale. This seems like a reverse process to the popular trend in graphic representation in which a rise in the figures implies improvement in performance. In the analysis of this study, the higher the number on the scale, the poorer is the result.

Below are some tables and charts to explain the trend. The first two tables deal with the American students and their foreign counterparts

in relation to the overall evaluation of the programs. To help students make a summary assessment of the programs, the following statements were presented on a five-point scale:

1. I am lucky I came to MSU; the program has been most beneficial.
2. The program has been very good; I hope the rest is like this.
3. The program is fair but needs some improvement.
4. The program is poor and needs major review.
5. If I were to choose again, I would go to another school.

Even though the answers given were fairly in favor of the school, the differences among the groups were not statistically significant as can be seen from the two ANOVA tables below.

Table 28(a).--American Students and the Overall Evaluation of the Programs.

Source	D.F.	Sums of Squares	Mean Squares	F. Ratio	F. Probability
Between Groups	5	7.3302	1.4660	1.2702	.28
Within Groups	101	11.5763	1.1542		
Total	106	123.9065			

Table 28(b).--Foreign Students and the Overall Evaluation of the Programs.

Source	D.F.	Sums of Squares	Mean Squares	F. Ratio	F. Probability
Between Groups	9	12.1884	1.3543	1.7604	.08
Within Groups	129	99.2361	.7693		
Total	138	111.4245			

At .05 level of significance, it can be observed that neither of the two results (.28 or .08) was significant. The small measure of variability between the two can be seen in the illustration in Figure 2.

The components of the programs examined (presented in charts) indicated the existence of some differences as we would soon see. The content of the courses in the core area were examined using seven concepts that are important to the training of change agents. The results, as revealed in the next seven pairs of charts, were about average to poor, for the content of the core courses while generally above average in the research, laboratory and field experience. The analysis was not significant for both groups in the content area (Fig. 3a), but was significant only for American students in the research section (Fig. 3b, see the asterisk below the chart).

A close look at Figure 4(a) and (b) reveal a below average result in the "content of courses" dealing with effective leadership. Under "actual research" conducted, the result was above average. In each case the foreign students maintained their moderate position when compared with American students. As in Figure 3(b), the reactions of American students was statistically significant at .05 level.

In an effort to ascertain the amount of "effective communication" available in the "content of the courses," the results of the survey showed a generally average to negative reaction but when the same question was directed at "research," it turned positive with the American students' viewpoint being statistically significant. In addition to the moderate position maintained by foreign students, there was also fluctuation in their answers which reflect the two major sub-groups: the "star" countries represented by 0, 2, 4, and 6 units, and

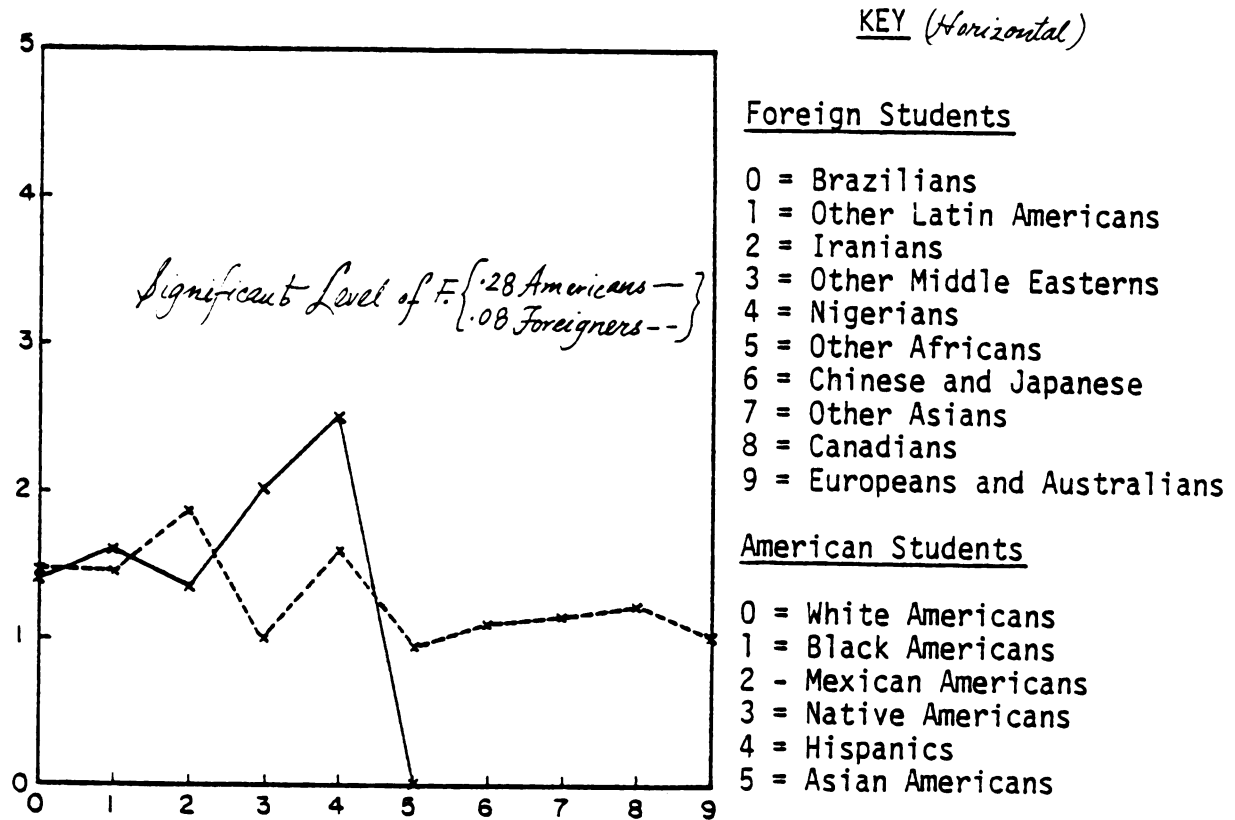


Figure 2.--General Evaluation of the Programs.

SCALE (Vertical)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

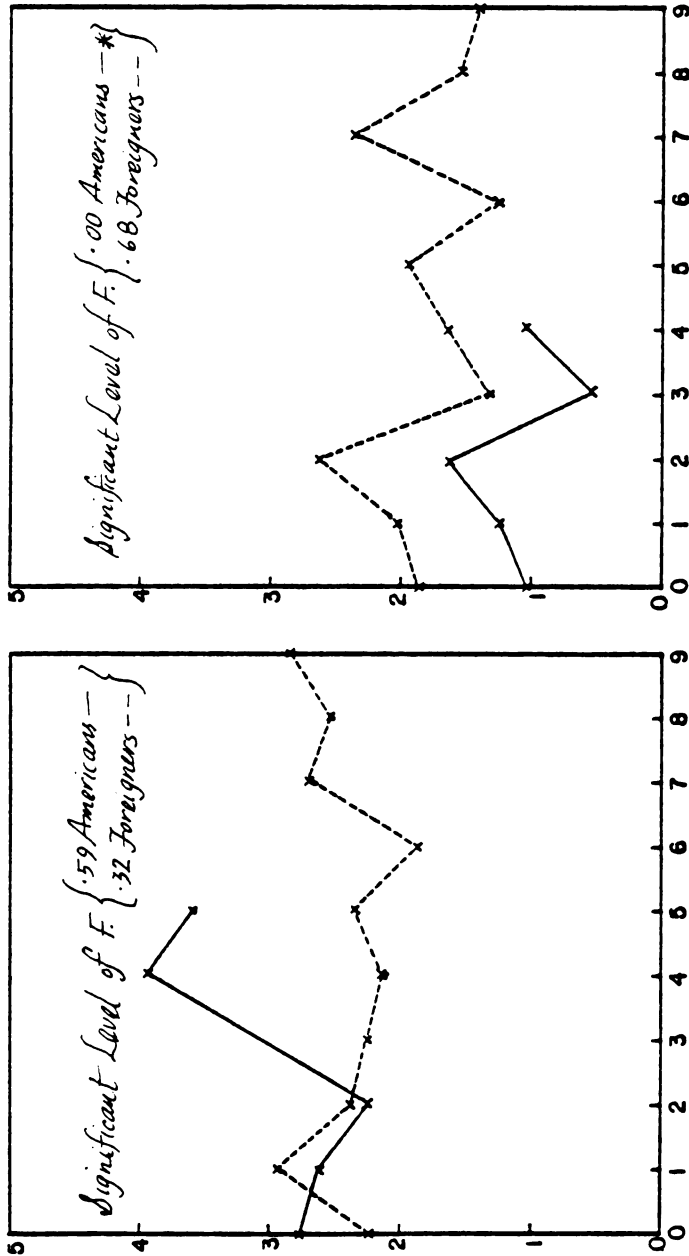


Figure 3a - Extent of Practical Problem Solving in Content of Core Courses

Figure 3b - Extent of Practical Problem Solving in Actual Research Conducted

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

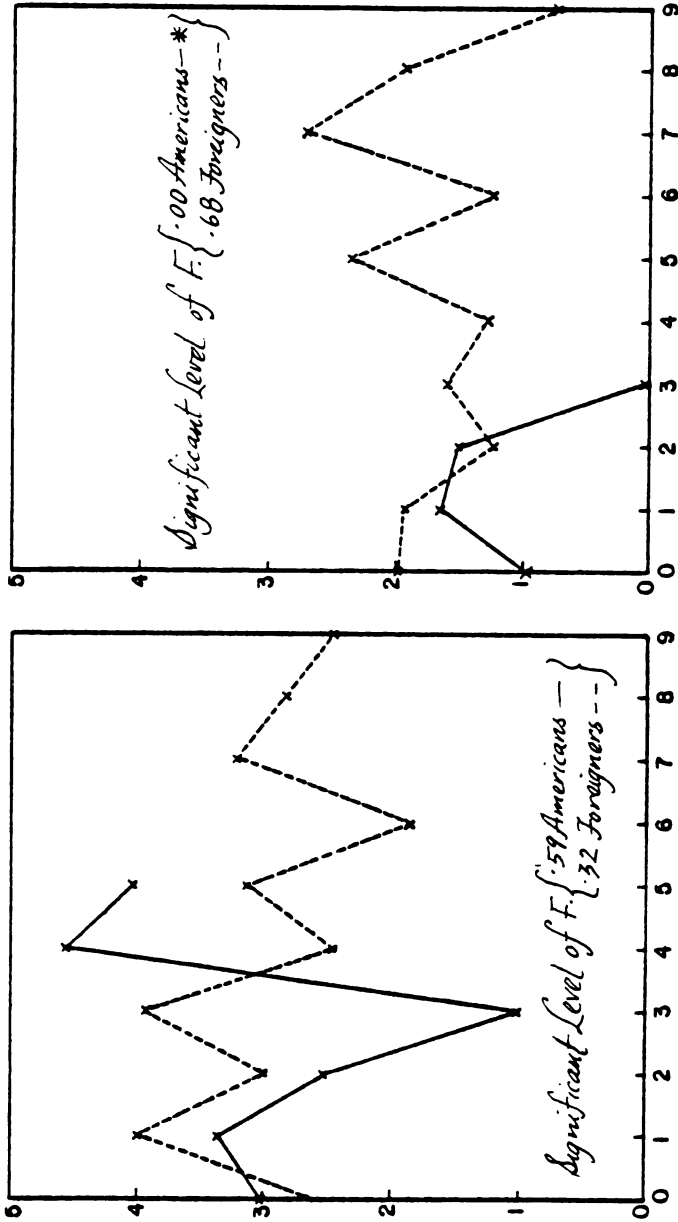


Figure 4a - Extent of Effective Leadership Concepts in Content of Core Courses

Figure 4b - Extent of Effective Leadership Concepts in Actual Research Conducted

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

the rest of the zones represented by 1, 3, 5, and 7 units, respectively (see Fig. 5a and b).

Another competency which effective change agents would be expected to have is a capacity to "work well with people," i.e., the extent to which they are equipped with necessary "human relations skills" to enable them to get their message across. As can be observed in Figure 6(a) and (b), the responses to "content" were about average and there were no differences in the comparison between American and foreign students. On the "actual research" side of the analysis, the results were generally above average, with American students' responses being statistically significant.

The question on whether the content of the courses in the core and research areas could be "adapted to individual needs" had responses which were similar in trend to those already discussed in Figure 3(a) and (b) to Figure 6(a) and (b): they were average to negative for core courses and above average for research. As usual, Americans' responses were statistically significant in research (see Fig. 7a and b for the details).

In any learning environment where adults are often engaged in self-initiated work, their success can be facilitated by the volume and variety of resources provided. It was in this context that the question was asked about resources available to them to meet learning needs in core areas as well as in research. As may be expected, the results were about average for both groups in the core courses, even though the Americans were a bit more moderate than their foreign counterparts (see Fig. 8a and b). As would be observed in Figure 8(b), the responses of both groups were not only above average, the positions

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

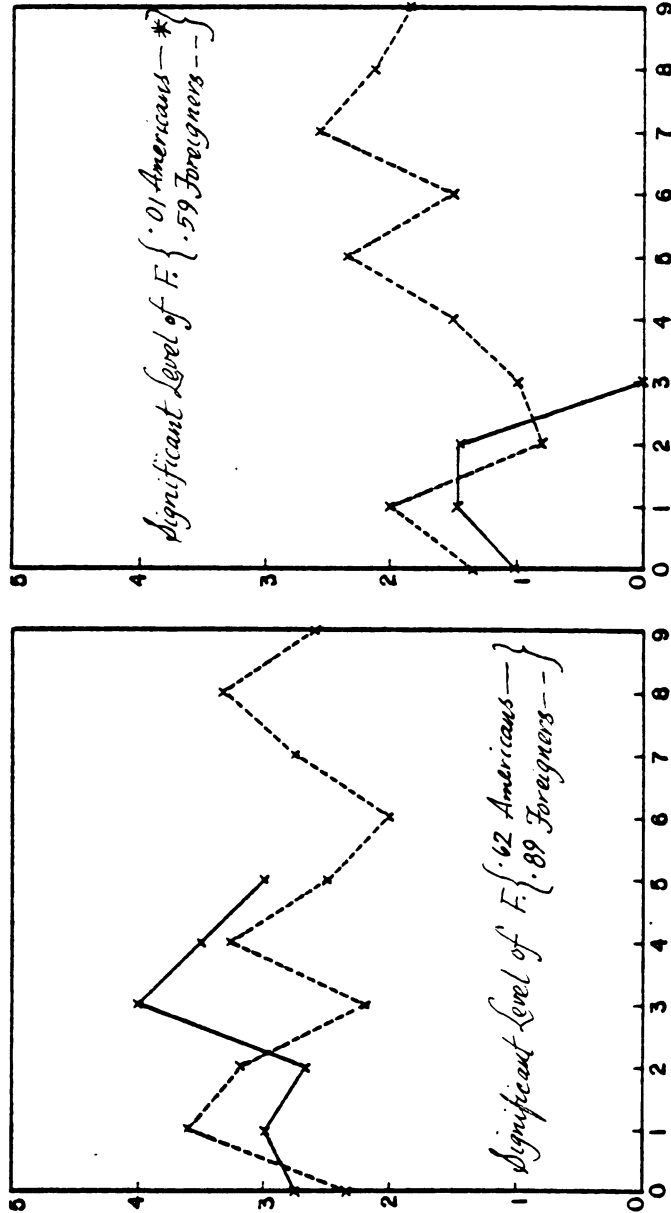


Figure 5a - Extent of Effective Communication Concepts in Content of Core Courses

Figure 5b - Extent of Effective Communication Concepts in Actual Research Conducted

Relevant (Excellent) Acceptable (Average) Irrelevant (Very Poor)

0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.

2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.

4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

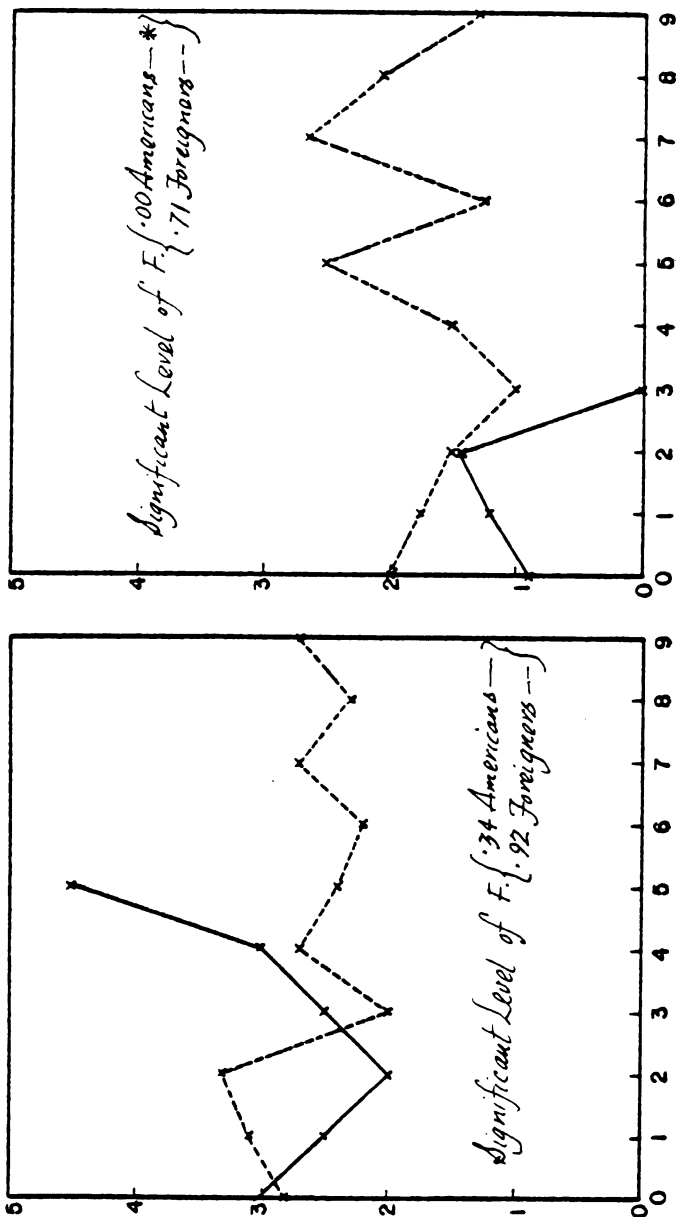


Figure 6a - Content of Core Courses Dealing with Working Well with People

Figure 6b - Amount of 'Working Well with People' skills Applied in Actual Research

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (Horizontal)Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

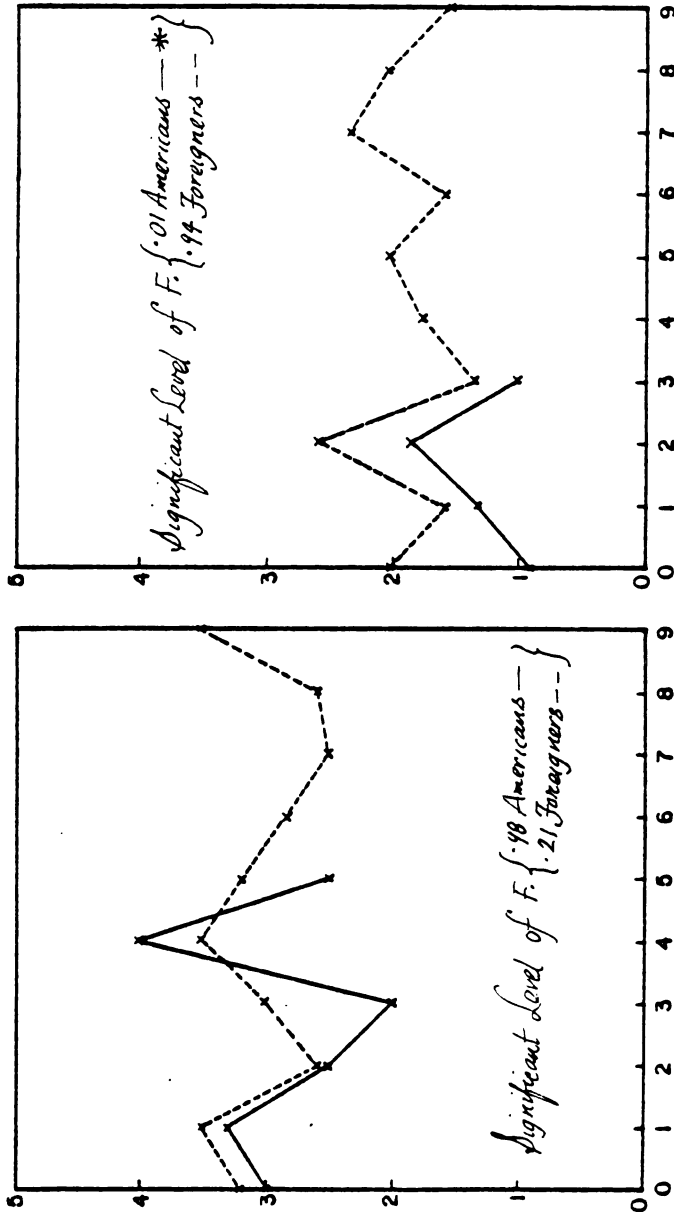


Figure 7a - Amount of Content of Core Courses Adaptable to Individual Needs

Figure 7b - Amount of Actual Research Conducted Adaptable to Individual Needs

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
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- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

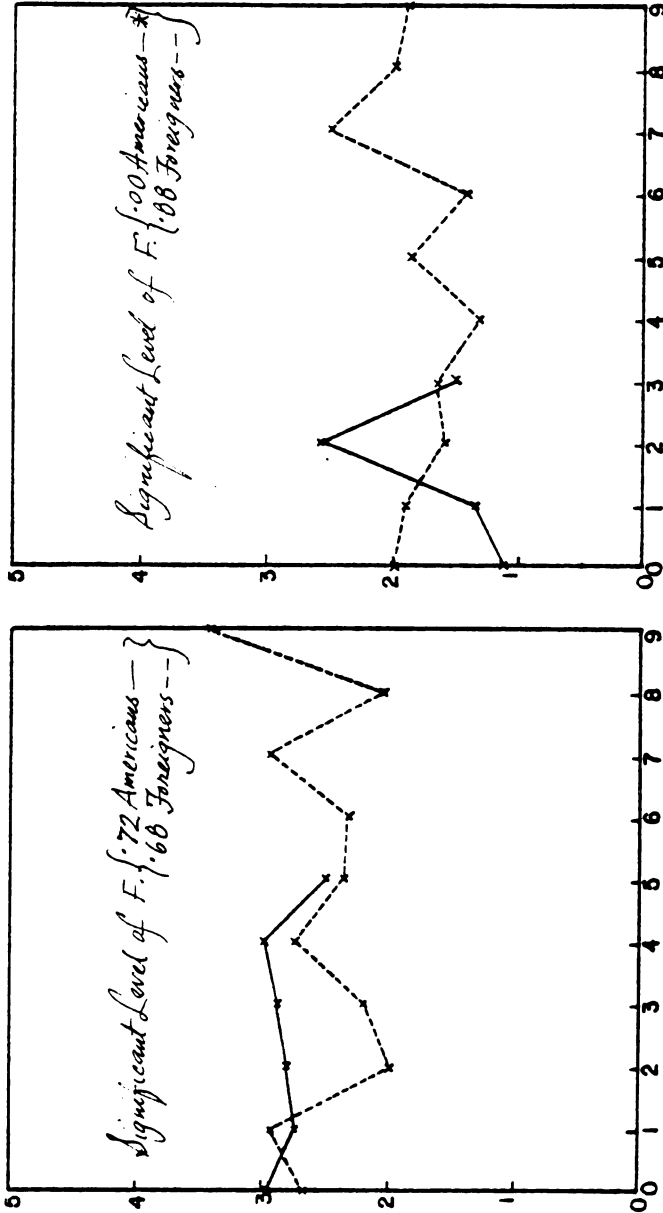


Figure 8b - Amount of Learning Resources Provided to Support Actual Research Conducted

Relevant (Excellent) Acceptable (Average) Irrelevant (Very Poor)

- 0-1 Course content is appropriate for my professional growth.
Gave me a rewarding learning experience.
So well taught I will recommend it to a friend.
- 2-3 Content not appropriate but well taught.
Content appropriate but not well taught.
May recommend it but with a caution.
- 4-5 Inappropriate content.
Limited gain in learning experience.
Won't recommend it to anybody.

of foreign student groups were much closer to that of the Americans, and as usual, the views of American students were statistically significant.

As a good grasp of the concept of change is necessary for an effective change agent, knowledge and understanding of the concept as provided in core courses and in research was probed. The results were illustrated in Figure 9(a) and (b). The results were above average for both categories, the views of American students being statistically significant in each case and those of the foreign students being moderate by comparison. The widest amount of variability in the group responses to core courses came from American students.

The Teaching Process Involved in These Courses

The first teaching strategy examined was "students' participation" in the teaching process. As the illustration (Fig. 10a and b) revealed, there was no significant difference between the positions of foreign and American students on the teaching of the "core courses" --a generally average response. The teaching process in the "research" section received an above average approval with a statistically significant reaction from American students who participated.

On the strategy of "learning by doing," the same trend as in Figure 10(a) and (b) was repeated with slight modification. American students were more negative in their reactions to the teaching of "core courses" than were foreign students, while showing more positive and statistically significant reactions than the latter group in the application to "research" (see Fig. 11a and b for the details).

Dealing with "concrete, real world problems" was the next strategy considered. Wide variability was observed in the reactions of

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
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- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

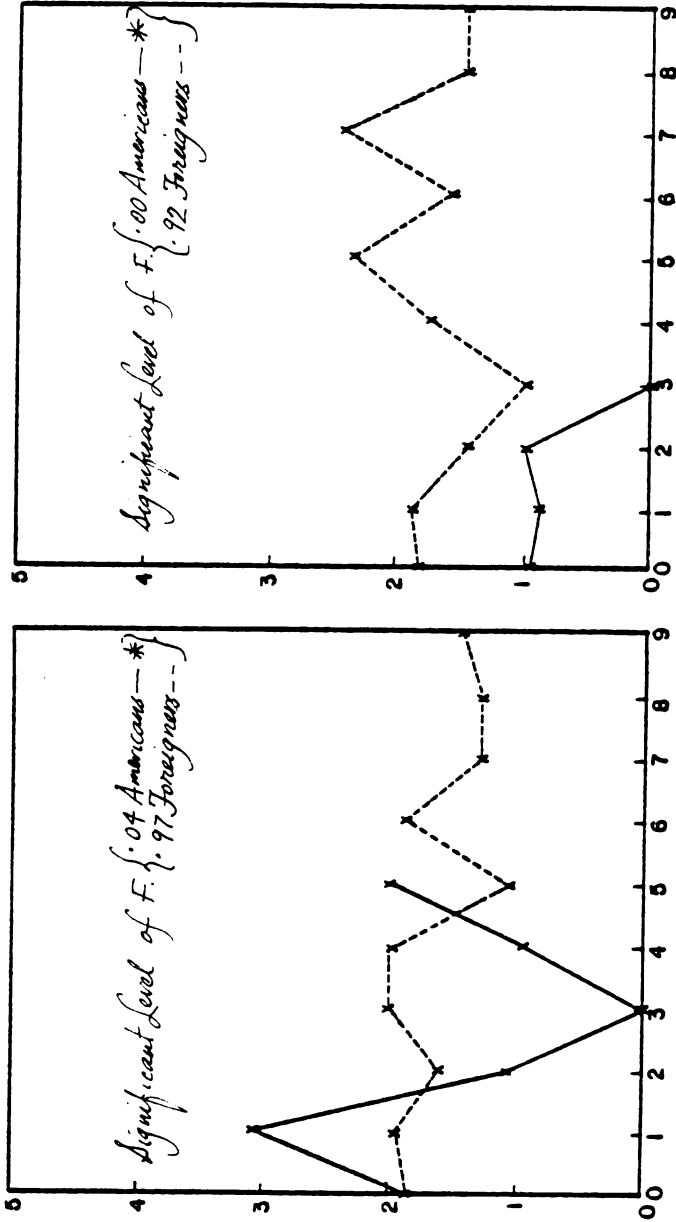


Figure 9b - Amount of Actual Research Conducted Dealing With Concept of Change

Relevant (Excellent) Acceptable (Average) Irrelevant (Very Poor)

- 0-1 Course content is appropriate for my professional growth.
Gave me a rewarding learning experience.
So well taught I will recommend it to a friend.
- 2-3 Content not appropriate but well taught.
Content appropriate but not well taught.
May recommend it but with a caution.
- 4-5 Inappropriate content.
Limited gain in learning experience.
Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

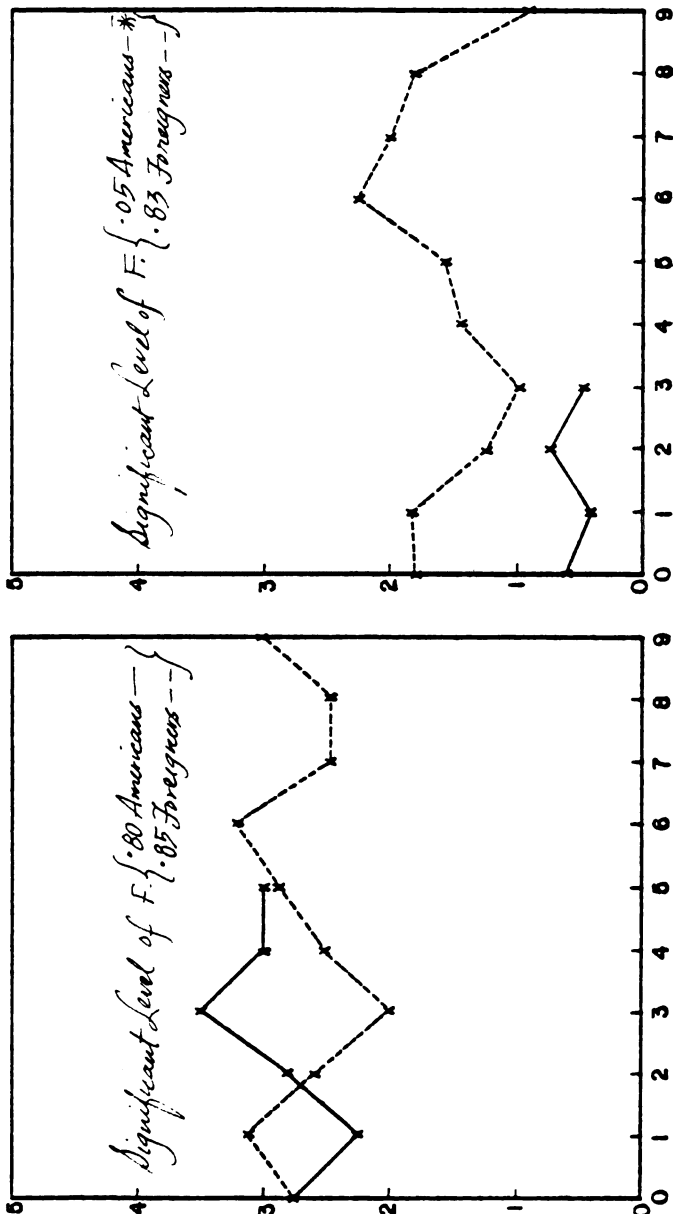


Figure 10a - Extent of Active Student Participation in the Teaching of Core Courses

Figure 10b - Extent of Active Student Participation in the Actual Research Conducted

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

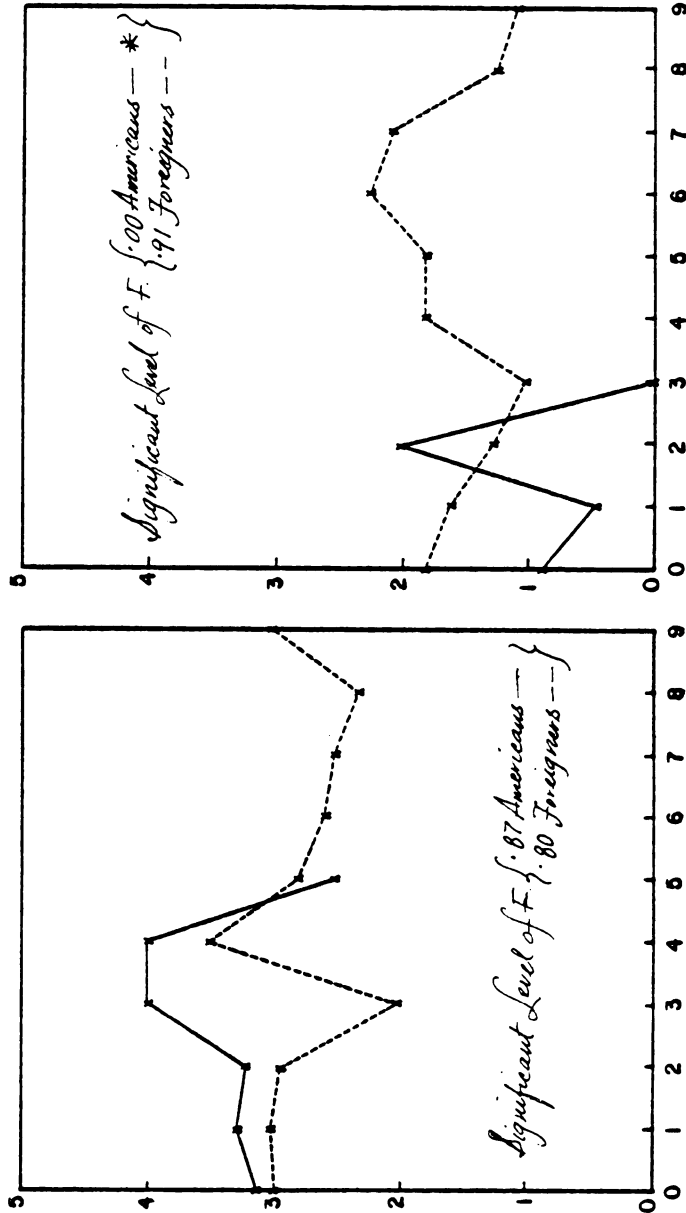


Figure 11a - Amount of Emphasis Laid on Learning by Doing in the Teaching of Core Courses

Figure 11b - Amount of Emphasis Laid on Learning by Doing in Actual Research Conducted

Irrelevant (Very Poor)

- 4-5 Inappropriate content.
- Limited gain in learning experience.
- Won't recommend it to anybody.

Acceptable (Average)

- 2-3 Content not appropriate but well taught.
- Content appropriate but not well taught.
- May recommend it with a caution.

Relevant (Excellent)

- 0-1 Course content is appropriate for my professional growth.
- Gave me a rewarding learning experience.
- So well taught I will recommend it to a friend.

both the American and foreign student groups (see Fig. 12a and b). By far the most negative response to the teaching of core courses came from the Hispanics (group 4) and was closely followed by Native Americans (group 3). Among foreign students, the rest of Latin Americans (minus Brazil) and the rest of Africa (minus Nigeria) were very negative. Even in the teaching with "research," the Native Americans were not as optimistic as others while the most negative reaction came from the rest of Asian students (minus China and Japan).

A trend can be observed here. The dramatic reactions came from American minorities (and the difference in the views of American students was statistically significant). Foreign students from "non-star" nations (those which the United Nations designated as needing more assistance than others) reacted in a similar vein even though the differences among foreign students were not statistically significant.

The extent to which instructors "encouraged independent thinking" in what they taught was examined and results (Fig. 13a and b) indicated an average to negative reaction in the teaching of "core courses." Most American groups were more negative than their foreign counterparts. The position was reversed when dealing with "research" as American students were more positive than the latter group. However, no statistically significant differences were revealed. Whether or not the instructor welcomed and used his "students' feedback" in evaluating his course and making changes in future plans for improvement, was the next strategy tested. The results illustrated in Figure 14(a) and (b) fall in the same pattern as the previous ones: a generally average to negative reaction, with Americans more negative than foreign students in the teaching of "core courses;" and a generally positive reaction

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
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3 = Other Middle Easterns
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5 = Other Africans
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7 = Other Asians
8 = Canadians
9 = Europeans and Australians

American Students

- 0 = White Americans
1 = Black Americans
2 = Mexican Americans
3 = Native Americans
4 = Hispanics
5 = Asian Americans

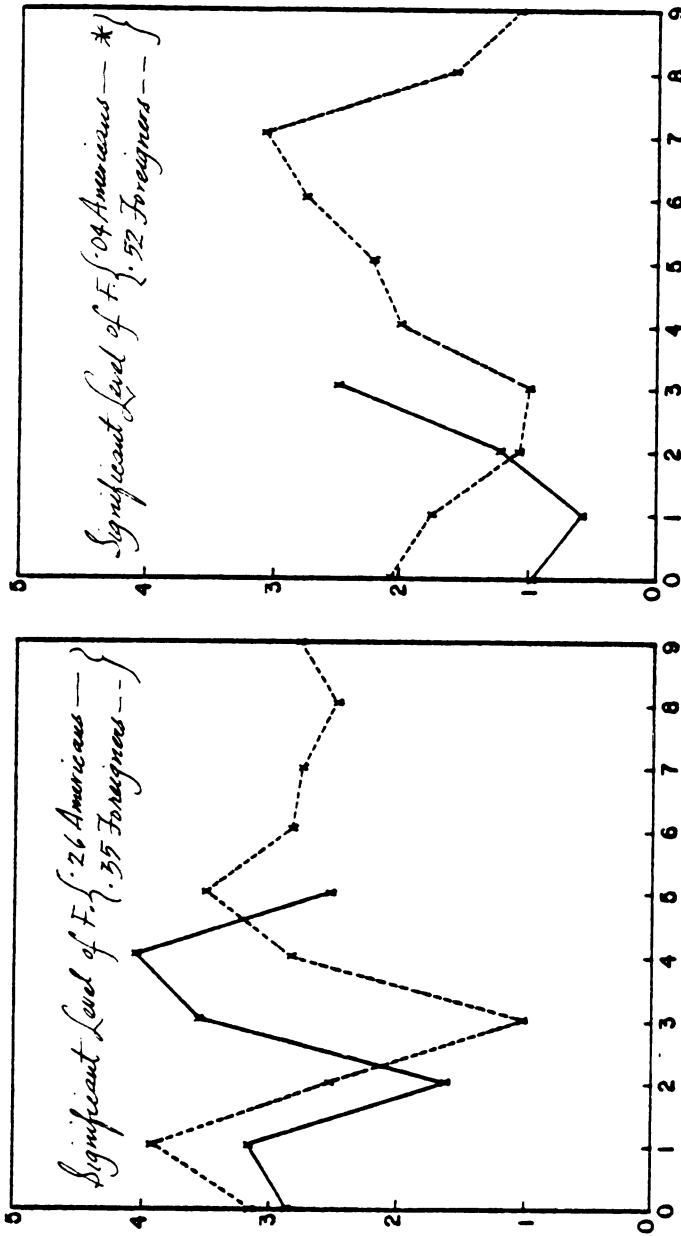


Figure 12a - Extent of Real World Problems Reflected from the Teaching of Core Courses

Figure 12b - Extent of Real World Problems Reflected from Actual Research Conducted

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (*Horizontal*)

Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

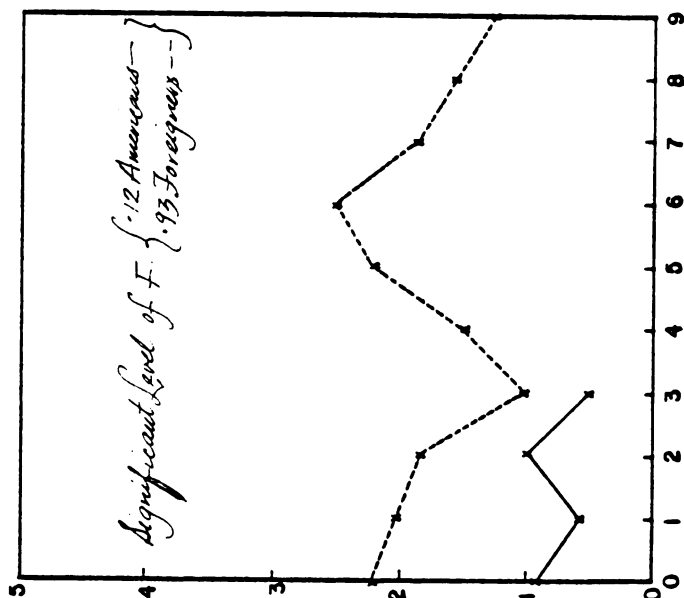


Figure 13b - Amount of Independent Thinking Encouraged in Actual Research Conducted

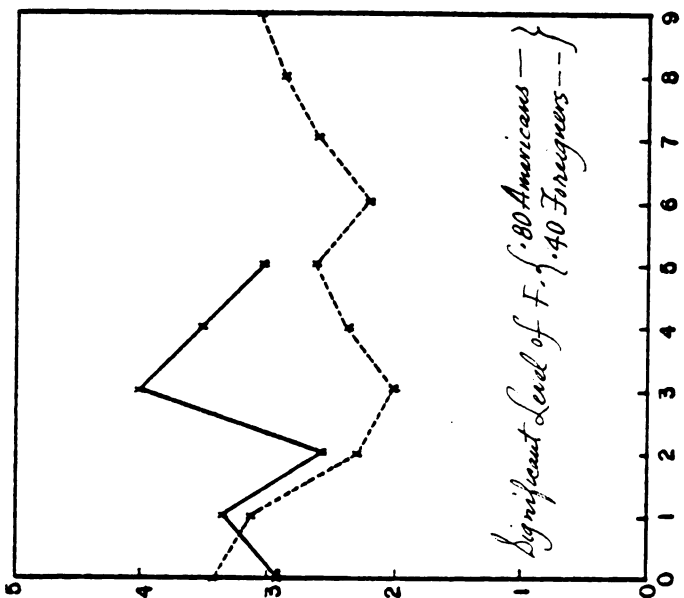


Figure 13a - Amount of Independent Thinking Encouraged in the Teaching of Core Courses

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

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- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

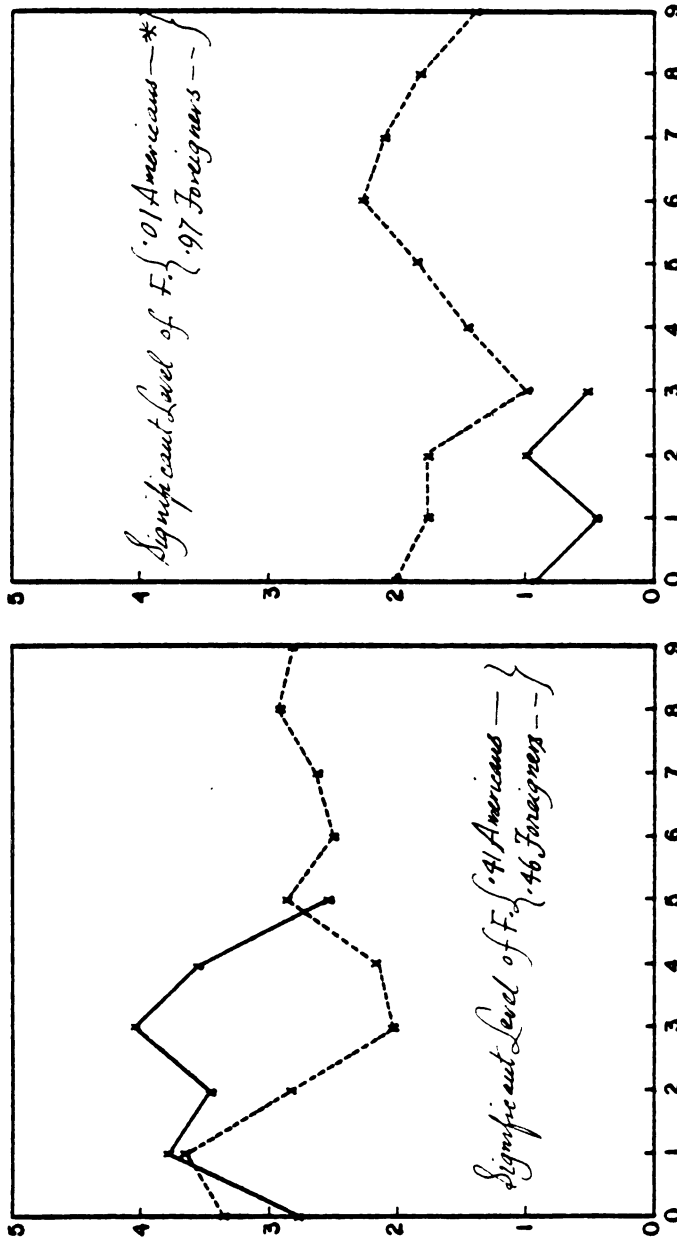


Figure 14a - Extent of Use of Student Feedback in the Teaching of Core Courses

Figure 14b - Extent of Use of Student Feedback in Actual Research Conducted

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

with Americans, this time not only more positive than the latter group but also recording a statistically significant difference.

When asked how much "emphasis was laid on learning" as compared to grades, the widest disparity was revealed in the teaching of the "core courses" (see Fig. 15a and b). Apart from the fact that the result represented the most negative reaction by both groups, most American minorities (groups 1, 2, 3, and 4) were more negative than others. And for the first time in the analysis, the difference in the reaction of foreign students participating was statistically significant ($F. = .00$). When the same strategy was applied to the "research" section, the result was above average with American students being more positive than foreign students, and also recording a difference which is statistically significant.

As the illustration showed in Figure 16(a) and (b), students' assessment of instructors' concern for their progress was below average for both foreign and American students even though the differences were not statistically significant. When the strategy was examined on the "research" side, "above average" results emerged; American students' viewpoint being more positive than their foreign counterparts and the difference being statistically significant.

On the strategy of "respecting the individual differences of students" in the teaching process, a "below average" reaction was revealed in the teaching of "core courses," as illustrated in Figure 17(a) and (b). The difference between foreign and American students' responses was not statistically significant. However, a test of the same strategy in "research" revealed, as in previous cases, more positive reaction among American students than foreign students. There

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

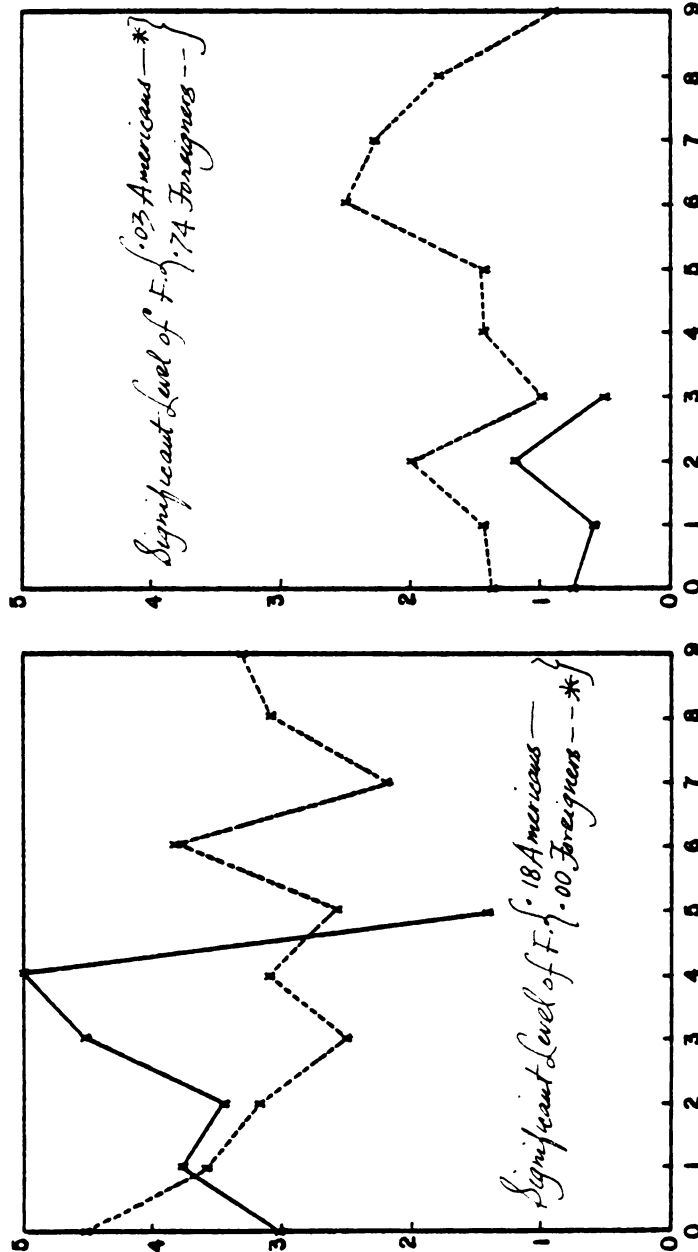


Figure 15a - Extent to Which Emphasis was Laid More on Learning than Grades in Teaching of Core Courses

Figure 15b - Extent to Which Emphasis was Laid More on Learning than Grades in Actual Research Conducted

Irrelevant (Very Poor)

- 4-5 Inappropriate content.
 Limited gain in learning experience.
 Won't recommend it to anybody.

Acceptable (Average)

- 2-3 Content not appropriate but well taught.
 Content appropriate but not well taught.
 May recommend it but with a caution.

Relevant (Excellent)

- 0-1 Course content is appropriate for my professional growth.
 Gave me a rewarding learning experience.
 So well taught I will recommend it to a friend.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

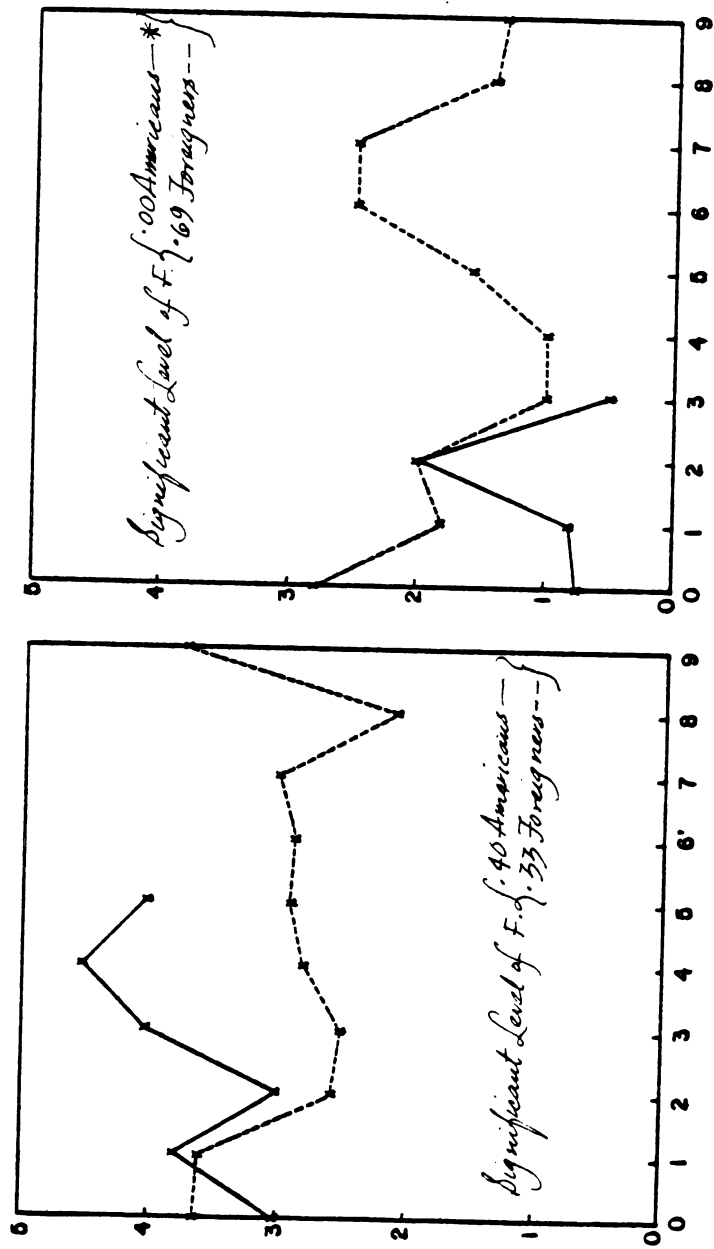


Figure 16a - Amount of Concern for Student Progress in the Teaching of Core Courses

Figure 16b - Extent of Concern for Student Progress Reflected in Actual Research Conducted

Relevant (Excellent)

0-1 Course content is appropriate for my professional growth.
Gave me a rewarding learning experience.
So well taught I will recommend it to a friend.

Acceptable (Average)

2-3 Content not appropriate but well taught.
Content appropriate but not well taught.
May recommend it but with a caution.

Irrelevant (Very Poor)

4-5 Inappropriate content.
Limited gain in learning experience.
Won't recommend it to anybody.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
1 = Other Latin Americans
2 = Iranians
3 = Other Middle Easterns
4 = Nigerians
5 = Other Africans
6 = Chinese and Japanese
7 = Other Asians
8 = Canadians
9 = Europeans and Australians

American Students

- 0 = White Americans
1 = Black Americans
2 = Mexican Americans
3 = Native Americans
4 = Hispanics
5 = Asian Americans

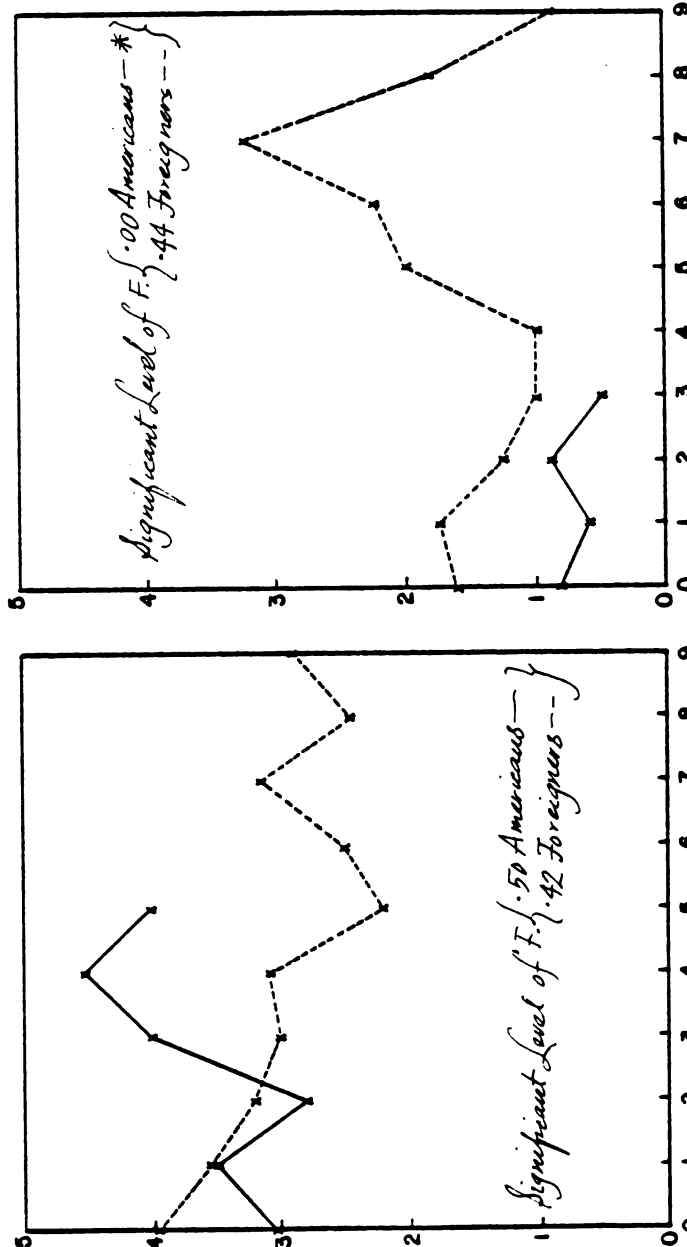


Figure 17b - Amount of Respect for Individual Differences Encouraged in Actual Research Conducted

Figure 17a - Amount of Respect for Individual Differences Encouraged in the Teaching of Core Courses

Acceptable (Average) Irrelevant (Very Poor)

Relevant (Excellent)

- | | | |
|--|--|--|
| 0-1 Course content is appropriate for my professional growth.
Gave me a rewarding learning experience.
So well taught I will recommend it to a friend. | 2-3 Content not appropriate but well taught.
Content appropriate but not well taught.
May recommend it but with a caution. | 4-5 Inappropriate content.
Limited gain in learning experience.
Won't recommend it to anybody. |
|--|--|--|

was also a statistically significant difference between them on this item.

When the two categories (Core Courses and Research) were evaluated from the standpoint of "encouraging innovation in problem solving," the result was similar to others previously discussed: a "below average" level of response from both groups in terms of teaching "core courses;" and a generally "above average" level of response in its application to "research" (see Fig. 18a and b); except that none of the differences between foreign and American students were statistically significant.

The Academic Advisor

Questions dealing with the role of the academic advisor such as the frequency of his meeting with his advisee, his interest in and interaction with him (advisee), and the amount of support he gives in setting up the latter's program were evaluated. Reactions of all students surveyed were positive even though none of the differences between foreign and American students on each item were statistically significant. Two examples (Fig. 19a and b) were selected to illustrate this point. As indicated in Figure 19(a), students were asked whether or not they were allowed to make major input into the drawing up of their programs. A two-point scale of response was used; "0" stood for "yes" while "1" stood for "no."

The "above average" result indicated that a majority of the participants in the survey were positive in their answers. The same positive reaction was posted in the overall evaluation of the advisors' performance, even though the reactions of foreign student groups were

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
 1 = Other Latin Americans
 2 = Iranians
 3 = Other Middle Easterns
 4 = Nigerians
 5 = Other Africans
 6 = Chinese and Japanese
 7 = Other Asians
 8 = Canadians
 9 = Europeans and Australians

American Students

- 0 = White Americans
 1 = Black Americans
 2 = Mexican Americans
 3 = Native Americans
 4 = Hispanics
 5 = Asian Americans

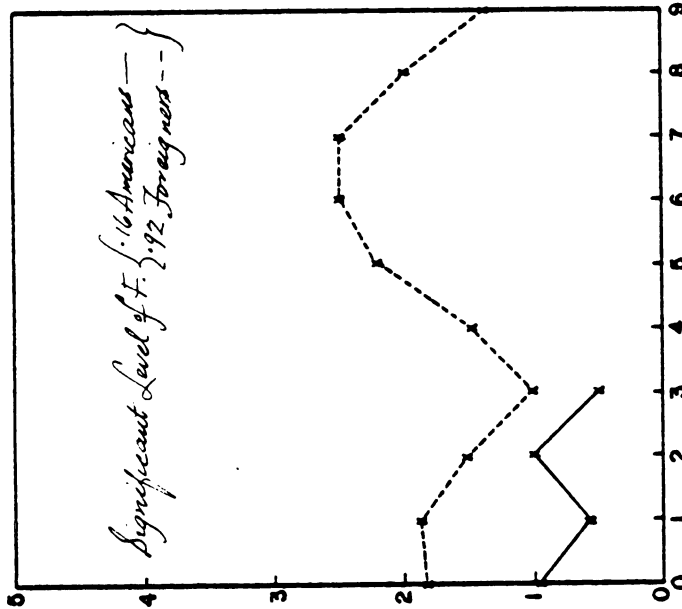


Figure 18b - Amount of Innovation in Problem Solving Encouraged in Actual Research Conducted

Acceptable (Average) Irrelevant (Very Poor)

- 2-3 Content not appropriate but well taught.
 Content appropriate but not well taught.
 May recommend it but with a caution.
- 4-5 Inappropriate content.
 Limited gain in learning experience.
 Won't recommend it to anybody.

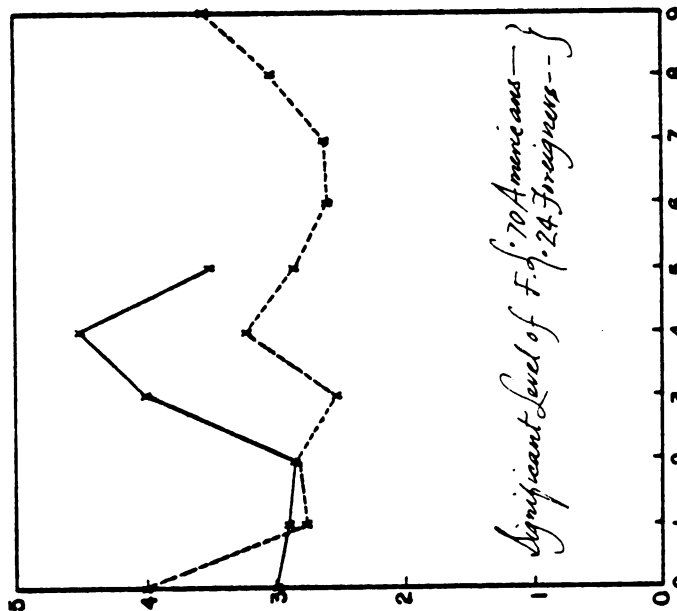


Figure 18a - Amount of Innovation in Problem Solving in the Teaching of Core Courses

Relevant (Excellent)

- 0-1 Course content is appropriate for my professional growth.
 Gave me a rewarding learning experience.
 So well taught I will recommend it to a friend.

KEY (Horizontal)

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

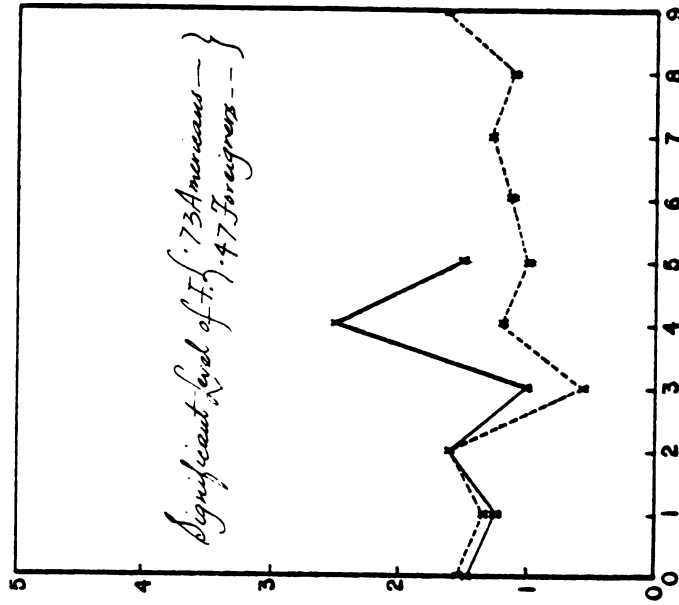


Figure 19b - Overall Evaluation of Advisor's Performance

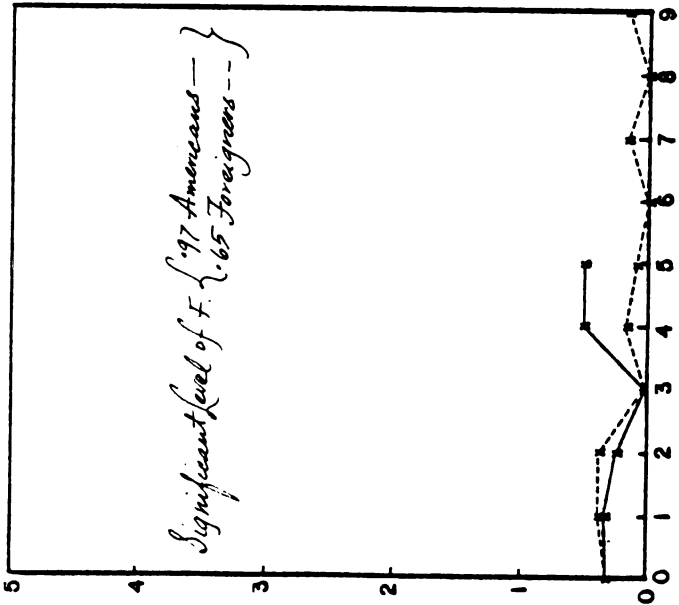


Figure 19a - Amount of Student Input into Programs with Advisor's Support

Relevant (Excellent)	Acceptable (Average)	Irrelevant (Very Poor)
0-1 Course content is appropriate for my professional growth. Gave me a rewarding learning experience. So well taught I will recommend it to a friend.	2-3 Content not appropriate but well taught. Content appropriate but not well taught. May recommend it but with a caution.	4-5 Inappropriate content. Limited gain in learning experience. Won't recommend it to anybody.

more favorable than their American counterparts. Though none of the results were significant statistically, an attempt was made to see what contribution these two elements had on the general evaluation of the programs and the results were interesting. In each case, as could be seen in Figure 20(a) and (b), there was a positive linear relationship between the general evaluation of the programs and the input made by students as well as the role played by the advisor in the exercise and both results were significant statistically. In short, what the result suggested was that a positive contribution of these two elements did make a difference in the programs' general evaluation.

Other Factors of Importance

A number of variables expected to influence the outcome of the survey were included in the study to ascertain the measure of influence which their inclusion would have. It is believed that owing to differences in content, style of teaching and research among disciplines, this would have some effect on the outcome of the study. As the result showed in Figure 21, a generally positive reaction was registered as all colleges participating had "above average" responses. However, a statistically significant difference was established between the College of Agriculture and Natural Resources and other colleges combined.

The result from a classification of the subjects according to the levels in their programs revealed the same positive reaction. It can be observed that both the master's and doctoral candidates were slightly more than others in their responses as the illustration in Figure 22 clearly showed, but differences among the levels revealed

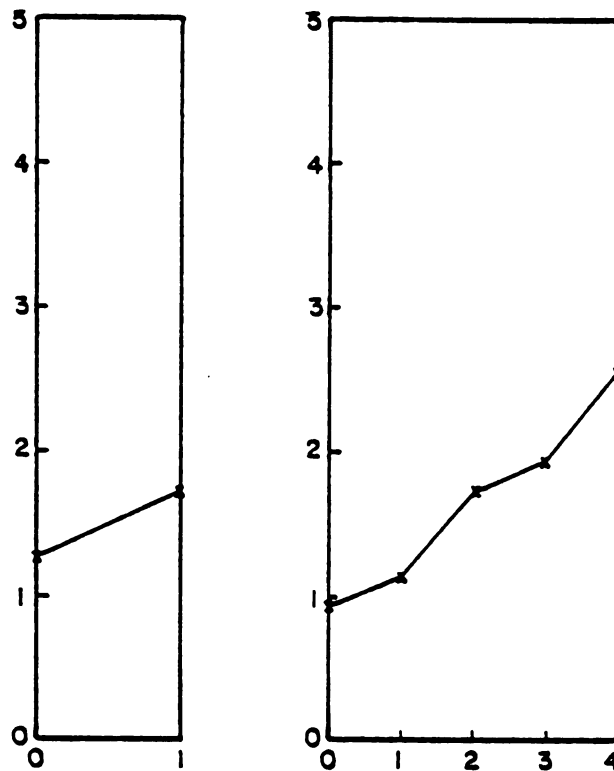


Figure 20.--Interaction Between General Evaluation of the Programs and
(a) Student Input into Programs and (b) Overall Performance
of Academic Advisors.

KEY (*Horizontal*)

- 0 = Student made Major input into Program
- 1 = Student made Limited input into Program

*Significant Level of F. .00**

KEY (*Horizontal*)

- 0 = The Best Academic Advisor Ever
- 1 = A Very Good Advisor
- 2 = Adequate but not Exceptional
- 3 = A Rather Poor Advisor
- 4 = So Bad a Change was Made

*Significant Level of F. .00**

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

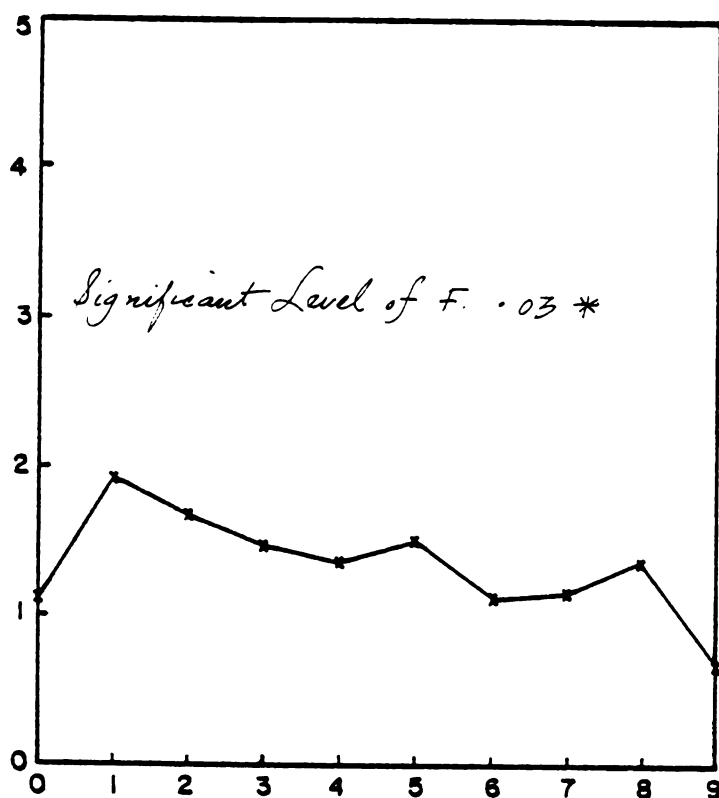


Figure 21.--General Evaluation According to College.

KEY (Horizontal)

- 0 = Agriculture and Natural Resources
- 1 = Business
- 2 = Communication Arts and Sciences
- 3 = Education
- 4 = Engineering
- 5 = Human Ecology
- 6 = Human Medicine
- 7 = Osteopathic Medicine
- 8 = Social Science
- 9 = Veterinary Medicine

SCALE (Vertical)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

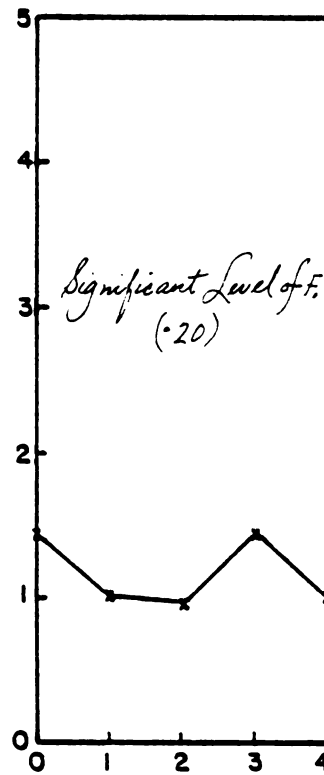


Figure 22.--General Evaluation of Program According to Level in Program at Present.

KEY (*Horizontal*)

- 0 = Master's Level (Arts and Sciences)
- 1 = Educational Specialist
- 2 = Graduate Professional
- 3 = Doctoral Level (Ph.D., Ed.D., etc.)
- 4 = Post-Doctoral

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

in the result were not statistically significant.

It was also speculated that age and years of full-time work experience (as co-variables) would affect the total outcome. As Figure 23(a) and (b) showed, neither of the two variables made a difference as the test of the results was not statistically significant. Two additional dimensions of work experience: "kind of work" and "class of work" were probed. The results as revealed in Figure 24(a) and (b), were similar to the preceding cases described: respondents recorded "above average" reaction to both but there were no statistically significant differences among them. In Figure 25(a) "students' objectives" were tested in relation to the overall evaluation. The significant difference recorded in the frequency distribution earlier on disappeared; the three groups were positive in their reactions and the differences among them were not statistically significant. However, the test on "choice of career" revealed statistically significant differences (Fig. 25b). Those who were either holding jobs or were decided on what career to pursue were more positive in their reactions than other groups.

In Figure 26(a) and (b), the extent of progress students made in the programs, and their academic performance inferred from their grade point averages were used as criteria for assessing their reactions. As the illustration showed, there was no significant difference in the views of beginners (those who completed up to 20% of their programs) and the experienced students (those who completed more than 80% of their programs). However, from their grade point averages, those who recorded the highest grades (group 1), were not as optimistic as those whose results were poor (group 5). A slight negative linear

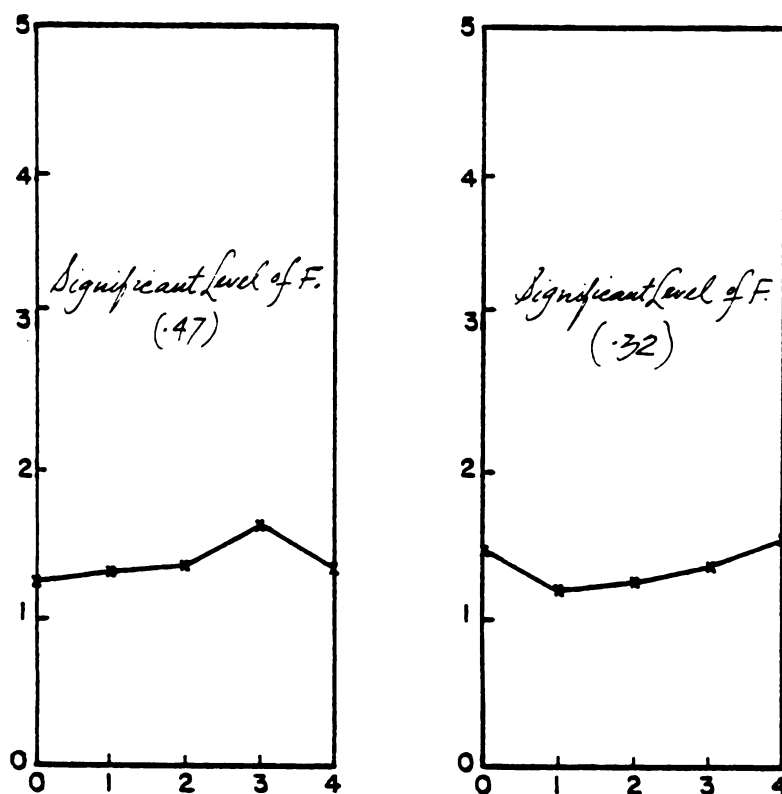


Figure 23.--General Evaluation of Programs (a) According to Age and (b) According to Work Experience.

KEY (*Horizontal*)

- 0 = Less than 25 years
- 1 = 25 up to 29 years
- 2 = 30 up to 34 years
- 3 = 35 up to 39 years
- 4 = 40 years or more

KEY (*Horizontal*)

- 0 = No experience at all
- 1 = Less than 3 years
- 2 = 3 years up to 5 years
- 3 = Over 5 years and up to 7 years
- 4 = Over 7 years

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

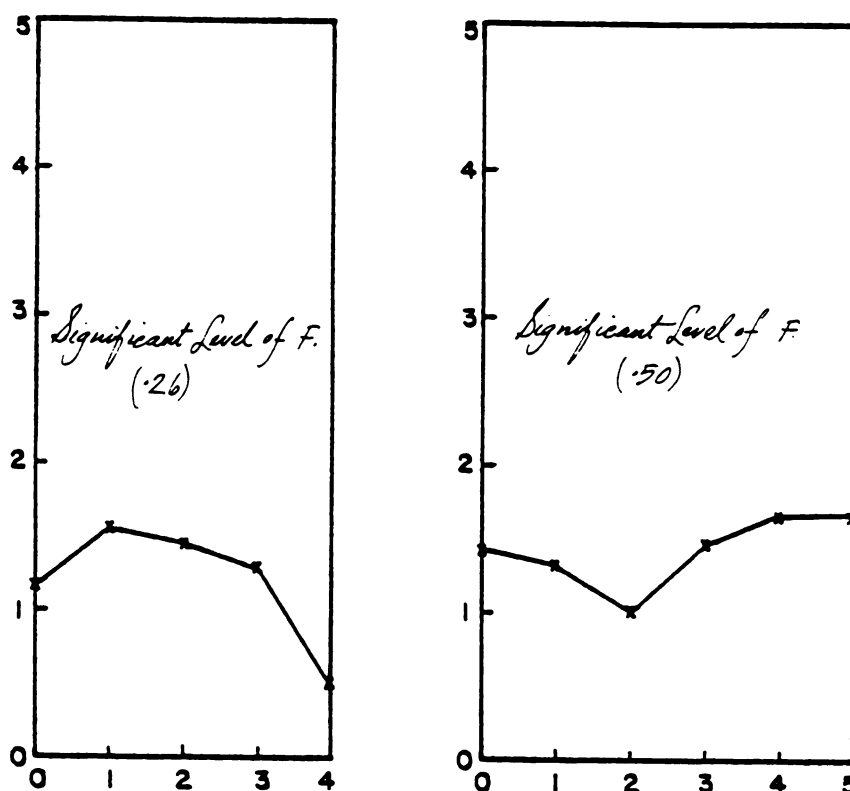


Figure 24.--General Evaluation of Programs According to (a) Kind of Work and (b) Class of Work.

KEY (*Horizontal*)

- 0 = Public or Government
- 1 = Private Sector
- 2 = Education (Public and Private)
- 3 = Non-profit Organization
- 4 = Self-employed

- 0 = Executive, administrative, etc.
- 1 = Professional (e.g. Doctor, Lawyer, etc.)
- 2 = Technician (computer specialist, etc.)
- 3 = Teacher (elementary through college)
- 4 = Sales, clerical, crafts
- 5 = Other

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

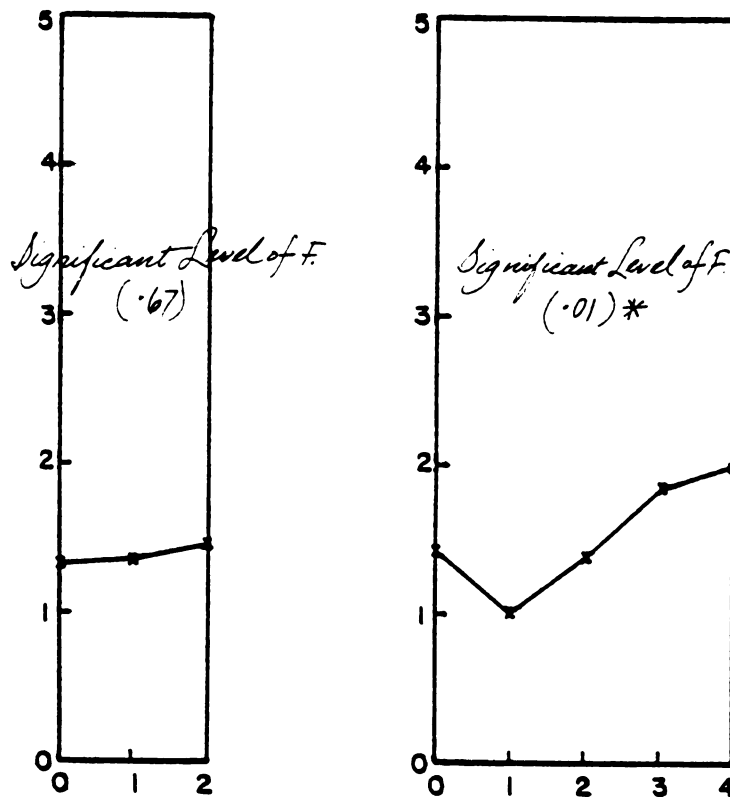


Figure 25.--General Evaluation of Programs According to (a) Student's Objectives and (b) Choice of Career by Students.

KEY (*Horizontal*)

- 0 = Personal Objectives are more important
- 1 = Social Objectives are more important
- 2 = Both are of equal importance

(Significant Level of F .67)

KEY (*Horizontal*)

- 0 = Presently Fully Employed
- 1 = On Leave of Absence
- 2 = Decided on Career Choice
- 3 = Undecided on Career Choice
- 4 = No Plans to Choose a Career

(Significant Level of F .01)*

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

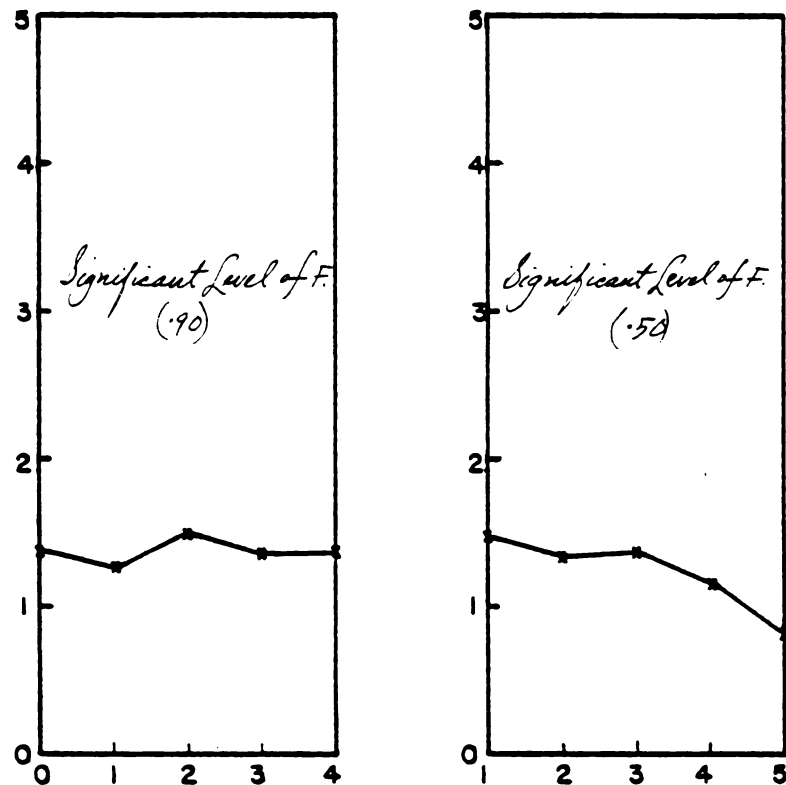


Figure 26.--General Evaluation of Programs According to (a) Progress in Programs and (b) Performance in Grade Point Average.

KEY (Horizontal)

- 0 = Up to 20% completed
- 1 = 21 to 40% completed
- 2 = 41 to 60% completed
- 3 = 61 to 80% completed
- 4 = 81 to 99% completed

KEY (Horizontal)

- 1 = 3.76 to 4.00
- 2 = 3.51 to 3.75
- 3 = 3.26 to 3.50
- 4 = 3.01 to 3.25
- 5 = up to 3.00

SCALE (Vertical)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

relationship was also shown in the illustration (Fig. 26b). On the whole, none of the differences in the results were significant in statistical terms.

Factors Related to Foreign Students' Background

When the general evaluation was made from the perspective of "proficiency in the use of English language" and the "length of time already spent in the U.S.," the results, presented in Figure 27(a) and (b) revealed no statistically significant difference between them. Both registered positive responses. In short, there was no difference in the views of the newcomers (group 1 of Fig. 27a) and the "old timers" (group 4). On the use of English, the views of those who have been using the language for over 6 years were no different from those whose use was less than 2 years.

The fact that most foreign students came from a different educational system did not affect the overall evaluation, neither was their attitudes toward "seeking foreign aid" by developing nations. Both results, as illustrated in Figure 28(a) and (b) were slightly above average, and the difference was not significant statistically.

The general evaluation of the programs made from the perspective of those who plan to return home, and those who are committed to the development effort in their respective countries (Fig. 29a and b), revealed generally "above average" responses. The differences, as in preceding cases, were not significant in statistical terms.

The extent to which academic interaction occurred between foreign and American students in "structured non-class setting" was tested to see if there was a difference in their reactions. The results were not only positive for both groups, the views of foreign students revealed

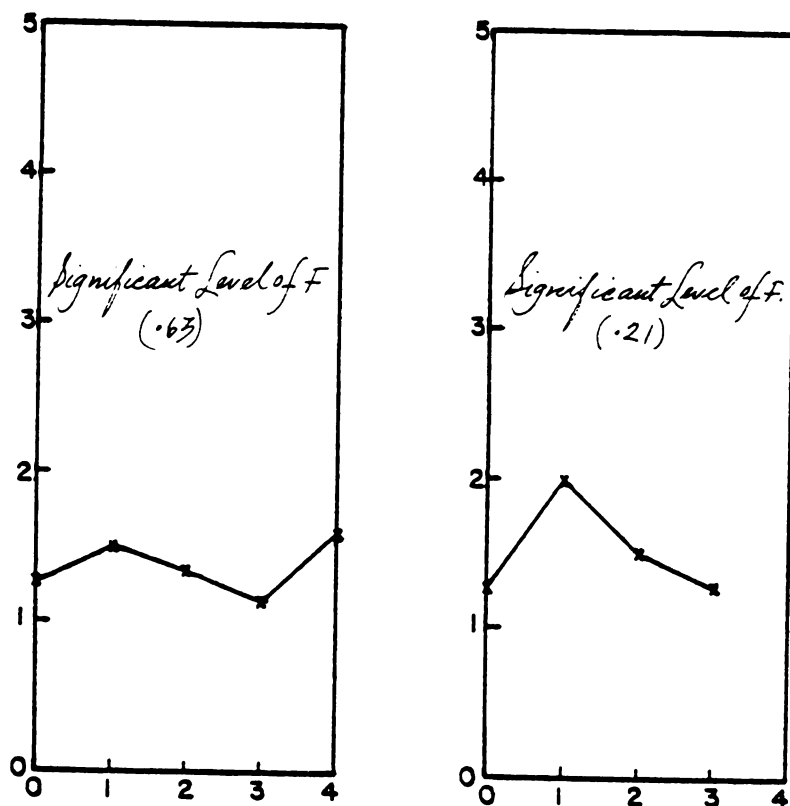


Figure 27.--General Evaluation of Programs as Shown by (a) Stay in the U.S. and (b) English Language Proficiency.

KEY (*Horizontal*)

- 0 = Less than 2 years
- 1 = From 2 years up to 4 years
- 2 = Over 4 years up to 6 years
- 3 = Over 6 years up to 8 years
- 4 = Over 8 years

KEY (*Horizontal*)

- 0 = Less than 2 years of use
- 1 = From 2 years up to 4 years
- 2 = Over 4 years up to 6 years
- 3 = Over 6 years

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some umprovement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

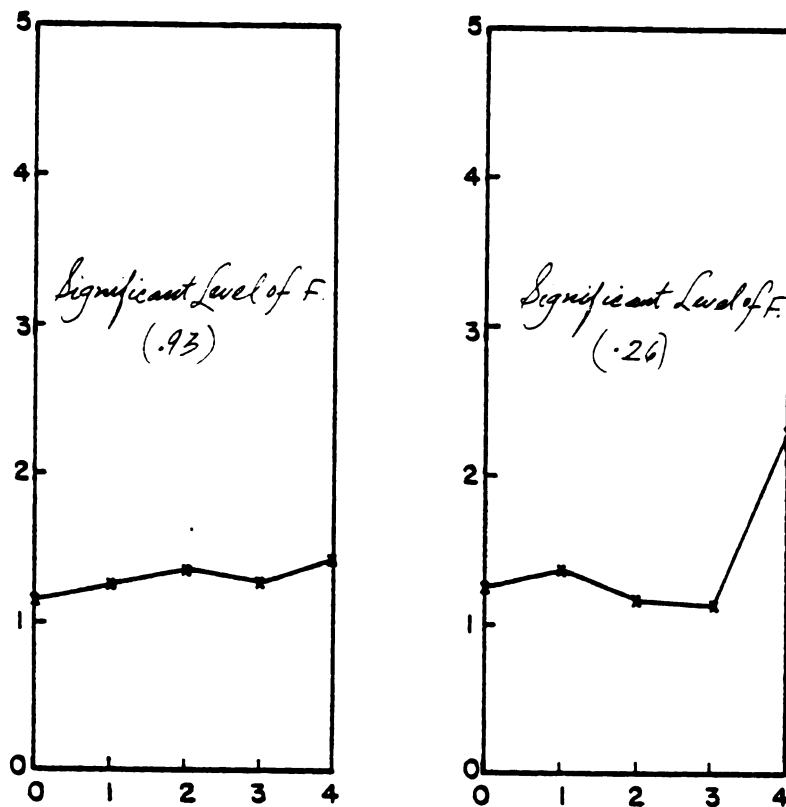


Figure 28.--General Evaluation of Programs by Respondents to (a) Foreign Educational System and (b) Attitude Toward Technical Aid.

KEY (Horizontal)

- 0 = Exactly the same as U.S.
- 1 = Very close in similarity
- 2 = About 50:50
- 3 = Very much different
- 4 = Completely different

KEY (Horizontal)

- 0 = Don't rely on any aid
- 1 = Only a limited aid if useful
- 2 = Strike a 50:50 balance between aid and self-help
- 3 = Welcome aid for most of development
- 4 = Seek aid and emulate West's model of development

SCALE (Vertical)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

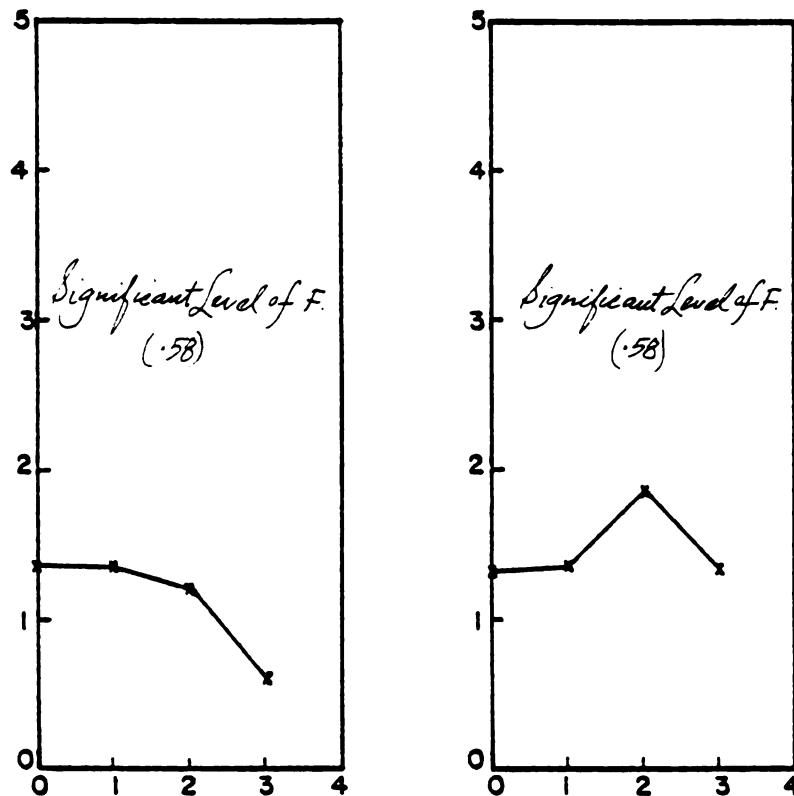


Figure 29.--General Evaluation of Programs by Those Who Have (a) Plans to Return Home and (b) Commitment to National Development.

KEY (*Horizontal*)

- 0 = Will surely return
- 1 = Shall return
- 2 = May return
- 3 = Shall not return
- 4 = Will surely not return

KEY (*Horizontal*)

- 0 = Legally bound by contract
- 1 = Morally bound by conscience
- 2 = Uncommitted at this time
- 3 = Has no plans to participate
- 4 = Believes it is unnecessary

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

a significant difference (Fig. 30).

Other variables tested which revealed no statistically significant differences between foreign and American students surveyed were "the socio-economic status of subject's parents" (Fig. 31), "the kind of financial support" which they received, and "where they grew up" (Fig. 32a and b). In each case, their reactions were generally above average.

Statistical Tests for Interaction Among Selected Variables

In addition to the significant differences in the views of foreign students when compared with American students on some issues, it is necessary to know what contributions other key variables made, by interaction, to the overall results. Four analysis of variance tests with regression effects were conducted to ascertain this. The first test attempted to find what differences were made to the "Overall Evaluation of the Programs" by students' "Input into the Drawing of Their Programs" and their "Grade Point Averages." The result as shown in Table 29 below indicated that no significant difference was made by each item on individual basis (the significance of F. being .380 and .145, respectively), but their interaction did produce significant differences (.014) and subsequently improved the overall results (compare .173 with .059). It is clear from the table that the combined interaction of the two items listed substantially improved the overall rating.

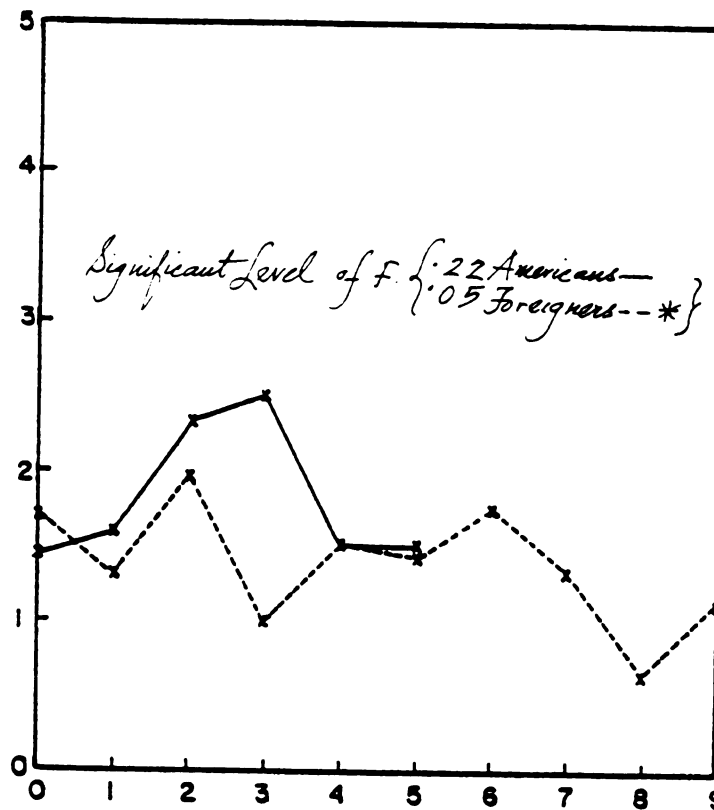


Figure 30.--Foreign Students' Interaction with American Students in Structured Non-Class Setting.

Foreign Students

- 0 = Brazilians
- 1 = Other Latin Americans
- 2 = Iranians
- 3 = Other Middle Easterns
- 4 = Nigerians
- 5 = Other Africans
- 6 = Chinese and Japanese
- 7 = Other Asians
- 8 = Canadians
- 9 = Europeans and Australians

American Students

- 0 = White Americans
- 1 = Black Americans
- 2 = Mexican Americans
- 3 = Native Americans
- 4 = Hispanics
- 5 = Asian Americans

SCALE (Vertical)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

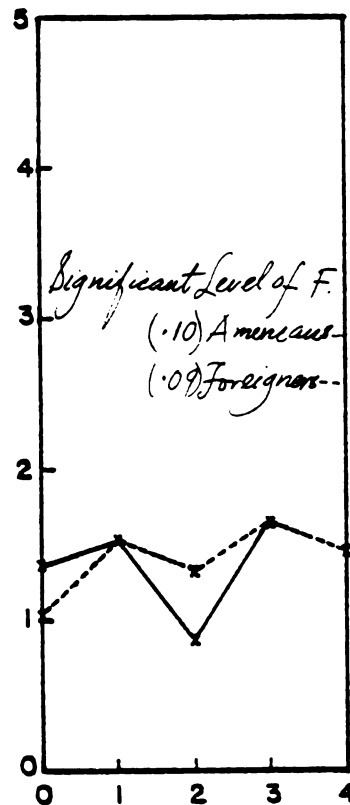


Figure 31.--General Evaluation of the program according to Socio-Economic Status of Subjects.

KEY (Horizontal)

- 0 = Parents earned M.A. or higher
- 1 = Parents owned home \$30,000+
- 2 = Parents earning \$20,000+
- 3 = Parents belong to none of the above

KEY (Horizontal)

- 0 = Parents completed high school or higher
- 1 = Parents can finance college education
- 2 = Parents own two houses or more
- 3 = Parents own a car
- 4 = Parents not as well-to-do as above

SCALE (Vertical)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

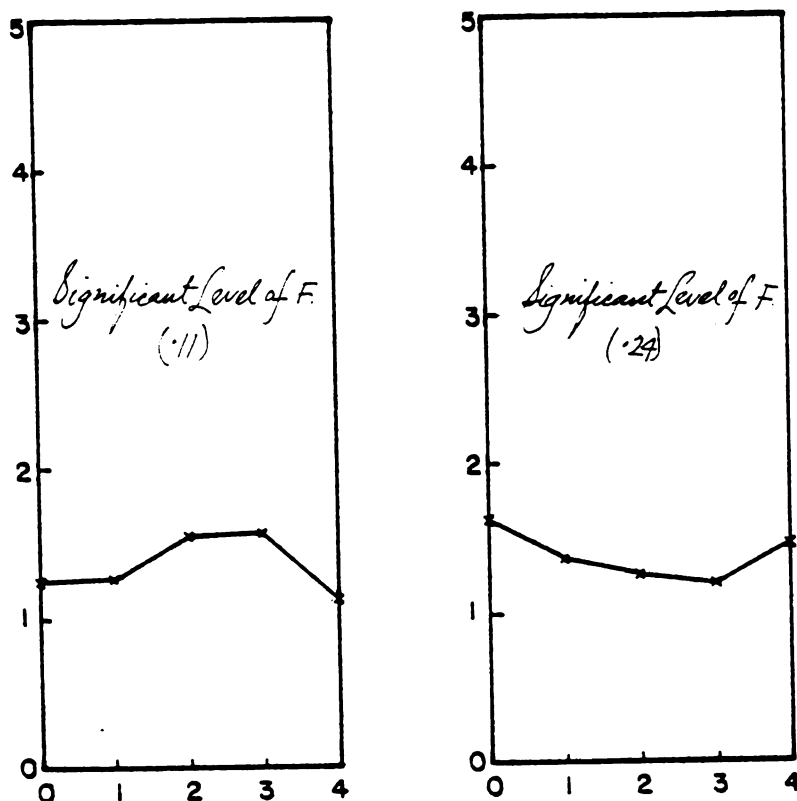


Figure 32.--General Evaluation of the Programs According to (a) Financial Support and (b) Where Subjects Grew Up.

KEY (*Horizontal*)

- 0 = Government (scholarship, loan, etc.)
- 1 = Private organization (e.g. Ford Foundation)
- 2 = Parents and relatives
- 3 = Self
- 4 = Other sources

KEY (*Horizontal*)

- 0 = Rural farm area
- 1 = Rural non-farm area
- 2 = Town or city (pop. 20,000-50,000)
- 3 = Suburban, near city (pop. 50,000-1 million)
- 4 = Large city (pop. over 1 million)

SCALE (*Vertical*)

- 0 = I am lucky I came to Michigan State University, the program has been most beneficial.
- 1 = The program has been very good, I hope the rest will be like this
- 2 = The program is fair but needs some improvement.
- 3 = The program is poor and needs a major review.
- 4 = If I were to choose again, I would go to another school.

Table 29.--General Evaluation by Students' Input into Programs and Their Grade Point Averages.

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F. Ratio	Significance of F.
Main Effects	6.079	5	1.216	1.570	.173
Students' Input	.601	1	.601	.776	.380
Students' GPA	5.383	4	1.348	1.742	.145
2-Way Interaction: Students' Input/Students' GPA	8.498	3	2.833	3.659	.014*
Explained	12.030	8	1.504	1.942	.059
Residual	96.776	125	.774		
Total	108.806	133	.818		

The next two variables tested for similar results were "discipline" as represented by the various colleges participating and the "overall performance of the academic advisor." As the results showed in Table 30, the contribution of the academic advisor was significant even though the interaction with "college" was not. In short, the generally significant difference brought about in the "main effects" was contributed largely by the "performance of the academic advisor." The contribution by "college" was considerable but not significant.

Table 30.--General Evaluation by "College" and "Overall Performance of the Academic Advisor."

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F. Ratio	Significance of F.
Main Effects	24.793	6	4.132	5.063	.001*
College	4.456	2	2.228	2.730	.068
Advisor's Performance	14.143	4	3.536	4.333	.002*
2-Way Interactions: College/Advisor's Performance	6.131	8	.776	.939	.485
Explained	47.525	14	3.395	4.160	.001*
Residual	168.930	207	.816		
Total	216.455	221	.979		

The next test conducted dealt with students' motivational variables: their "choice of career" and "objectives." As Table 31 would show, only "choice of career" made significant contribution to the total result in combination with others. The absence of the two-way interaction in the table showed that the two did not interact at all.

In order to see what effects the interaction of selected variables associated with foreign students would have, a test was also conducted. Table 32 showed that little contribution came from each of the variables treated; none of their results was statistically significant.

Table 31.--General Evaluation by "Choice of Career" and "Students' Objectives."

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F. Ratio	Significance of F.
Main Effects	11.322	6	1.887	2.044	.061
Choice of Career	10.820	4	2.705	2.930	.022*
Students' Objectives	.557	2	.278	.302	.740
Explained	11.322	6	1.887	2.044	.061
Residual	209.583	227	.923		
Total	220.906	233	.948		

Table 32.--General Evaluation by Students' Home Educational System, Length of Stay in the U.S., and English Language Proficiency.

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F. Ratio	Significance of F.
Main Effects	9.181	11	.835	1.027	.428
Educational System	1.152	4	.288	.354	.841
Stay in the U.S.	4.008	4	1.002	1.233	.302
English Language Proficiency	3.367	2	1.122	1.381	.253
Explained	9.181	11	.835	1.027	.428
Residual	85.349	105	.813		
Total	94.530	116	.815		

In summary, it can be observed that apart from the socio-cultural differences between foreign students and their American counterparts, the interaction of key variables such as college, their own objectives, their input into programs and their GPA had only limited effects on the total outcome; whereas the contribution of such factors as "choice of career" and especially the role of the academic advisor did make a significant difference.

As indicated in preceding chapters, the study was interested in the results as reflected from the position of students in the Instructional Development and Technology program (ID & T). Owing to the small number of participants in this category, a T-test was conducted to compare their responses with the rest of the respondents. The results indicated that there was no difference in their views and those of the others when the general evaluation of the programs was examined. The pooled variance estimate (2-Tail probability) was .788 while the test result for ID & T group was .773. The results were not different when the "overall performance of the academic advisor," as well as "students' input into their programs" were evaluated. The whole groups had a probability of .783 while the result for ID & T was .776 for the "evaluation of the advisor;" all had .533 and ID & T had .436 for "input into their programs."

Similarly, the results were nearly identical when issues such as students' objectives (.035, .010); "work experience" (.008, .007); and "choice of career" (.064, .054) were tested.

On the whole, it can be reported that the views of students from ID & T and those from other programs were not different on the issues evaluated. It was initially speculated that those in ID & T

might be significantly more optimistic than others since their programs were designed to enable them to acquire the knowledge and skills necessary to play the role of effective "change agents" in the effort to improve learning and instruction.

Statistical Hypotheses Tested

From the test of the eighteen working hypotheses designed, it was anticipated that a better understanding of some factors influencing students' reactions would be obtained. The difference between foreign and American students as anticipated in the first hypothesis was shown as statistically significant (especially for Americans) if one reviews the charts used in illustrating their reactions toward the overall evaluation of the programs, and most especially from their assessment of the content of courses taken, and research as well as laboratory and field experience activities undertaken (see Figs. 3-19). Even though the general evaluation was above average, a more moderate response was posted by the foreign students most of the time.

The second hypothesis which stated that potential change agents would see less relevance in their programs was not supported as the result was not statistically significant. Both those committed to personal and social objectives (indicators used for assessing potential change agents) had positive reactions to the programs. There was no significant difference between their views as shown in Figure 25(a).

The third hypothesis which expected a difference in the views of whites as compared to non-whites did not yield significant results. Though differences did exist in the views of American minorities

(groups 1 to 5) who were the non-whites in most of the analyses, the difference was not significant. Similarly, the views of Canadians and other students from Western Europe and Australia were not markedly different from those of other foreign students even though, in a few instances (Figs. 3a and b), their views were more closely aligned with those of white American students.

The fourth hypothesis stated that respondents from poor backgrounds would react negatively to the programs as compared to those who were well-to-do. Figure 31 showed that there was little difference between these two categories even when subdivided into the categories of American and foreign students. In short, both the poor as well as the well-to-do were generally positive in their evaluation of the programs, so the hypothesis was not supported.

The fifth hypothesis expected significant differences between those who were returning home and contributing to development effort and those who were not. Though their views on this point was significant in terms of the number which supported the idea, it was not significant when the evaluation of the programs was considered as Figure 29(a) and (b) clearly demonstrated.

Occasional differences were observed in the reactions of the "star" countries when compared with the rest in each zone; these differences were not profound as to be statistically significant. Therefore the sixth hypothesis which anticipated these differences was not supported.

In the seventh hypothesis, which was equally not supported, it was stated that those among foreign students who were "less acquainted with the U.S. educational system would view their programs as less

relevant than those who were very familiar with it." As illustrated in Figure 28(a), there was virtually no difference at all: every group reacted positively.

Subjects who believed in self-reliance were compared with those who advocated heavy reliance on foreign aid. The eighth hypothesis tested their reactions with a statement that the former would view their programs as less relevant than the latter. The difference between the groups as shown in the reaction of the former and the latter groups was not statistically significant. The hypothesis was, therefore, not supported as could be observed in Figure 28(b).

The ninth hypothesis which dealt with "work experience," speculated that those who had many years (5 years or more) of full-time work experience would view their programs as less relevant than others who were not in this category. As Figure 23(b) showed, there was little or no difference: all groups responded positively and the result was not significant in statistical terms.

The tenth hypothesis expected subjects either with jobs or clear-cut choice of career to view their programs as less relevant than the others. The results as shown in Figure 25(b) were in reverse to what was anticipated. The difference was statistically significant but subjects with jobs or career choice were more positive in their reactions than the others. The explanation for this reverse trend may be obtained from another result which showed that a majority of these same students made major input into the drawing of their programs (Fig. 20a) and consequently, took care in selecting what would be most beneficial to their training. Though the hypothesis was not supported as stated, it was helpful to note what factor may have brought the

change about.

The eleventh hypothesis, which indicated that subjects from other colleges would view their programs as less relevant to their needs than those from the College of Agriculture and Natural Resources, was supported. Though the responses were generally positive, a majority of the colleges took a more moderate position than the College of Agriculture and Natural Resources (except the College of Veterinary Medicine). A close look at Figure 21 would reveal this if one compares group "0" with the others.

In terms of age, the twelfth hypothesis expected those who were 30 years of age or older to view their programs as less relevant than the others. As the illustration clearly showed in Figure 23(a), there was only a limited difference (which was not statistically significant) among the groups. The position taken in the hypothesis was not supported.

In hypothesis number thirteen, subjects who rated the overall performance of their academic advisors low were expected to see less relevance in their training programs than others not in this category. Figure 20(b) clearly showed that this position was true. The result of the difference was not only statistically significant, there was positive linear relationship also. Therefore, the hypothesis was supported.

In the fourteenth hypothesis, subjects who either did not, or were not allowed to make major input into the drawing of their programs were expected to rate their training programs as less relevant to their needs than the others. The results shown in Figure 20(a) illustrated not only the difference which was significant in statistical terms but also the positive linear relationship between the groups' reactions and

the overall evaluation of the programs. The hypothesis, like the thirteenth above, was also supported.

The speculation in the fifteenth hypothesis that subjects who were financially supported would view their training programs as less relevant than others was not supported statistically as could be observed from Figure 32(a). Even though the trend was reversed with those who were supported by government or private organizations being slightly more positive than those who were supported by parents, relatives or self, the difference was not significant.

The sixteenth hypothesis compared those who grew up in rural environments with others and found, in the results shown in Figure 32(b), that the minor differences between them was not statistically significant. Therefore, the position that "rural dwellers" would view their training programs as less relevant than others was not supported.

The seventeenth hypothesis anticipated that subjects who rated their programs as average or less would also rate them as less relevant to their needs. The results shown in Figure 2 clearly illustrated generally favorable reactions from the two major groups but, in each case, neither of the results was statistically significant.

The last working hypothesis on the list, the eighteenth, expected subjects whose GPA was 3.25 or less to view their training programs as less relevant to their needs than others. The results as shown in Figure 26(b) presented a reversed trend in which those with the highest grades were the least optimistic about the relevance of their programs. Apart from the fact that the position was rejected because the differences were not statistically significant, the trend showed a slightly negative linear relationship among the groups with those

scoring the poorest grades being the most optimistic.

The Two Research Hypotheses

From the results of the foregoing statistical hypotheses tested, it may be inferred that the first research hypothesis which postulated that "learners who were being trained in institutional settings located in socio-cultural environments quite different from their own would consider the training as less relevant to their needs unless these programs were designed with them in mind," was not supported. As shown in the many figures already presented, there were differences in the views of foreign students when compared with their American counterparts, the former being more moderate than the latter most of the time. However, the fact that both registered positive results seems to indicate that foreign students can derive worthwhile learning experiences from programs which are not specifically designed for them if certain factors are considered. These include taking their objectives, career choice, field of specialization, maximum participation in the design of their programs, and the support of a concerned and helpful academic advisor into consideration. In addition, training programs which would be favorably supported would have to have solid research and laboratory and field experience components with practical, real world problems being tackled in an atmosphere that strongly encouraged their active participation. This is encouraging because it is unlikely that major programs in any institution of higher learning in the U.S., let alone MSU, would be designed exclusively with foreign students in mind. But it is possible to expand the resources of the schools and design a structural arrangement which would take the interests of foreign students into consideration. The significant difference shown between the

College of Agriculture and Natural Resources and others (Fig. 21) tends to support this contention.

The second research hypothesis which stated that subjects' age, years of full-time work experience, academic performance, and future roles would be positively related to their perception of relevance was only partially supported. Age did not make any difference as shown in Figure 23(a); neither did work experience make much difference as the illustration in Figure 23(b) clearly pointed out. However, students' career choice which signifies what future role would be played did make a difference--Figure 25(b) illustrated this.

Interpretation of the Results

Before the results of respondents' reactions to the major questions in the study are interpreted, it is necessary to look at the results of their background characteristics. Earlier it was reported that more foreign students than Americans were employed by the government. This is an indication of the prominent role which the government plays as an employer in non-Western nations. By virtue of this privilege (working mostly for government), and the fact that skilled hands are few, it can be understood why more foreign students than Americans occupied executive and professional positions.

In terms of class of work performed, American students surveyed indicated working in "other" jobs besides those put on the list. By comparison, it showed that there was a wide variety of job types and functions which American students had access to outside of the public sector.

The report on "sex distribution" revealed a ratio of 83:17 in favor of male foreign students. This feature of educational experience

is worth noting. For instance, it would of interest to know what effect the presence of an unusually large number of women (Americans) would have on the foreign student who has been accustomed to interacting with men most of the time in an academic setting. The socio-psychological impact of this phenomenon especially on students from cultures which hold women in a different light may be significant.

The result showed little or no difference in the rural/urban distribution of foreign students as compared to their American counterparts. The high percentage of foreigners associated with urbanized environments can be explained by the trend in the educational systems of developing nations where learners have no choice but to move away from the rural areas, the further progress they make in their educations.

From the results of the students' grade point averages, it can be inferred that the performance of foreign students was not significantly different from those of Americans.

Since a majority of those surveyed have completed more than three-fifths of their programs, it implied that they have been exposed to a good part to be able to present a point of view.

In the frequency distribution on English language proficiency, a significantly large number indicated that they have not used the language more than four years. Realizing that most of the foreign student population at Michigan State University are from the Middle East and Africa, the magnitude of the problem can be appreciated.

The result which showed that a significantly large number of foreign students were resolved to return home after completing their programs may be a reflection of changes in the foreign policy of the

U.S. toward students from non-Western societies, discouraging them from staying much longer than their training warranted.

The rationale behind the inclusion of questions dealing with foreign students' attitude toward foreign aid was to assess the extent of their willingness to welcome support from outside sources. By inference, it is believed that the more an individual advocated self-reliance, the less inclined he would be to look forward to or depend on what the Western nations could offer in the future.

Results on students' objectives showed that foreign students favored social objectives while American students supported personal objectives. The fact that many foreign students are sent here for training in the hope that they would be equipped with the knowledge and skills to discharge their social and professional responsibilities efficiently is a strong reason why more of them should endorse social objectives. Similarly, the fact that the U.S. has attained a high level of development may be the reason why more Americans (especially whites) would concentrate on personal rather than social objectives. Interestingly there is a rather uniform distribution among American minorities, which probably shows that they are still conscious of the social responsibilities which a better training would impose on them. This disparity in the objectives of Americans and foreign students was acknowledged by Spencer² when he suggested that this was a primary reason why attention should be paid to providing the kind of training which the foreign student can use when he returns home. He advocated, like Sperling³, that reliable instruments and criteria be developed to measure this, believing that the real worth of the training could be determined this way.

The University's Objectives

On the issue of the university's objectives in training foreign students, there were no significant differences in the rating of American students surveyed as compared to their foreign counterparts on seven of the ten items. The three in which the rating of the former group was significantly different from the latter are "assisting developing nations in manpower development" (.00), "providing opportunity for cross-cultural experience" (.02), and "helping trainees acquire leadership skills, win friends and influence people" (.03). The significance of the last item came from the fact that it was regarded as one of the least important reasons for training foreign students at MSU. The statistical test of the viewpoints of the administrators could not be done because their sample was not randomly selected. However, the illustration in Figure 1 showed the differences between their rating of the items and those of the student groups.

In summary, what the administrators said was that foreign students were being trained to help them "acquire the knowledge and skills" necessary for solving the "problems of poverty, illiteracy and disease" in their societies by acting as "change agents" bringing innovative ideas to complement development efforts. But the students tended to see the maintenance of "positive international image" as the primary reason for training foreign students in the school. They acknowledged that the development of knowledge and skills in solving problems of poverty, illiteracy and disease through manpower development was important, but the foreign students were more moderate in their evaluation of this as one of the primary functions of the university. From the illustration, it could be inferred that a disparity existed in the

views of the administrators and the students regarding the purpose of training foreign students. Whereas a unity of purpose among participants in an undertaking is necessary for the design of evaluative criteria which they would all support. More importantly, the success of such an undertaking would depend on the extent to which participants understand and subscribe to the purpose. A number of studies have referred to the goals of the foreign student, the sponsoring organization and the schools providing the training. Harari⁴ strongly emphasized the need on the part of universities in the U.S. to carefully examine their training goals especially in the selection and admission as well as the material content of their programs. He urged a more meaningful interaction between the schools and other concerned parties in the endeavor. When Otto Klineberg⁵ declared in 1966, that a better clarification of the goals of international exchange had not been undertaken, little did he realize that the observation would still be valid in some instances in 1978. Changing conditions in the nation and around the world will continue to cause a review of the perspective in which the role would be played.

Swan⁶, in his study of Filipino students, indicated that the success of training programs was a function of the congruence in the perception of goals of training by the student, his major professor, and his home government. It may prove helpful to review the goals as far as the role of the school is concerned, and clarify them so all students would develop a more accurate measure of what to expect from the school, and an assessment of the extent to which these expectations are being met.

Discussion on Content of Courses

What emerged from the results dealing with content of courses already taken in the core area by students who participated in the survey was a "below average" rating. The trend did not reveal any significant difference between foreign and American students, except in one instance (Concept of Change, Fig. 9a), where the difference in American students' reaction was significant (.04).

Within the bounds of a generally negative reaction to content relevance, foreign students maintained a more moderate posture than their American counterparts. By comparison, the reactions of both groups were "above average" in content of actual research conducted as well as laboratory and field experience activities. The same moderate posture was maintained by foreign students while the difference in the views of American students was statistically significant in most of the cases.

It may be pointed out that this position was further corroborated in the result of the open-ended question (see Appendix G) which asked respondents to identify one thing provided by the university which facilitated their learning experiences. A proportionately large number of foreign and American students surveyed cited the availability of learning resources in the library, clinical laboratories, etc., facilities which assisted them in the conduct of research.

Discussion on Teaching Style of Instructors

The trend revealed in the teaching process section was similar to that reviewed earlier on in the content of courses: the teaching of the core courses was below average while the experience on the "research"

section was above average. Americans were generally more negative than foreigners in the teaching of core courses but often turned out to be more positive in "research." In short, the foreign students maintained their moderate position. This result seems to fall in line with the views expressed in the open-ended questions (Appendix G) where, in response to the request to identify one thing which inhibited their learning experiences, they pointed frequently to cases of instructors who were not interested in teaching or the students. They were particularly appreciative of the exceptional cases where the instructor took teaching seriously and mastered his subject very well. A third point of agreement with this position was revealed in the result of the mini-survey among a small sample of faculty identified by the students as "good." In response to the questions about what strategies were employed in their classes, they placed high on their lists the fact that they prepared their lessons well and delivered them with enthusiasm. They also rated highly "relating learning to concrete world problems," and also "showed concern for student progress" while challenging them to tackle problems in creative and innovative ways. Both "learning by doing" and "encouraging active student participation" were additional strategies which were regarded as helpful in their teaching effort. A detailed analysis of this result is available in Appendix F3. This position was further supported by findings from a study conducted by Wilson, Gaff and others published in their book, College Professors and Their Impact on Students (1975). It was revealed that, regardless of the philosophical position of the professor, he would enjoy the respect of students if he took teaching seriously and mastered his subject. In addition, he would be loved if he cared

and interacted with them, especially outside of the classroom. The issue of college teaching and the role of professors has attracted and continues to attract the attention of scholars, and others who are concerned with the future of higher education.

The concern to improve the quality of college teaching is not new if one examines volumes by Lee⁷, Sheffield⁸ and Udolf⁹ just to mention a few references. The funding by the National Institute of Education of the Institute for Research on Teaching which currently operates from the College of Education at Michigan State University, is further proof of the keenness of interest in elementary and secondary school teaching, while the complex nature of the issue is recognized, an exhaustive treatment of it is beyond the scope of this study. What seemed evident from the reactions of students surveyed was the fact that the quality of teaching, with the exception of its application in research, was "below average" and needed to be improved.

Discussion of the Role of the Academic Advisor

It was encouraging to note that foreign and American students reacted positively to the part their advisors have played in assisting them. The importance of this result can be fully appreciated when one recalls that views have been expressed in the past (see Benson¹⁰, Ford¹¹, Higbee¹², and Miller¹³) about the need to improve the quality of academic advising especially of foreign students. The fact that many graduate students play significant roles in drawing up their own programs is a positive development, the effects of which radiated to the evaluation of the performance of the academic advisor and which, in turn, affected the evaluation of the programs. A mini-survey of members of faculty who have served as advisors especially to foreign

students showed that many colleges and departments regard it as standard practice to have graduate students state their goals clearly, draw up their programs and have them reviewed by their guidance committee (doctoral students) and major professors. For further details on the results of the survey, see Appendix E2.

Some Factors Related to Foreign Students' Backgrounds and Attitudes

From past studies, many of which were reported in Spaulding and Flack's¹⁴ book, and the report of interviews with administrators and faculty on campus (see Appendices A3, E3 and F2), proficiency in English language has been shown to be a necessary prerequisite for the success of foreign students (from non-English speaking countries) engaged in any form of training programs in the U.S. It was also noted that the longer a foreign student stayed in the U.S., the better his chances were in mastering the language and understanding the educational system. When the general evaluation was made from the perspective of these two factors, the lack of significant differences in the views of those who mastered the language and those who didn't, and also between the newcomers (staying less than two years) and the "old-timers" (staying longer than 8 years), indicate that both can derive meaningful and relevant learning experiences from training programs provided at MSU.

Issues related to the problem of non-return home among foreign students have been discussed extensively in the past (see Chapter II) and the consensus was that the hope to assist developing nations in their manpower development would be dashed if those who were supposed to use the knowledge and skills in these areas refused to return to make the necessary contribution. It is believed that those who plan

to remain in the U.S. would think less of home problems, not to talk of contributing efforts to solve them. The same holds for those without commitment to participate in the development effort. But the results tend to suggest that these issues were not critical to the evaluation of the programs as those planning to return and contribute to development activities were not significantly different from others in their evaluation. In spite of these results, a large majority of the participants took the issues seriously. A Chi square test of the frequency distribution presented in the cross-tabulations showed high statistical significance ($F. > .00$) on such issues as "length of stay in the U.S.," "plans to return home," "commitment to national development," and "English language proficiency."

The last question of general concern to both foreign and American students was the extent of interaction that occurred in "structured non-class setting." It will be recalled that foreign students placed this item highly (their second and fourth most important reasons for training them--see Fig. 1). They regarded building "bridge of friendship, understanding, and international cooperation" through interpersonal and group "cross-cultural interaction" as very essential. The extent to which this translated into action was illustrated in Figure 30. As would be observed, foreign students were more positive than their American counterparts in this regard. The difference in the foreign students' responses was also statistically significant. When this is compared with the views of the administrators on the issue (which was negative--see Fig. 1), it would be observed that there is a gap in their interpretations. As adults who can learn as much from outside of the classroom as inside it, the limited reciprocation which

foreign students receive from their American counterparts may point to a shortcoming--valuable learning situations not being adequately used. This view is underscored by Klineberg¹⁵ when he remarked:

Foreign students, both at large and at small institutions, often speak of the superficial interest of American students in them, their countries and their cultures, and feel that many of their friendships with American students are "contrived."

The National Association for Foreign Student Affairs in one of its guidelines published in 1967, Guidelines: American-Foreign Student Relationships, and the recommendation in Charles Ford's¹⁶ and Hector Guglielmo's¹⁷ dissertations, it was emphasized that institutions should encourage greater interaction, through structured activities, between foreign students and American students..

Both groups have stressed, in their reactions analyzed earlier, that they cherish learning in environmental settings in which concrete, realistic problems were tackled, where theoretical concepts were tested for their value and worth. It can be expected that interaction in a structural non-class setting would provide additional opportunities for realizing this objective.

In summary, as was evident from the foregoing results and interpretation, both foreign and American students who participated in the survey viewed their programs positively. Factors which contributed significantly to this evaluation came not so much from the content of courses offered or the quality of the instructional mode employed as from the problem-solving, practice-oriented activities involved in research, laboratory and field experience. When it is realized that the direction and assistance provided in the choice of content and mode of delivery would affect the amount of benefit likely to be derived

from the practice aspect of the learning experience, one cannot but be disturbed by the results. The "less than average" showing in these two areas seems to imply that more attention should be paid to them. Incidentally, this view was emphasized in the responses which the students gave to the open-ended questions in the instrument (see Appendix G). In it, they expressed appreciation for the learning resources and facilities provided in structured settings to assist their efforts in the practical problem-solving endeavors. The quality of teaching of the few very good professors who mastered their subjects, delivered them with authority and also were willing to interact with them in non-class settings were lauded (pp. 3-5). This position was also supported by the comments of professors whose courses were rated as "very good" as the result of a mini-survey conducted among them showed (see Appendix H1). Among topmost factors inhibiting their learning experiences were unsuitable curricula manifested in few or irrelevant courses or lack of depth of those offered. These were followed closely by complaints about the teaching style of a good number of professors whom they described variously as unfriendly, uninterested in either the students or the teaching, and not mastering their subjects well enough to command the respect of graduate students (p. 6). This is a question that requires careful examination if quality is the objective which the school strives to achieve.

A good number of educators and scholars have been examining the problems of the relevance of curriculum and the role of the instructor in the teaching/learning process. It is not the purpose of this study to treat these issues in an exhaustive fashion. Suffice to say that the new rethinking going on accords a lot of recognition to the part

which learners can play in helping to set guidelines about what would be relevant to their needs, no matter how different these are likely to be from those of their teachers. John Lembo¹⁸ put it clearly when he remarked:

Since the backgrounds, life styles, concerns and goals of the students are almost invariably different from those of the teacher, certain activities may be perceived by students as having relevance, while many tasks and materials appear to them as having no relationship to their lives. . . If a student fails to see the personal relevance of particular activities, learning may still take place out of fear of academic failure or punishment. . . since the effects of such fears is avoidance behavior, there is little likelihood that the knowledge and skills mastered under aversive conditions will be retained by students for any significant period of time.

Roy Udolf¹⁹ stressed the need for instructors to evaluate and improve their teaching and on top of the list of sources for obtaining the necessary information for this evaluation was "student opinion surveys" as well as their "formal and informal feedback." The results of this study may be viewed in this light.

Two other factors which turned out as strongly influencing the overall evaluation in a positive direction were the extent to which the students were allowed to make major input to the design of their programs and the amount of assistance received from a concerned and helpful academic advisor. It will be recalled that in providing a rationale for the hypothesis dealing with student input, a reference was made to Festinger's cognitive dissonance theory on overall evaluation when a student was the chief "architect" of the design of his own program. Apart from the fact that he would be less inclined to blame anyone else for the selections he made, he would tend to develop confidence and a positive attitude toward the fruits of his own efforts. The importance of this point was corroborated by selected faculty

members who have acted as academic advisors to foreign students. In another mini-survey conducted among them, the results (see Appendix E2) showed that most colleges regarded this as standard procedure though there were others in which students had only a limited choice in exercising initiative in the selection of courses for their programs. Perhaps the most important point to note is the reassuring feeling that foreign students can "learn and like it" in American institutions of higher education if the appropriate conditions were created to accommodate their interests. This thesis was strongly underscored by McClelland²⁰ in his recent article "Managing Motivation to Expand Human Freedom." When reviewing the analysis of people about disappointing failure of many programs of the society, he deviated from the two extreme camps, one of which asked to "change society" and the other which advocated "doing nothing" about it, by suggesting a third factor: "It is very simply, that we set impossibly high goals for social improvement and applied massive doses of inappropriate technology to achieve them. So we were bound to fail." (p. 203) A similar trend applies to higher education. In short, his advice in the context of this study means that modes achievable goals be set and careful research and analysis of foreign students' conditions and needs should be done to ensure that assistance rendered them stand the chance of being beneficial.

It is equally worthy of note that "discipline" as reflected in the various colleges which participated did make a difference in the results. It is interesting that the difference between the College of Agriculture and Natural Resources and the others was statistically significant. One only needs to recall the rationale which accompanied the

eleventh working hypothesis in which the unique position of the College was explained. In addition to the extensive academic, professional and service oriented programs, the College, in collaboration with other institutes and colleges of agriculture regionally and nationally, has participated in deliberations specifically intended to discuss ways and means of improving the current practice of training foreign students. In one of such conferences convened at Purdue University in April 1976, Brannon of University of Kentucky, Fender of USDA, and Wyeth of Michigan State University presented a joint working paper titled "Key Elements in International Agricultural Training" in which these critical points were noted, among others:

Degree requirements are rigid and are designed to meet the needs of the U.S. student and to prepare him for a career in the U.S. employment environment. There is little flexibility in addressing the specific training needs of the foreign students.

The time programmed for the degree training is insufficient to provide an education, as opposed to simply guiding a student through the hurdles to obtain a degree. Because of the rigidity of the requirements, it is not feasible to provide exposure to areas of training outside of the narrow scope of the specific discipline for which the student is being trained. This is in spite of the fact that broader training is probably of greater importance to the foreign student who is less likely to be required to deal on such a sophisticated scientific level as the American student, and who is more likely to be called upon to serve in a variety of policy and administrative positions, soon after his return home.²¹

Most of the information in the paper as well as the report²² of another conference on the same subject convened in Ohio State University in April 1977, seems to have implications for all institutions of higher learning in the U.S. where the training of foreign students is undertaken.

While it is acknowledged that younger and smaller colleges may not be able to command the kind of resources at the disposal of the

College of Agriculture and Natural Resources, they undoubtedly can benefit from some of the procedures and techniques which have been tested and found to be reliable. This point would be fully dealt with in the next chapter under "Recommendations."

FOOTNOTES TO CHAPTER IV

¹Reginald Smart. "The Goals and Definitions of International Education," International Studies Quarterly 15 (December 1971), pp. 442-463.

²Richard Spencer. "The Relationship Between Examination Systems and Cultural Change." Urbana, Illinois: University of Illinois, Office of Instructional Resources, Measurement and Research Division, 1967.

³Philip Sperling. "Evaluating Training Programs: The AID Experience," Focus: The Technical Cooperation, 1973, No. 4, pp. 9-13 in International Development Review 15, No. 4.

⁴Maurice Harari. Global Dimensions in U.S. Education: The University. New York: New York Friends Group, 1972.

⁵Otto Klineberg. International Exchanges in Education, Science and Culture: Suggestions for Research. Paris: International Social Science Council, Mouton and Co., 1966.

⁶Lee Melvin Swan. "Perceptions Regarding American Graduate Education of Filipino Agricultural and Home Economics Students at Selected Universities in the United States, Their Major Professors, and Their Home Country Authorities," Ph.D. dissertation, University of Wisconsin, 1969.

⁷Calvin B. Lee (ed.). Improving College Teaching. Washington, D.C.: American Council in Education, 1966, especially the views expressed by Michael Drosnin (p. 252), James Johnson (p. 288), and Laura Kent (p. 312).

⁸Edward F. Sheffield (ed.). Teaching in the Universities--No One Way. Montreal and London: McGill-Queen's University Press, 1974.

⁹Roy Udolf. The College Instructor's Guide to Teaching and Academia. Chicago: Nelson-Hall, 1976.

¹⁰August G. Benson (1972), op. cit.

¹¹Charles Ford, op. cit.

¹²Homer Higbee, op. cit.

¹³Richard Miller, op. cit.

- ¹⁴Seth Spaulding, et.al., op. cit.
- ¹⁵Otto Klineberg (1976), op. cit., p. 206.
- ¹⁶Charles Ford, op. cit.
- ¹⁷Hector Guglielmo, op. cit.
- ¹⁸John M. Lembo. Why Teachers Fail. Columbus, Ohio: Charles E. Merrill Co., 1971, p. 24.
- ¹⁹Roy Udolf, op. cit., pp. 105-106.
- ²⁰David C. McClelland. "Managing Motivation to Expand Human Freedom," American Psychologist, March 1978, pp. 201-210.
- ²¹Russell H. Brannon, Frank A. Fender, and Irving R. Wyeth. "Key Elements in International Agricultural Training," Paper presented at the Joint Conference on International Agricultural Training, Purdue University, April 25-27, 1976.
- ²²Proceedings of the International Agricultural Training Conference for North Central and Northeastern Regions of the U.S. at Ohio State University, April 18-20, 1977, sponsored by International Science and Education Council, Association of U.S. University Directors of International Agricultural Programs and the U.S. Agency for International Development.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS FOR FURTHER RESEARCH

"Whoever wants to lick the honey embedded in a rock
should not worry about what happens to the blade
of the axe."

--An African Proverb

Introduction

The primary purpose of conducting the study, briefly, was to have foreign students answer the question: How relevant are your training programs to your career goals and the national development needs of your respective countries? The study was particularly interested in what actually happened to the students once they had been admitted to MSU. Attention was given to their academic welfare in terms of the content of courses taken, teaching strategies used by the instructors, and the counseling provided in the planning and execution of their programs by the academic advisors. In other words, the study attempted to find out, from their judgment, how their academic interests were affected by the above factors; the assumption being that the more positive the effect, the higher would be their assessment of the relevance of the programs to their needs.

Limitations to the Study

Before the findings of the study are summarized, it is essential to review briefly the limitations which surfaced in the conduct of the study. It is hoped that a better understanding of the results can be

made by the reader in the light of this information.

1. The response rate among the sample of 445 students surveyed was 56% (251). Socio-cultural factors influenced the variability as both Latin American and African students surveyed had response rates which were 80% or higher whereas the rate fell to 53% or below among Euro-Canadian, Asian, and Middle Eastern students. Similarly, the rate was 72% among white American students but only 50% among the minorities.

2. Where high rates of return were recorded, the enthusiasm of the interviewers may have made the difference. Additionally, the investigator could not get interviewers of the same socio-cultural background in those areas where the rate was low.

3. Questions asked varied in the amount of effort required to answer them. Some easy ones (e.g. field of study) were answered 99% of the time while some tough ones (e.g. professor's teaching style) were as low as 50% in response rate.

4. Some have not spent long enough time to be able to make a valid assessment while others (foreign students in particular) were reluctant to pass judgment on their programs.

5. Some of the respondents (from the Middle East and Southeast Africa) were not proficient enough in the use of English language to answer all the questions satisfactorily.

6. Not all the issues raised applied in all departments. Some questions were meant only for foreign students.

7. The frequency distribution of the data showed two of the ten colleges which participated (Agriculture and Natural Resources, and Education) were responsible for half of the respondents. The

Colleges of Natural Science and Arts and Letters were left out.

8. Since only a few (6) who participated in the pre-test were involved in the actual survey, the problem of internal validity of the results was minimized. To take care of the problem of external validity, the results would be generalized only to the colleges which participated in the survey.

9. Apart from the students' grade point averages obtained from the Registrar's Office (an authentic document), the study depended primarily on the opinions of students, faculty and administrators and so, it is not insulated from the limitations inherent in the use of survey as a research methodology.

Summary of the Findings

A Chi square test (at .05 level of significance) of the frequency distribution of the data revealed the following:

1. A significant difference existed between foreign and American students surveyed with regard to field of study; foreign students outnumbered American students in the College of Agriculture and Natural Resources in the ratio of 5:1 while the latter outnumbered the former in the College of Education in the ratio of 2:1.

2. Masters and doctoral degree candidates form 90% of those who responded--a significant difference from others.

3. Similarly, statistically significant differences were found on such items as "choice of career" (foreign students holding more government-related, executive jobs than American students), "students' objectives" (foreign students favoring "social objectives" while American students favored "personal objectives"), "where students grew up" (more Americans being born and raised in urban environments than foreign

students), and the socio-economic status of students' parents (the parents of American students being more "well-to-do" than their foreign counterparts).

4. From the same test, there were no significant differences between foreign and American students surveyed with regard to such items as "age" (though foreign students were slightly older), "sex" (though 83% of foreign and 50% of American students were males), years of "work experience" (which was even), proportion of "program completed" (which showed majority from both groups completing at least 60% of the programs), and "grade point averages" (in which over 85% from both groups scored grades of 3.25 or higher).

5. On some characteristics unique to foreign students, these results were revealed (with significant differences between the "highs" and "lows" on the scales of evaluation):

- a. 90% had their first degrees in their countries,
- b. 60% had spent less than 4 years in the U.S.,
- c. 78% were resolved to return home after completing their programs,
- d. 90% were either legally or morally bound to contribute their quotas toward development efforts,
- e. about 50% who have been using English for over 6 years came from Africa, Canada and Western Europe while the remaining 50% came from Latin America, the Middle East and Asia, and
- f. no significant differences were observed on issues such as "familiarity with the U.S. educational system," and "attitude toward seeking foreign aid."

6. To the question, "Why did you choose MSU?" both foreign and American students regarded the "reputation of the programs" in respondents' fields as the most important reason, with foreign students' position being statistically significant. Foreign students thought the "reputation of faculty" the next most important but American students regarded "proximity of school to home" as second in importance. There were no statistically significant differences between them.

"Fair tuition" was regarded by foreign students as important in statistically significant terms but American students did not think so. This trend was reversed on "financial assistance" with American students' view being statistically significant.

The "relationship of the school with overseas governments and organizations" yielded statistically significant differences for both groups; foreign students viewed it positively while American students regarded it as the least important reason for attending MSU.

7. With reference to university's objectives in training foreign students, there were no differences in the views of both foreign and American students surveyed on seven of the ten objectives listed. The views of American students differed significantly from those of foreign students on "manpower development" for non-Western nations; the interaction of both groups in providing "cross-cultural experience," and the opportunity for the development of "leadership skills" which the American students regarded as one of the least important reasons.

Both agreed that the most important objective of training foreign students was to help the school maintain its international reputation and contacts. The administrators disagreed with this position as well as with all other items on the list.

8. Using a one-way analysis of variance with Scheffe's technique at .05 level, their evaluation of "course content," "teaching style," and "academic advising" as components of the general evaluation revealed the following:

a. Both groups rated the content of "core courses" as "below average" (no statistically significant difference between them). When applied to actual research, laboratory and field experience activities the results were "above average" with the views of American students being statistically significant.

b. Similarly, "teaching style" was rated "below average" by both groups without significant differences. "Above average" results were recorded for research, laboratory and field experience activities; American students also posted statistically significant differences.

c. The quality of performance by academic advisors was rated "above average" by both groups, even though there were no significant differences between them. A factor contributing to the result was that many had a chance to plan their own programs. These two factors (effective advising, and determining own program) significantly influenced the overall evaluation.

9. Of the eighteen working hypotheses designed, only four were supported and these are:

a. Those holding jobs, on leave, or have decided on a career viewed their programs more positively than others.

b. Subjects from the College of Agriculture and Natural Resources were significantly more positive about the relevance of their programs than subjects from other colleges.

c. Those who rated the performance of their academic advisors as "above average" also rated the relevance of their programs in like manner. In short, a positive linear relationship was established between the two.

d. Subjects who played major parts in planning their programs were also positive in the assessment of the relevance of their programs.

10. The remaining hypotheses which were not supported are listed below:

a. Though there were statistically significant differences between foreign and American students on the evaluation relating to research and laboratory and field experience activities, these differences disappeared in the overall evaluation; both groups rated the programs as "above average."

b. Both potential change agents and others were positive in their evaluation, so there was no difference between them.

c. Whites and non-whites rated the programs as "above average," so did those whose parents had high socio-economic status and others whose parents did not.

d. Among foreign students surveyed, there were no differences between those returning home and those who planned to stay in the U.S.; familiarity with the U.S. system of education did not make a difference nor did the level of development of the country from which respondents came. Those who advocated self-reliance did not differ from those who favored dependence on foreign aid.

e. Years of "work experience" and "age" did not make a difference in the results. All groups in the two categories responded positively.

f. Those on scholarships were as positive in the general evaluation as those who were self-supporting. Similarly, subjects born and raised in urban environments were no different, in their reactions, from those who grew up in rural environments.

g. Respondents who scored high grades (3.76 - 4.00) did not differ from those whose GPAs were 3.25 or below.

h. Overall, there was no statistically significant difference between those who rated their programs high and those who rated them low.

11. Of the two research hypotheses formulated, only one was partially supported. The one rejected stated that learners who leave their own environment (a), to acquire knowledge and skills in another (b), with a view to returning to apply them in (a) would see less relevance in the training unless it is planned with them in mind. The rejection can be inferred from the positive reactions which both American and foreign students gave in their evaluation.

The one which was partially supported expected age, work experience, academic performance and choice of career to make a difference in the evaluation. Only the last factor (choice of career) did in the findings.

Constraints

Before the conclusions of the study are drawn, it is necessary to synopsize the constraints within which a university such as MSU operates so that a better understanding of the conclusions, and especially the recommendations to be made, would be developed.

Educational institutions, particularly those dealing with higher education, are slow to react to problems in our social

environment. They often adopt a methodology, like social scientists, of asking why certain things happen (after the event) rather than creating, through foresight, the necessary conditions to forestall their occurrence. Wharton¹ recognized this as a shortcoming to be rectified when he said:

By tradition, universities are primarily contemplative and reflective institutions, not active instruments for change. But tradition will no longer suffice as justification for passivism. Most observers agree that the forces are such that universities will inevitably be transformed. The only questions which remain are whether the transformation is to come from within or without and will the change be truly creative or merely reactive.

The rapidly changing conditions in the world which make plans almost obsolete before they are executed, further compounds the situation mentioned above.

Since the university, as an institution, attracts the attention of many vested interest groups, the competition among them to ensure that their respective constituencies are protected, often leaves the institution with strains and stresses which reduce its measure of effectiveness. For instance, it is necessary to know how much of the cases of foreign students are presented and their vital interests protected when the legislature (representing the taxpayers and parents), business and industry, even the administrators and faculty, all struggle to defend their own areas of corporate interest. From the history of the experiences of minorities in educational opportunities in the U.S., it is not hard to see where the interests of foreign students (another minority group which does not have voice) are likely to be placed in the scheme of things. Even where the intention to help is genuine, if the cost of such assistance is high, it may constitute a restraining factor.

The demand by the American society and its students, that

institutions (especially those financially supported) be accountable because of the assistance received is more intense than ever before. The justification for this demand was underscored by Dressel² in the opening remarks to his new book, Handbook of Academic Evaluation, when he stated:

My third conviction is that institutions of higher education have a special obligation to students and society: to exemplify the use of the best possible model in deciding how to use resources to achieve desired ends. If rational, though value-based, processes and decisions cannot be found in the university, there is little hope either for the university or for a better society.

Educational institutions are no more a monopoly on the question of providing training. Both business and industry, probably because of the shortcomings in the training programs set up by the former, have entered the scene with their own training institutes and methodology which often include conducting research, checking available resources, ascertaining needs, planning programs, executing them in a systematic way, and building in evaluative mechanisms with which to assess the extent to which stated objectives have been met. Cato-line³ showed how GET Sylvania Training Operations in Waltham, Massachusetts has prepared special training schemes for manpower training and human resources development which are necessary for the "transfer of technology" to non-Western societies. Their programs were designed with these areas in mind. Instructional resources used were equally prepared to reflect as much of these environments as possible. Similarly, efforts were made to simulate the areas to which trainees would return, when conducting the training. The foresight involved in the planning and execution of the programs is the kind which institutions of higher learning will have to beat.

By contrast, a report⁴ prepared on the Food and Agriculture Organization (FAO) training programs showed that of the twenty-seven group training activities organized by FAO, only nine have been evaluated and it was strongly advised that built-in evaluative measures be undertaken with all programs involving the organization. This, and another study prepared by Ravenswaj⁵ for the same organization in the preceding year (1972), showed the necessity for evaluation to help the organization and other concerned parties to determine how effective the programs were in meeting the needs for which they were designed.

The factor of time is a serious constraint that cannot be ignored in the training of foreign students in American institutions of higher learning. There is still an unresolved question about how much an American university can accomplish in providing the necessary training for the acquisition of knowledge and skills which effective future leaders or change agents in non-Western societies would need.

✕ This constraint is further compounded when they enroll in programs specifically designed for American students. It is hardly surprising that a good number of foreign students surveyed (and some Americans too!) complained about the "rush" inherent in the current arrangement which left them with little time to "assimilate" or practice to a point of "mastery" (see Appendix G).

Conclusions

The foregoing constraints, as a sample of inhibiting factors which the university must overcome in order to operate effectively, should provide an appropriate context in which to view the findings from the study.

1. The strength of the responses to the problem solving, practice-oriented activities in research, and laboratory and field experience activities (which were rated "above average" and statistically significant among American students); and the weakness of the rating of the content of core courses and the teaching style of instructors, suggests that the former should be encouraged while the latter should be re-examined.

2. Because there was a significant difference in the views of subjects from the College of Agriculture and Natural Resources (the majority of whom are foreign students) as compared to others, one gets the impression that foreign students can derive meaningful learning experiences from their programs if the conditions are appropriate.

3. The significant differences between those holding jobs, on leave, or with definite career choice, and others indicates that students be encouraged to identify a career of interest before they have gone far in the training programs they choose.

It is worthy of note that these two variables: "field of study" and "choice of career" should make significant differences in the findings. Their relationship as co-variables is obvious.

4. The positive and significant influence which students' playing a major part in the planning of their programs had on the general evaluation implies that they welcome the opportunity.

5. The significant difference which the role of a concerned and helpful academic advisor made toward students' "above average" overall evaluation shows the importance of this function and why more attention should be paid to it.

A few concluding questions need to be answered from the findings of the study:

6. "Can it be said that foreign students perceive their training as relevant to their career needs?" The answer seems to be positive but with a qualification. The research and practice-oriented components of the programs and the input which they made into the planning of the programs may have been largely responsible for this reaction. When compared with the viewpoint of American students, that of the foreign students was, in most cases, not different. There were very few instances in which their opinions were diametrically opposed to each other even though the reaction of foreign students generally tended to be more moderate than that of American students. This posture can be attributed to socio-cultural factors. By perceiving themselves as "guests" in American institutions, they may regard it as culturally not decorous to be critical of their hosts and hostesses, whatever may be the shortcomings of the latter. What is encouraging to know is that, with careful planning and execution, MSU has the resources in personnel and physical facilities to provide appropriate training that would meet the needs of foreign students.

7. In response to the question, "Are foreign students confident they can play their roles as 'change agents' satisfactorily, in the light of what they are going through?", the answer may not be positive. One needs to look at the responses to questions which dealt with "change agent competency" concepts in the "content of courses" to realize that foreign students (and American students too) were not optimistic (see Figs. 3a, 4a, 5a, 6a, 7a, 8a, and 9a which revealed "below average" results). The strength of this position (potential

change agent) was further illustrated from their answers to such issues as "plan to return home," "commitment to development," and selection of "social objectives" over "personal objectives" which were supported by an overwhelming majority of participants. Their current status, in terms of professional functions, showed a larger proportion of them (than Americans) in executive or other policy-making positions and more of them (than Americans) were employed by the government. Among working hypotheses which Spaulding and Flacks' work (The World's Students in the United States, p. 311) corroborated, was the fact that foreign students have played the role of change agents in the development of their countries. As potential change agents, their rather negative answers to some key concepts in the training of change agents indicated a necessity for the review of existing programs to overcome this deficiency. Klineberg (1976) was emphatic about this when he remarked:

Curricula revisions to meet the needs of foreign students are few; most, in fact, seem to have developed in response to courses in which foreign students predominate. . . But apart from these and the more common courses in English for foreign students, our institutions have not seen fit to develop curricula offerings especially geared to the foreign student. A frequent complaint of foreign students is the number of required courses, and often the lack of relevance of these courses to their interest, their backgrounds or their professional goals. (p. 203)

8. Asked whether or not they would be "willing to recommend the programs to prospective foreign students," the answer is probably positive if for no other reason than the opportunity for graduate students to exercise initiative in planning their own programs and the fact that one can make up shortcomings in content and teaching by giving serious attention to actual research, laboratory and field experience activities.

Some Issues Raised by the Results

1. Irrelevance of the curricula. As indicated earlier, the contents of curricula were rated as average at best. This position was reinforced in the summary of the answers to the open-ended questions (see Appendix G). It is noteworthy that only a few administrators and faculty members identified this as a likely problem. But many researchers and concerned educators over the past decade have been pointing out this factor as a shortcoming (see Chapter II in the "Review of Literature"). Very few studies have been conducted examining this question. Spaulding and Flack included this factor as one of the working hypotheses which were supported from studies which were evaluated in their book The World's Students in the United States (see p. 308). In a paper submitted to the House Committee on Education and Labor, the Task Force on International Education by the Committee on Educational Interchange Policy, three issues were raised the foremost of which was what steps should be taken to adapt curricula to ensure that the needs of foreign students were met especially since it was realized that their needs were not the same as the Americans'.

The speed at which changes occur in our physical and social environments today would seem to call for a curriculum that is flexible enough to accommodate the new experiences while retaining the old for as long as they remain useful.

2. Below average teaching quality. The controversial nature of this topic is acknowledged; so did Thielens Jr., when he remarked:

College and university teaching is a little understood and possibly quite ineffectual craft. Despite the centuries of campus encounters between professors and their students, no sizeable fund of wisdom and experience has accumulated to guide these meetings.⁶

The school is aware that something ought to be done to bring the improvement about. In order to encourage instructors to come forward and take advantage of resources available to them, the Educational Development Program was created and one needs only to read the report Commitment to Excellence⁷ by Davis, Abedor and Witt to appreciate the meritorious service provided. Therefore, some obvious questions are raised by students' reactions especially when the school was "striving for excellence." The graphic illustrations (Figs. 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 18a) clearly showed that the students were not impressed with the quality of teaching. The survey among a few of the professors whose courses were rated as "very good" showed that they considered the application, in a real world situation, of concepts learned, encouraged problem-solving, and involved the students through active participation. They also indicated taking their teaching seriously and mastering their subjects (see Appendix F3). When these strategies were applied to the rest of the teaching especially in the students' areas of specialization, however, "below average" results were revealed. What made the questions important was the fact that teaching in the core and cognate areas generally involved more than half of the credit load which the student must carry to graduate. Additionally, the Educational Development Program was designed to encourage quality only in undergraduate teaching.

The emphasis being laid on this point comes not as an effort to be critical of instructors, but more in terms of drawing attention to the academic welfare of graduate students. It seems like there should be a moral obligation to ensure that they are treated to the best possible instruction as the undergraduate students, if one realizes that

they are part of the "indicators" used by those in authority to justify almost everything the school does: asking for state tax support, professors asking for recognition, better pay, and improved conditions of services, etc. Since the call for improvement comes from both Americans as well as foreigners, it is anticipated that improvements set up in the interest of the latter may also benefit the former group. It is unlikely that major improvements may be undertaken exclusively for foreign students if the interests of the primary beneficiaries (the American students) are not going to be well served. More than anything else, the quality of performance of the students should be the determinant of instructors' efficiency. The observation by Fishman⁸, which would seem to be equally applicable to professors in colleges and universities, pointed this out:

We would like to evaluate physicians according to their patients' subsequent health records; we would like to evaluate lawyers according to their clients' subsequent fate when judges and juries have their say; we would like to evaluate automobile mechanics according to how well the autos they have repaired subsequently perform. I see no good reason for treating teachers differently, particularly as we find out more and more about why and how children do or do not learn.

3. The next issue to examine is lack of congruence in the university's goals in training foreign students as prioritized by the administrators, and the students' perception of how it applied to them in practice. When the disparity between the assessment of the administrators and the students is examined, one is tempted to see what McClelland described in his recent article (March 1978) in the American Psychologist as "power goals," and he went further to explain:

People high in need of power tend to take extreme risks, or set impossibly high goals, because their desire is more to have impact on those around them than to accomplish something

. . .Unfortunately, in terms of getting things done, people high in power motivation do not seem to take into account the probability of success. . .The person high in need for achievement wants to know if an act is instrumental to solving a problem--if, for example, a particular therapy program actually rehabilitates alcoholics.

When interpreted in the context of this study, it would be of interest to know from more research if data support the objectives outlined. If it is realized that we are dealing in this study with a problem in which the administrators and students don't agree on what the objectives are, a better assessment of the problem may be developed.

4. When all the foregoing issues are examined in the context of the conditions and setting to which foreign students would return, the magnitude of the problems can be appreciated especially when Americans, for whom the programs were designed were also complaining. It is not hard to imagine the impact when areas as important as content of courses and the teaching style of instructors are called into question. One only needs to recall some of the conclusions made by Osman⁹ when discussing the issue of transferring knowledge and techniques from the West to Iran. He warned that this should not be undertaken without a careful consideration of the "social and cultural setting" of the country receiving it, if the transfer was to be successful.

5. On the positive side is Academic Advising. It was discovered that academic advising was given "above average" rating mainly because a large majority of the respondents said that they played major roles in planning their programs. As adults who are responsible and have their own progress at heart, no one can be expected to do a better job on this assignment than themselves. This is not to discount

the invaluable assistance which a concerned advisor could give, especially where students' knowledge of academic procedures in the school is limited, or where their conception of the likely outcome of some decisions may be hazy.

The important point to note is that, given the opportunity to participate, the student can make substantial contribution not only to help himself but also to reduce the burden on the advisor. This is only one point; there may still be other positive elements in the existing structured interactions between student and advisor which should be maximized or new and challenging dimensions which may be explored for better results. An opportunity to allow more constructive contributions from students would help both student and faculty and ensure a greater measure of satisfaction from both parties while promoting the quality of the total product. A report¹⁰ submitted to the Dean of the College of Education in June 1977 by an ad hoc committee of foreign students stressed the point about meaningful contribution of foreign students to decisions affecting their interests (see Appendix H). Similarly, a good number of suggestions made in responses to the open-ended questions of the study (see Appendix G), are reflective of the contributions students can make, if given a chance to do so.

From the report of the suggestions made by faculty interviewed on the question of academic advising (Appendix E2), it would be noted that playing the role of an advisor was not to be regarded as a past-time. It was suggested that attributes such as patience, understanding and empathy were important if an advisor was to be successful in this time-consuming assignment. The magnitude of the role was

emphasized in the report¹¹ which the ad hoc committee presented to the Dean of the College of Education:

Of all the university officials with whom the foreign students would interact, this is the one whose functions may make or mar the latter's progress. The current practice of assigning foreign students essentially on the basis of area of expertise and the number of advisees being directed is inadequate. An effective academic advisor needs to be more than a scholar and an instructor. Other attributes that should be considered are: being world-minded, and skilled in human relations techniques with a genuine concern for "how the other half lives." An advisor who knows little about the culture and lifestyle of the people of the country where his advisee is from, would be drastically limited in the kind of help he can render.

6. Another positive signal from the findings was the overwhelming support of the application of theory, concepts and other heuristic dimensions of our respective disciplines in actual research, laboratory, and field experience activities. The immense value of knowledge used and skills perfected through practice cannot be over-emphasized in this highly competitive world. The call to be more competent than ever in the management and control of our environment, if for no other reason than ensuring our survival as a species, demands more than rhetorical exercised in theoretical ideas. This is not intended to undercut the importance of the acquisition of knowledge. Knowledge helps in making intelligent judgments on which effective action can be based, as Gardner¹² pointed out:

Men must be discriminating appraisers of their society, knowing coolly and precisely what it is about the society that thwarts or limits them and therefore needs modification. And so must they be discriminating protectors of their institutions, preserving those features that nourish and strengthen them and make them more free. To fit themselves for such tasks, they must be sufficiently serious to study their institutions, sufficiently dedicated to become expert in the art of modifying them.

From the study, it was concluded that knowledge and awareness have to

be accompanied by action. The "practice" dimension of the learning process was strongly supported in the findings. Given this awareness, perhaps those in authority should use resources to strike a better balance between classroom instruction and practice.

The need for this attention stems from the fact that many courses for graduate and professional certificates have very limited number of credits assigned to the practice aspect of the learning experience. Indeed, in some programs, it is quite possible to complete all requirements and graduate without getting the necessary practice in real or simulated conditions. This can be likened to training and certifying a driver who did not get, in practice, what it really meant to be a "good driver." A review of programs to give more emphasis to this dimension seems to be in order. An anonymous poet once observed:

What I hear I forget,
What I see I remember,
What I taste or smell I may enjoy;
It is what I do that I know,
And to do is to be.
So get in the act!

It is hoped that graduate students in general, and foreign students in particular would continue to take this aspect of the learning process seriously. Their future success in whatever professional career they may choose may depend on it.

Implications of the Findings for Some Interested Groups

1. The Foreign Students. The feeling one gets from the results is that foreign students should not build expectations too high because, apart from the fact that the system was not designed for them, the constraints outlined earlier further limit the opportunity. Because of this, additional effort is called for on their part. They should

be determined in pursuing what would be of benefit to their academic and professional careers. The report to the Dean of the College of Education (Appendix H) strongly advised them to be willing to participate and make valuable input to decisions likely to affect their interests. The same note of advice was sounded by Reischauer¹³ in his message to Asian students:

The only answer to this problem is to make the most one can of what is offered, while remembering that the crucial task, which probably can only be performed by oneself, is to find out how what one is learning is relevant to one's own interests and the special needs of one's own country.

This investigator emphasized this point in an article¹⁴ in 1977 when he asked the overriding question and followed with a similar advice:

What are we foreign students doing to better prepare ourselves to cope with problems we would encounter back home? First and foremost, we should realize that the curricula here were not set up with us in mind. So the onus of adapting to and adopting what is available falls squarely on our shoulders. Perhaps our greatest need is for meaningful dialogue and communication on more than social level. Intellectual interactions in the form of professional exchanges and sharing of academic experiences is indispensable.

When one recalls that American minority students have complained many times in the past about lack of relevance of programs to their needs and that they deserve recognition and better educational opportunity (see Cultural Challenges to Education edited by Brembeck and Hill, The Minority Student on the Campus edited by Altman and Snyder, or Minorities in U.S. Institutions of Higher Education by Brown and Stent), one would appreciate the compounding dimensions of such curricula to the needs of foreign students.

2. The Administrators. There is no intention to minimize the importance of the role which the administrators would have to play to bring about reform. The foregoing advice to foreign students was

intended to show that they had a strong part to play in the mission to improve the quality of the programs. On their part, the administrators need to look at the findings from the standpoint of--

- a. a clear redefinition of goals of foreign student training;
- b. the admission and graduating requirements including the logistics needed for executing them;
- c. the adequacy of resources available to foreign students in respective programs;
- d. creating a necessary congenial climate under which both foreign and American students can function so well as to derive the best possible knowledge, skills and attitude from their efforts;
- e. reducing the variability in the execution of programs as practiced by many colleges and departments;
- f. colleges having contractual arrangements with organizations in which procedures regarding specific training programs are clearly spelled out;
- g. the capacity of the Graduate School as presently constituted in meeting the demands of the many colleges needing its attention;
- h. the role of the International Programs Office in the midst of all these events.

Since foreign students are called on to redouble efforts about their training, the question that should be asked of the administrators was succinctly put by Spencer¹⁴:

Since we expect them (foreign students) to succeed in Western-oriented culture, in educational institutions designed to train Americans for success in American culture, insist upon Western

attitude and socialization changes, we are in fact saying that foreign students are considered successful to the degree that they become more like us. . .To act professionally (i.e., according to what they learned in the United States), they must act as Americans. They cannot separate out the content material from the cultural overtones in which it was learned. Their content fields are American and their application of it is an American concept in and of itself. They have, in effect, been trained to be acultured in their own culture. They are neither fish nor fowl, not quite American and not quite native. Have we done them justice?

Perhaps the content of the above quotation would sensitize the administrators to the obstacles which have to be overcome if foreign students' learning efforts are to be richly rewarding.

3. The Faculty. Part of the observation intended for the administrators above applies equally to faculty members. Many scholars and instructors combine their professional interests with administrative duties at college and departmental levels.

The results shown on evaluation of teaching pleads for a more responsive attitude to students and a more serious attitude to the teaching profession. On the question of academic advising, more student input is called for and more time and care should be given to the assignment. The success of the advisee's academic career hinges very much on the extent of prompt assistance he receives when he needs it.

4. The Instructional Development and Technology (ID & T) Program. The implication of this study for the ID & T program can be regarded as far reaching if for no other reason than that the reactions of students in the program were no different from that of the total population. From the objectives of training professionals in the field which includes equipping them with needed competencies to fit them to play the role of change agent in education (with a mission

to improve the quality of learning and instruction), their responses should have been different. The opening paragraph of the brochure introducing the program clearly recognized this:

Improvement of education in universities, in public schools, and in the allied agencies of government and industry has become a matter of crucial concern. The dominant position once held by theory and research in the university has been challenged by societal demands, the explosion of knowledge, and the maintenance of quality in instructional programs--the curriculum of high school and elementary programs is under critical evaluation by communities and their educators --the educational programs of business and government are responding to the demand for the retraining of large segments of our population. These shifts reflect a society in which innovation and change are inherent and which looks to education to make much needed changes and improvement in its own structure and operation.¹⁶

The design of the program took the inadequacies in the existing educational set-up into account and attempted to rectify them by ensuring that trainees received the kind of training which were both effective in solving the problems and efficient in the utilization of available resources to accomplish this purpose. The brochure further explained:

Instructional Development involves the identification and careful analysis of educational needs and problems, a highly specific definition of objectives in terms of those needs, a determination of practical alternative solutions; the selection and validation of viable solutions, and continuous education, with consequent revision as needed, of component parts and of the program as a whole.

In short, what the program promised should have been reflected in the responses of the students (in the program) who participated in the study. If only from their exposure to the theory of change, the logistics of bringing this about, and a commitment to finding solutions that would be effective, their responses should have been more positive than others, at least in that aspect of the analysis in which content of courses directly related to change agents' role. Further

evidence of this posture (of students) may be obtained from their comments to the open-ended questions (Appendix G). What they identified as "inhibiting factors" were essentially the same with other students. Even some of their suggestions for improvement pointed to some curricular needs.

More courses in the core area are needed. More emphasis should be placed on practical activities, the program is presently theoretical. Courses in core area dealing with how professionals should relate to their clients and to one another are needed.

The above position is further supported by comments from practioners in the field who are finding it tougher than ever to bring the needed change about. Some of those observations were contained in the publication edited by Alexander and Yelon.¹⁷ In the book, Robert Stakenas of the Division of Instructional Research and Service at Florida State University observed:

We are now apprehensive about our ability to promote change through information dissemination and course development projects alone. It is too time consuming and ineffective in producing widespread change. Rather it now seems to make more sense to work on changing academic policies which will require faculty members to think and behave in new ways. (p. 49)

Stanford Ericksen of the Center for Research on Learning and Teaching at the University of Michigan sounded the same note when he said:

Basically, our problem is one of learning how to function as a catalytic (change) agent without becoming a crutch for any given teacher or department. We continually ask the question: how does a small unit influence a large university with respect to something as complicated and as ego-involved as classroom instruction? By way of solution, we feel that our next staff appointment should be with specialists in the area of organizational psychology or group dynamics, or interpersonal relations. (p. 65)

While Claude Mathis of the Center for the Teaching Professions at Northwestern University supported the views above, he went further

to question the adequacy of the present model for training Ph.D. candidates in the field:

Least effective have been our attempts to date to promote change in those few areas of the university where a perceived resistance to change is present. In some few instances in which the Center has attempted to act positively as an intervention agent we have been reminded of the often cited observation that "changing a university is oftentimes like trying to reorganize a cemetery". . . We have found that Ph.D. preparation models emphasizing specialization in such areas as educational technology, educational psychology, administration, and curriculum development do not produce the type of generalist necessary to work effectively with a broad spectrum of university faculty in developing strategies and techniques for instructional improvement. (pp. 92-93)

When the above observations are made in connection with the problems which a professional in the program would be facing in the educational system in the U.S., one can imagine the magnitude of the problem when applied to a foreign student who will be returning to a system quite different and probably more change resistant than those presently described.

5. Implications for Sponsors of Foreign Students (Organizations and Foreign Governments). A number of questions raised for the sponsors from the findings would be:

- a. How closely do sponsors examine university's objectives for training foreign students?
- b. Do they have any mechanism for assessing the content of programs especially to ensure they are relevant before sending in their trainees?
- c. What information do they have about faculty in the program to ascertain that trainees sent to them would be in "good hands"?
- d. To what extent do they realign the above with their own

goals and those of the trainees before entering any contractual training agreement?

- e. How often do they review the results of this endeavor from the performance of the trained personnel to see if, really, the training is worth the money invested in it? Or to put it in terms used by McClelland¹⁸, were the programs, from their results, reflective of programs designed out of "power motivation" or "achievement motivation"?

It is hoped that the answers given to these questions would shed some light on the sponsors' practices and assist in future reviews intended to improve current performance.

Implications for Further Research

As indicated under "Limitations of the Study" in Chapter I, it may be necessary to point out again that the interpretation of the findings from this study takes cognizance of the fact that more research ought to be done on the subject. This is a one-shot study exploring that aspect of foreign students' learning experiences which have not been adequately researched in the past (see Chapter II). The conclusions will have to be regarded as tentative till the findings from future studies shed more light on our knowledge of the learning experiences of foreign students at Michigan State University in particular, and around the nation generally.

As would be recalled in Chapter II ("Review of Literature"), it was clearly pointed out that research studies on foreign students have avoided dealing with their learning styles as a separate entity. In most cases, they have been compared with American students to ascertain if they could do well, using the rules and regulations laid down

to guide the Americans. The results have shown that they could. Now is the time to take a bold step to study them in their own right instead of basing their success on the extent to which they can copy the American approach to learning and problem-solving. While this is not intended to mean that they cannot benefit from this approach, their positions would undoubtedly be enhanced if they have the opportunity of synthesizing the new with the old instead of treating them as mutually exclusive. By conducting studies which reveal their unique and effective learning styles, foreign students may be better understood and helped whenever this is needed. The genuine knowledge sharing experience which may result from this may be useful to American students as well.

1. This study has attempted to examine two of the four components of evaluation: aspects of the context and the process. It cannot be denied that both the input, in the form of background characteristics of the foreign students (before they are offered admission), showing regional similarities and differences; and the output, in the form of graduates engaged in their professional activities in their home countries, need to be evaluated. The consequences of the knowledge of these two components in the context and the process can be significant, as Robert Dreeben pointed out in this remarks in "Contemporary Views on Education" in Encyclopaedia of Education (Vol. 9):

Another problem equally important, is the question of curriculum content. Here again, the critical issue would appear to be the extent to which schools are coordinated with non-educational institutions in which school graduates will eventually find employment; there is some evidence, at least in certain countries, that holding a school credential, irrespective of curriculum content and of actual learning outcomes, is the most important criterion for entering the labor force. In any case, the question of connection

between curriculum and learning outcomes has yet to be investigated thoroughly. (p. 317)

2. Since the planning and resources available to the College of Agriculture and Natural Resources made a significant difference in the result, it is necessary to compare programs planned with foreign students in mind with others meant exclusively for Americans to see what beneficial differences would be brought about by this arrangement. A comparison along disciplinary lines may reveal interesting results, e.g. Physical and Biological Sciences and Technology compared with Humanities and Social Science.

3. A more in-depth analysis of the goals of the university for training foreign students is in order. Similarly, studies designed to obtain additional information on students' goals may help to reveal motivational factors to consider in planning their programs. It would be of interest to know how foreign students interpret success in graduate education.

4. In terms of the learning process, data are needed on the learning style (cognitive map) of foreign students as compared with Americans especially in the realm of problem-solving. For instance, do they prefer divergent to convergent thinking? On the issue of imagery, how do they compare with Americans on the concrete/abstract continuum, or in the use of auditory sense as contrasted with the visual sense?

5. It would be of interest to know in quasi-experimental research what effects factors such as background characteristics of foreign students, the kind and extent of relevance of materials, amount and length of time given, level of difficulty and sequence of

arrangement of the courses, would have on their rate of learning.

6. Since it was pointed out in the result that foreign students can do as well as American students in some courses as inferred from point averages, it is essential to know what defense or coping mechanisms they set up in academic work to ensure success in an environment which is socio-culturally different from their own.

7. The foreign students endorsed the provision of learning resources in the form of libraries and laboratories; a study investigating the extent to which they want to engage in independent work using these resources can be valuable. The implication of such study for instructor-student relationships in academic setting can be significant.

8. Future research should look further into the academic conditions (at MSU and also in the U.S. institutions of higher learning) under which foreign students should train to ensure transferability. This suggestion was also made in the volume by Spaulding and Flack.

9. A survey of foreign students' use of time while here to see what receives priority attention and what does not would be useful. A comparison of this with that of American students could help in identifying the proportion of the time given to structured academic experience and the proportion given to unstructured ones.

10. A comprehensive survey of faculty in their capacities as instructors of foreign students is necessary to ascertain whether such characteristics as "having international experience" makes any difference in their teaching style and what impact this has on foreign students participating in such classes. This is necessary especially because of the conclusion drawn by Klineberg (1976) when he said:

Despite the wide opportunities for the faculty to have international experiences, the conclusion must be drawn that the majority of students are not directly benefiting from exposure to a curriculum with an adequate international dimension. (p. 221)

11. Similarly, a comparative analysis of the teaching styles of foreign scholars and instructors with those of Americans who had no international experience may reveal helpful information about the best strategies to employ in the teaching of foreign students.

12. A detailed study of steps taken by experienced faculty in the academic advising of foreign students is essential to know "what worked" and what did not so that faculty members who are new may have some guidelines by which to evaluate their performances.

13. A research study examining the philosophical base of foreign students' training is in order to give direction to goals identified and reasons for their choice. For instance, which is more pertinent in cross-cultural research: "cultural relativism" or the sociology of educational ideas as a methodology which advocates withholding judgment of events till the context is considered, and the recognition of and respect for individual differences in the learning process; or the principle of "phenomenal absolutism" which advocates universality in the application of knowledge? Other suggestions are contained in Appendix H.

Recommendations

In order to ensure the best results possible, foreign students' training should, ideally, be conducted in their respective societies. This suggestion has been made many times in the past. Some organizations such as UNESCO¹⁹ have participated in such ventures: this idea was strongly supported at the Bellagio Conference²⁰ and by Edgar

Schuler²¹ in an article in Rural Sociology. In fact this is partly the reason why MSU has participated in institution building all around the world. Since foreign students would continue to attend MSU in the future, these recommendations may be helpful to all participants in the training programs.

1. To the Foreign Students. It cannot be over-emphasized that foreign students should be more involved (than at present) in activities in which their interests are affected. It is they who would have to answer the ultimate question about the relevance of university programs to their needs. Unless they make their feelings known, the assumption would normally be made that everything is alright. Even when the school authorities attempt to be helpful, the learning, adaptation and application will still have to be done by them. They should therefore, be productive and not "passive" learners. Some guidelines to help them do a better job are provided in Appendix I. Barbara Ostrander²² edited a NAFSA publication detailing a variety of ways in which foreign students have been meaningfully involved in many campus activities. If new structural arrangements by the administration gave cognizance to the contribution which they can make, it may be regarded as a challenge to which they would rise.

They should be strongly encouraged to join organizations and programs of professional relevance to their fields of interests so they can gain the experience about what the "field" is like outside of the classroom. They should be active participants in seminars and conferences. Where little attention is given to non-Western experience, they should either as individuals or in groups, present position papers to bridge this gap.

They should heed the valuable advice given them by experienced members of faculty (Appendix E2) on the need to be candid and not hesitate to ask assistance whenever problems are encountered.

Other suggestions of importance are contained in the report to the Dean of the College of Education (Appendix H).

2. To the American Students. Most of what American students need are derived from suggestions they made in Appendix G, in addition to the fact that many of the recommendations made in respect to foreign students, if adopted, would benefit American students too, especially those who intend to pursue careers in non-Western societies.

3. To the Faculty. The faculty in each department should give an academic orientation to foreign students, similar to what the Foreign Student Office gives. This practice is already in operation in some departments. Other departments can help their foreign student population if they adopt this practice. English language seems to be the only subject which receives much attention. Other activities to which a good number of foreign students will appreciate being introduced would include the use of the library, writing essay examinations and especially objective tests, preparing research papers, etc. Additional suggestions are contained in Appendices G and H.

It has been shown in the rating by the administrators, of the university's objectives in training foreign students as well as in the students' reactions to the programs, that application of knowledge acquired is taken very seriously. The faculty should take this seriously too, by teaching it rather than hope that it would occur automatically without their direction.

As the ones to interpret academic rules and regulations, they

should be willing to make adaptations in course offerings to accommodate foreign students' interests.

Course activities set up in a way as to utilize the resources of foreign students' experiences, or arranged to get both foreign and American students to interact on projects would be very helpful.

As academic advisors, they were advised (Appendix F2) by other experienced faculty to be patient, understanding and empathetic; to be willing to devote more time to the function if it is to be well done.

In the report to the Dean (Appendix H) it was suggested among other things, to arrange a workshop for academic advisors of foreign students at the start of the school year where those who have not travelled abroad or had much cross-cultural experience may benefit by the orientation.

Considering the resources available in the College of Education at Michigan State University, there is a need to create a research base specifically devoted to scholarly studies of characteristic features of the foreign students' learning orientation in environments different from their own. With the program in ID & T concerned with improvement of learning, the Educational Development Program, and Learning and Evaluation Services interested in the instructional aspect, and the Institute for International Studies in Education providing expertise on the cross-cultural aspect, a proposal may be jointly prepared and forwarded to organizations for funding with a view to generating additional knowledge which would help policy makers in making intelligent decisions about what needs would be appropriate in what circumstances, for foreign students. So far, most studies

conducted on foreign students, their unique characteristics and learning style have been very limited, as was shown in Chapter II. This recommendation would require the resources of the administrators and the foreign students (in addition to faculty) in their planning and execution. This is in consonance with the view expressed by Smuckler²³ in the chapter he contributed to the volume, Universities and Development Assistance Abroad, in which he spelled out major research needs and how universities can help in meeting them. Taggart²⁴ reiterated the same appeal in presenting a position paper on "Association for International Cooperation in Higher Education and Research" when he remarked:

We in the universities need to build additional world problem-solving activities into the service arms of our institutions. We need this increased component not only because we have a responsibility to advance learning wherever it is needed but also because it will enrich our programs and enable us to do a better job of educating Americans.

4. To the Administrators. In order to provide a philosophical base for the evaluation of programs involving foreign students, similar to what some colleges and universities in California adopted, a more clearly defined statement of objectives of training them is in order. Johnson and Gotcher²⁵ pointed this out in the assessment of "priorities to consider in the admission of international students." They remarked:

It was this same kind of thinking that led the trustees of one of California's systems of higher education, the California State University and Colleges (CSUC), to adopt in 1965 a policy for the system of principles for guiding development and conduct of Foreign Student Programs:

1. The primary purpose of Foreign Student Programs should be the education of the foreign student by making available to him educational opportunities consistent with his individual needs, and closely related to the needs of the country to which he will return.

2. The presence of foreign students in the campus community enables the State Colleges to make significant contributions to the development of other nations through the education of potential leaders.
3. Through organized Foreign Student Programs use should be made of students from other lands and cultures as a resource for enhancing the educational experiences of State College students, faculty, and the host community.
4. The development and conduct of Foreign Student Programs should be undertaken only insofar as the resources of the college are sufficient to support such programs at a quality level.
5. Foreign Student Programs should be examined and evaluated periodically with reports made to the Board of Trustees, to help assure that these principles are being realized. (p. 42)

A clear description of what foreign students are expected to accomplish in behavioral terms, the minimum standard of performance required (in addition to grades), and the conditions under which these should be accomplished are needed to guide both the students, faculty, administrators and organizations sponsoring the students.

Programs currently offered in the university should be classified according to categories of responsiveness to foreign student needs so that they (foreign students) can assess the potential level of relevance of these programs to their needs before making commitments about enrolling in them. These categories are suggested:

- a. Program completely designed with foreign students in mind.
- b. Program designed for American students, but flexible enough in structure to allow foreign students to adapt the contents to their needs.
- c. Program designed for American students but having faculty with international experience ready to assist foreign students make necessary adaptation.
- d. Program designed for American students only, without (b) and (c) above.

If a program is given label (d) above, a foreign student deciding to enroll in it should be ready to completely adapt to the American experience which would pervade the content of the course.

In the meantime, it is necessary to reexamine the curriculum of every department where a good number of foreign students are enrolled to see what could be done to rectify inadequacies in them as far as foreign student needs are concerned. Maurice Harari²⁶ offered this advice in his study.

It would be beneficial if a set of courses could be put together (similar to the "university college" courses for undergraduate students) specifically designed to help foreign students acquire a fairly broad academic base before they proceed to their fields. There is no doubt that a good number of them would be called upon to play the role of generalists which current arrangements in the departments may not address. Richard Niehoff, former assistant dean of International Programs, sounded a similar note in a memo to the Dean in March 1968 when he suggested exploring:

the feasibility of establishing a credit-non-credit seminar in each college especially designed to provide an opportunity for foreign graduate students to discuss problems of adapting the materials presented in their several programs of study to the needs of their countries. The seminar would have the important by-product of indicating to these students the view that MSU is interested in their use of the training being provided for their home countries. . . Students from different countries could be brought together to discuss development in their countries. . . faculty members having experience in those countries might be related to such groups.²⁷

In spite of being a decade old, the suggestion still has a lot of merit today. The present recommendation anticipates that a seminar or seminars such as these would be part of the set of courses suggested earlier on. By opening such courses to Americans interested in the subjects,

opportunity would be provided for richly rewarding academic exercises in cross-cultural education. An example of a curriculum to deal with this is contained in Appendix I.

Rather than open up all departments to all foreign students seeking admission, it may be necessary to limit them only to those programs where resources are adequately provided and the curricula have been reviewed to accommodate foreign students' interests.

There should be an equivalent of the Foreign Student Handbook (issued by the Foreign Student Office), exclusively devoted to academic matters assembled through contributions from each department and with substantial input from experienced foreign students in each program.

The Graduate School can coordinate such a publication. And judging from the interaction which the investigator had with the Graduate School, it seems more resources in space and personnel need to be provided if better performance is expected when additional obligations are to be met on behalf of foreign students.

Other suggestions made by the students can be found in Appendices G and H.

A Look Into the Future

One is tempted to speculate on what the future holds for foreign students' training at Michigan State University as well as in other institutions of higher learning in the U.S. given the findings of this study. There is no doubt that the university will continue to be involved in the development activities in non-Western societies. One only needs to read headlines in the campus newspaper, The State News,

and the weekly MSU News Bulletin to appreciate the full impact of the international dimensions of MSU involvement abroad, in addition to the community of foreign students and scholars which form part of the mosaic of international environment which the campus has become. The delicate nature of the interdependence which seems to be strongly advocated in the execution of international affairs makes involvement imperative as Carlos Romulo²⁸ pointed out:

It makes little difference whether the penguins of Antarctica know anything about the squirrels of Rock Creek Park. But it makes all the difference in the world whether the American people understand the crowded millions who inhabit Asia. Your destiny, Asia's destiny, the world's very survival may depend on such an understanding on your part.

The role which the university will continue to play in the future was succinctly stated by Wharton²⁹ in one of the position papers he presented in 1971:

The university is now so crucial to the successful prosecution of society's affairs that the university has no choice about its involvement--only about the form and conditions of that involvement. As a social institution the university must respond to society's needs or else see its functions, particularly in research and manpower training, transferred to other less qualified institutional forms.

And he went further to qualify this point in another paper presented in 1974 in which he advocated a revitalization of Western humanities by giving more attention to non-Western humanities, a process he described as "reverse technical assistance." He observed:

Thus, western humanists face a two-fold challenge. First, they must re-examine and reinterpret their own western heritage within the context of a world society growing continually more intimate and interdependent. Second, they must find a way to grasp and draw upon the humanistic heritage of non-western cultures.³⁰

The above observations were appropriately translated into the context of the foreign student by Benne³¹, when he stated:

By bringing into conscious focus the use of university resources in training people to effect radical change leads us to look at teaching and learning processes in a different light. Students from other countries, especially where social change is a dramatic necessity, and where these governments and ours are interested in effecting changes, dramatize issues which we have only partly faced in our own country and in the training of our own professionals. In a sense, we are interested to know now universities can assume responsibility, not only for the original acquisition of learning, but for the effective transfer and application of that learning in situations of practice. Our professional training institutions have assumed the responsibility in only a limited degree, probably because we could, with some assurance, assume that others would take up the job of the continuing growth of professionally trained persons and their adaptation to the hospital or social agency or school setting in which they worked. We cannot assume this in the case of the foreign student, so their presence among us dramatizes the problem of the extent of university responsibilities in the full cycle of learning.

If universities in general and MSU in particular would continue to play a leadership role in the affairs not only of the American society but also of other areas of the world through the instrumentality of foreign student training, the kind of interest, experience and level of commitment brought by the next president of the institution will set the pace. It will be recalled that the respectable posture which the school attained in the past three decades was very much a function of the dynamic leadership provided by John Hannah and Clifton Wharton Jr.

Other factors likely to facilitate or hinder the school's progress in this direction in the future, would include the amount of support provided by the State of Michigan. If the extent of past interest in international affairs is anything to judge by, one needs to be optimistic because the support, starting from the governor on down, has been encouraging.

Perhaps the most crucial factor would be the level of commitment by faculty. It is they who would translate any new policy to concrete activities in their day-to-day academic and administrative operations.

There is no doubt that the attitude of non-Western nations, reflected in the policies of the leaders of their governments would contribute to the result. Interestingly some of those future leaders are presently being trained here!. If their learning experience proves helpful, they would not hesitate to continue to promote it when they attain positions in which they can make that kind of contribution. In a way, we may be looking at the products of that very future now, and any meaningful assistance which the faculty, administration and the entire American student population can render may be the most reliable investment in a better interdependent world into which we are gradually drifting. Adlai Stevenson³² summarized this feeling well when he said:

We travel together, passengers on a little spaceship, dependent upon its vulnerable reserves of air and sail, committed for our safety to its security and peace, preserved from annihilation only by the care, the work and, I will say, the love we give our fragile craft.

We cannot maintain it, half-fortunate, half-miserable, half-despairing, half-free in a liberation of resources undreamed of until this day, half-slave to the ancient enemies of man.

No craft, no crew, can travel safely with such vast contradictions. On their resolution depends the survival of us all.

On this note, it may be appreciated that the training of foreign students, which often sounds like a thankless philanthropic undertaking, is indeed an investment in a better future for humanity. A better non-Western world would undoubtedly enhance the effort and quality of life of the Western world if the realities of interdependence continue to dominate the mode of our thoughts and actions in years to come.

FOOTNOTES TO CHAPTER V

¹Clifton R. Wharton Jr. Part of the opening remarks made when he took over as president of Michigan State University (January 20, 1970). Quoted as fronticepiece to the publication, Commitment to Excellence: A Case Study of Educational Innovation.

²Paul Dressel. Handbook of Academic Evaluation (San Francisco, Washington, London: Jossey-Bass Publishers, 1976), p. x.

³James E. Catoline. Software for Managing the Process of Man-power Training for Economic and Industrial Development (Waltham, Massachusetts: GTE Sylvania Training Operations, April 1977).

⁴Food and Agriculture Organization, External Training Coordination and Evaluation Unit. "Evaluation of Group Training Organized by FAO" (Rome: August 1973).

⁵Boem van Ravenswaj. Fellowship Evaluation: Main Findings of a Pilot Study of Individual Fellowships Awarded by FAO in the Field of Fisheries During the Period 1965-71 (Rome: Food and Agriculture Organization, 1972).

⁶Wagner Thielens Jr. Encyclopaedia of Education, Vol. 9, p. 54.

⁷Robert Davis, et. al. Commitment to Excellence: A Case Study of Educational Innovation (East Lansing: A Michigan State University Publication, 1976).

⁸Joshua A. Fishman. "The Evaluation of Teaching," Washington, D.C.: A Report of the Second Pi Lambda Theta Catera, 1967.

⁹Osama Abdul-Raman Osman. "The Transferability of Non-Indigenous Administrative Techniques as an Approach to Improve Administration in a Developing Country: The Experience of American Technical Assistance in Public Administration to Iran," Ph.D. dissertation, American University, 1970.

¹⁰"To Improve Learning Conditions for Foreign Students at MSU: A Report by an Ad Hoc Committee of Selected Foreign Students," presented to the Dean, College of Education, Michigan State University, June 1977.

¹¹Ibid., pp. 3-4.

¹²John W. Gardner. "Uncritical Lovers, Unloving Critics," commencement address presented at Cornell University, June 1, 1968.

- ¹³Edwin O. Rieschauer. "Studying Abroad," The Asian Student Orientation Handbook, 16th edition (San Francisco, California: 1977-78), p. 4.
- ¹⁴Adebayo Ogunbi. "Western World Education Moot for Non-Westerners," The Forum: MSU News Bulletin, April 7, 1977, p. 2.
- ¹⁵Richard Spencer. "The Relationship Between Examination Systems and Cultural Change" (Urbana, Illinois: University of Illinois, Office of Instructional Resources, Measurement and Research Division, 1967).
- ¹⁶Professional Programs in Instructional Development and Technology, College of Education, Michigan State University. Opening paragraph of brochure explaining the program, April 1978.
- ¹⁷Laurence Alexander and Stephen Yelon (eds.). Instructional Development Agencies in Higher Education (East Lansing: Learning Service, Educational Development Program, Michigan State University, 1972).
- ¹⁸David McClelland, op. cit.
- ¹⁹UNESCO. Evaluation of UNESCO Fellowship Programme (1964-1969), India (1971), Iran (1972), Japan (1972), Cameroon (1973), all published in Paris.
- ²⁰Champion F. Ward (ed.). Education and Development Reconsidered, the Bellagio Conference Papers sponsored by the Ford Foundation, and the Rockefeller Foundation (New York: Praeger Publishers, 1974).
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- ²²Barbara Ostrander (ed.). Innovations and New Programs of Special Interest in Foreign Student Education: A Catalogue (Washington, D.C.: NAFSA, 1970).
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³⁰_____. "Non-Western Humanities and Reverse Technical Assistance," paper presented at Ohio University, Athens, November 11, 1974, p. 2.

³¹Kenneth Benne. "Training Change Agents" in Irwin Sanders (ed.), The Professional Education of Foreign Students from Other Lands (New York: Council on Social Work Education, 1961), p. 86.

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APPENDICES

APPENDIX A

APPENDIX A1

OBJECTIVES FOR TRAINING FOREIGN STUDENTS AT MSU

Here is a list of possible reasons why foreign students are trained in this university. Kindly read through all of them and rank them in order of their importance, e.g. 1 = most important; 2 = next most important. . .and 10 = least important. If there is any other reason not on the list, please write it below and suggest a rank for it.

Foreign students are trained here:

- _____ (a) just because those admitted qualified and fulfilled admission requirements.
- _____ (b) in order to help their countries' effort toward modernization by waging war on poverty, illiteracy, and disease.
- _____ (c) to assist in manpower development being embarked upon by their countries.
- _____ (d) to train skilled hands which would act as change agents bringing innovative ideas to complement development.
- _____ (e) to build the bridge of friendship, understanding, and international cooperation.
- _____ (f) to ensure that they are better informed and competent to secure a good job and comfortable life.
- _____ (g) to help MSU maintain its international reputation.
- _____ (h) to enable them to use their training to secure leadership positions, win friends and influence people for the common good.
- _____ (i) to enable them to acquire the necessary knowledge and skills to solve the problems of their societies more efficiently.
- _____ (j) to give American students the opportunity for cross-cultural experience by interacting with their foreign counterparts.

APPENDIX A2

QUESTIONS FOR DEANS & OTHER TOP ADMINISTRATORS

1. Apart from the objectives on the list, are there other reasons why foreign students are trained in the college?
2. Of the problems confronting graduate students in the college, which would you say are peculiar to foreign students?
3. Are there concrete activities, college-wise, undertaken to assist foreign students in the light of the fact that they are from a different socio-cultural setting?
4. Have modifications been made in the curriculum (e.g. a new course) keyed specifically to the needs of foreign students?
5. What general comments can you make regarding the performance of foreign students as compared to their American counterparts in the college?
6. As a policy, do you maintain a file on your foreign graduates? Do you keep in touch with them? If so, what would you say are their reactions to their training experiences in the light of their current engagements?
7. Have foreign students participated in studies intended to ascertain their reactions to their training? If so, what are the findings? In short, what did they complain about and what suggestions did they make for improvement?
8. Given the university's land grant philosophy and its commitment to international exchange in education through knowledge sharing, institution building and manpower development, what future can you forecast for the training of foreign students at MSU?

APPENDIX A3

**A SUMMARY OF THE INTERVIEWS WITH DEANS OF SELECTED
COLLEGES AND OTHER TOP ADMINISTRATORS**

Conducted by

Adebayo Ogunbi

January 1978

REASONS WHY FOREIGN STUDENTS ARE TRAINED AT MSU
RANK-ORDERED RESPONSES

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total	Position
a	10	9	10	9	10	10	9	9	10	9	4	9	9	8	125	10th
b	1	4	1	2	4	2	3	2	1	6	5	3	3	1	38	2nd (4 firsts)
c	3	3	4	3	3	6	5	6	1	3	7	3	2	1	50	4th (2 firsts)
d	4	1	2	4	2	5	2	3	1	2	2	2	4	5	39	3rd (2 firsts)
e	6	6	5	5	6	8	6	5	5	7	9	6	5	1	80	5th (1 first)
f	8	8	9	8	9	1	7	8	8	8	3	9	6	8	100	8th (1 first)
g	9	10	8	7	8	9	8	10	9	10	10	9	10	6	122	9th
h	7	5	7	6	7	3	5	7	6	4	8	7	7	6	85	6th
i	2	2	3	1	1	4	1	1	4	1	1	1	1	1	24	1st (9 firsts)
j	5	7	6	10	5	7	4	4	7	5	6	5	8	8	87	7th

APPENDIX A3

A SUMMARY OF THE INTERVIEWS WITH DEANS OF SELECTED COLLEGES AND OTHER TOP ADMINISTRATORS

Summary

Primary objectives of training foreign students at MSU are: to have them acquire the knowledge and skills necessary for solving problems of poverty, illiteracy, and disease by enabling them to act as change agents bringing innovative ideas about, thus contributing to these areas' manpower development.

Secondary objectives include: building a bridge of friendship, understanding and international cooperation; giving American students the opportunity for cross-cultural experience through interaction with foreign students; and enabling foreign students to win friends and influence people for the common good through effective leadership.

Least important objectives include: using the expertise to secure a well paid job and comfortable life; helping MSU maintain its international reputation; and because those admitted qualified and fulfilled admission requirements.

Introduction

The rationale behind interviewing the deans and other top administrators regarding the relevance of training programs for foreign students lies in the important positions which they occupy as decision

makers. Their perspective is valuable to compare with the views of students to be surveyed so as to see the points of agreement and disagreement on the question of "purpose" for the training.

There is no doubt that they constitute reliable sources of valuable information about the goings-on within the university. Even though it was discovered that additional information on the attention being paid to foreign students' academic welfare could be obtained from heads of departments and directors of academic institutes, the limitation of time prevented exploration into these sources.

Objectives

In addition to the rank-ordered responses and a summary of the results' interpretation, it was pointed out that of the three major functions of the university in international exchange in education--knowledge generation and sharing, manpower development, and institution building--it is "institution building" that is currently being de-emphasized. This trend is largely dictated by the nature of requests made by those asking for assistance. In recent years, knowledge sharing and manpower development have received more attention.

How the objectives translate into concrete day-to-day activities of the college or department affecting the interests of foreign students is an assignment left exclusively in the hands of the academic unit involved in a given project.

Problems Affecting Foreign Students Viewed from the College Level

The following is a list of problems outlined by those interviewed as they can recall from experience:

1. By far the most often mentioned problem was language

difficulty--speaking, listening to, reading, and writing English. It was stated that in spite of the effort of English Language Center, many were still deficient. It was doubted if the preparation provided by the Center was adequate to help a student poor in the use of the language to cope in graduate work especially where technical language was involved in some disciplines.

2. Financial support for those in need. With limited funds, this was a difficult task to perform.

3. Occasional personal problems such as emotional upset or crisis in home country.

4. Difficulty of admitting foreign students to some programs because of limitations imposed by the legislature, e.g. Colleges of Human and Osteopathic Medicine.

5. Difficulty of picking those who have the potential to effect transferability. There was no way this could be determined before admission was granted.

6. Danger of overtraining them, i.e., training them for functions and roles that did not exist in the social system to which they would be asked to return.

7. Of all interviewed, only two mentioned the next three points as problems requiring administrative attention:

a) Expectation of foreign students to make a total adaptation to the existing program which is designed for a clientele that is American.

b) A system of teaching and testing which is peculiarly American.

c) Relevance of training programs to meet their needs and

the difficulty involved in their effort to make modifications.

Solutions

When asked to suggest what could be done to solve the above problems, the following ideas were presented:

1. Owing to the limited resources available to colleges, it is unlikely that more funds would be available to help foreign students. The trend now is to admit only those who can pay their way through the training and not those who are very much in need. The dramatic increase in the population of Iranian and Saudi Arabian students is a clear evidence of this development.

2. Though there is some improvement in the selection process especially on assessing the equality of credentials, it is recognized that the ideal thing would have been the identification of those who have the potential to effect transferability in their home countries.

3. To improve foreign students' proficiency in the use of English, it was suggested that the staff of the Center should be expanded and those students who are very deficient should spend more time in courses designed to handle more sophisticated exercises and that they could be granted credit for the time invested in the study. It is recognized that foreign students vary widely in their language proficiency; more attention should be given to those who really need it. The current practice which regards the training as "remedial" needs to be changed so the Center can be looked upon as a "facilitator." Presently some foreign students do not want to be associated with the image which the Center reflects.

4. In order to attend to personal, social and emotional problems, it is believed that the Foreign Student Office along with the

cooperation of the academic advisors can handle this effectively.

5. To handle the problem of the relevance of program and the danger of overtraining, it was suggested that major professors or academic advisors should help at the outset to review students' goals from time to time. It was also pointed out that faculty with international experience on given regional areas can help when the interest of the student from that area is involved.

6. Where the legislature imposes limitations, there is little that the college can do; however, if the college has a contract with a foreign government or organization, it has to honor it.

7. Since only two of the colleges dealt with had a foreign student office, it was suggested as necessary to handle academic matters of interest to foreign students since this aspect is not adequately covered by the Foreign Student Office attached to the International Center.

8. In one college, it was pointed out that students (including foreign students) were involved in the decision-making process regarding curriculum review. By welcoming their input, they may come up with suggestions which may be helpful.

Curricula

1. There was a wide variation in curricular characteristics as one moves from one college to another. Some easily lend themselves to international and cross-cultural focus such as Social Science; others run accredited schools which require fixed curricula approved by the Accreditation Association such as Business.

2. Some, by virtue of having faculty from varying disciplines, develop inter-disciplinary orientation and a wider focus, others build

programs across collegiate lines, e.g. Osteopathic Medicine and Human Ecology. As a result, some programs can be flexibly modified at the graduate level to accommodate foreign student interests especially where the course has a large number of foreign student enrollment and the professor has a wide international experience. This does not imply that where these conditions are present, adaptation follows automatically. It is the extraordinary professor who takes the additional time and effort to make the necessary adaptation to meet the needs of foreign students such as allowing them the opportunity to illustrate their answers or select topics for papers which would deal with problems in their societies.

3. In large measure, no effort is made to set up courses in the curriculum with foreign students specifically in mind. The assignment is often left with individual professors to handle as they see fit. It seems foreign students have not asked or complained.

4. It was pointed out that this change in curriculum cannot be mandated from the administration as it was believed that better results could be obtained if each discipline initiated the move. It was recognized that guidelines were necessary to ensure that each foreign student derived maximum benefit from their learning experiences. This way, a fairly uniform standard could be set to minimize the wide disparity in procedures currently undertaken. Some colleges are way ahead of others in this regard. Where foreign students are part of a project, the objectives, procedures and curricula content tend to be better defined. The problem is acute where a large number of foreign students are enrolled without the benefits accruing to those on the project.

5. Upon completion of their programs and return to their home countries, a good number of foreign students either switch away from or combine administrative functions with the professional roles they were trained to perform. The curricula available are not designed to take this kind of problem into account. Organizations such as National Association for Foreign Student Affairs (NAFSA) are attempting to provide short courses to alleviate this deficiency. The College of Agriculture and Natural Resources is way ahead of others here. They have a national organization called International Science and Education Council (ISEC) set up jointly by National Association of State Universities and Land Grant Colleges (NASULGC) and United States Department of Agriculture (USDA). One of the main functions of this organization is to help improve the quality of programs in international training of foreigners in the U.S. with emphasis on relevance of content not only for degree for also non-degree programs. Some of the papers presented at a recent conference convened (April 18-20, 1977) by the North-Central and Northeastern region of the organization at Ohio State University, and a summary of its proceedings, pointed clearly in the direction of striving for quality through relevance.

Major Professors and Academic Advisors

This group varies as widely as the curricula just described. Some have many years of experience abroad and are helpful; some have this experience but are heavily saddled with other responsibilities and cannot help. Others lack it but make up for it by their warmth and empathy. Others lack it, are limited in their assistance, and cannot be bothered.

It was pointed out that foreign students have a tendency to repose complete confidence in the capacity of the major professor to provide answers to all their problems.

Individual advisors handled the assignment privately. Owing to little or no information-sharing among members of this group with regard to foreign student problems, individuals had to bear the strain of resolving the problems or leave it to the student to shoulder.

To deal with the foreign student, it was regarded as necessary to sensitize faculty to foreign cultures. Those who have lived at least one year abroad develop a perspective which helps them to better understand the problems of the foreign student.

Sometimes, the principles which the professor teaches as "law" may not have a universal application. The foreign student's confidence in him cannot but be shaken when he is forced to accept this as universal, especially when he knows that in the context of his own socio-cultural environment, the principles do not apply.

It was advised that the number of faculty with international experience be increased where there is a large concentration of foreign students.

Periodic seminars between this group and those without experience was encouraged. Participation of selected foreign students was considered useful.

Academic Performance

Like the curricula and faculty, this varies too, depending on a number of factors. It was indicated that their performance ranged from very outstanding to very poor--just like American students. Two

major factors influencing results, as identified are:

1. Educational background--those with solid mathematical background tend to do well in quantitative aspects of the academic endeavor while those "well groomed" in the humanistic aspect do well in the socio-psychological component. But the best results often come from those who can combine both.

2. Language proficiency is a potent weapon for success. Unless the foreign student can express himself, the ideas he has may as well be dead. In a large majority of cases, a high correlation has been found between low language proficiency and poor performance.

3. Unfamiliarity with the teaching and testing styles of the school may further complicate the issue for the foreign student.

Contact with foreign alumni is generally informal. Only a few of the colleges maintain files on their foreign alumni. Among the few, some conduct periodic surveys (e.g. Education, Business). The return rate which is low, generally shows that most of those who respond are either strongly in favor or strongly against. Sometimes those with a negative reaction may not communicate at all. In some cases, personal contacts are made; in others the Alumni newsletter is sent. Feedback from these sources is often favorable because of cultural constraint to avoid making negative comments.

As a result of the above, it can be said that the results obtained are generally biased in favor of the school. Though it is acknowledged that feedback from this source can be useful, no effort has been made to set up mechanisms to gather this information in a comprehensive way. The Alumni Association generally concentrates on Americans only.

The Foreign Student Office plans to undertake this exercise very soon. The officials are counting on inputs from colleges and departments to make the endeavor a success.

It was found that the modest data gathering device which the Graduate School administers in the form of a questionnaire to graduating doctoral candidates has not been fully utilized as those collected in the past have not been analyzed.

Brain Drain

This phenomena is generally believed to be subsiding when compared with the trend in previous years. The trend varies with discipline. It is acknowledged that both medical and engineering fields carry a lion's share of the drain. Similarly, there is variation according to regional areas with more Orientals tending to stay than others.

Two measures being taken seem adequate: tightened immigration laws and improved efforts on the part of the home governments to attract their skilled personnel. In spite of the safeguards, it is hard to predict who would return home and who will not. Suffice it to say that the colleges are not doing anything specifically calculated to stem this.

One of the cautions given was to take care and avoid overtraining them, i.e., train them for jobs and positions which are non-existent in their social system. This suggestion raises the question of relevance of training which only a few discussed.

The Future

Asked to make forecasts regarding the future in the light of past experiences and current indicators, the participants made the following summarized observations:

1. The future trend points in the direction of reduced funding of foreign students. As budget cutbacks are coupled with a demand to be accountable to American students (especially the minorities), the economic interests of foreign students would be relegated into the background. The criterion of admitting foreigners would be "effective demand," i.e., a need backed up by capacity to pay. The cases of Iranians and Saudi Arabians are clear indicators.

2. A more clearly defined goal orientation for foreign students would be needed in existing programs.

3. This should be followed by a change in the instructional resources especially textbooks used for the training of foreign students. Some of the concepts contained in them are already found to be inaccurate or very narrow in scope with little emphasis on the global perspective.

4. More attention should be given to curriculum content by matching them with students' goals to ensure close relationship and improve the eventual likelihood that the knowledge and skill so acquired would be used.

5. Screening before final admission could be done in an intermediate English language training ground established for this purpose with only those who stand a good chance of benefiting from it being given the opportunity to undertake the training.

6. In the event that some colleges execute envisaged expanded

programs for training foreign students, the above factors, among other things, must be taken into consideration before the actual expansion begins.

Conclusion

The foregoing summarized observations of deans of selected colleges and top administrators showed a wide disparity in the techniques employed at the college level to attend to the academic welfare of foreign students. Some receive a lot of attention while others receive very little. The gap needs to be bridged.

There is a general consensus on the need to organize by having an inter-collegiate forum for information-sharing on the training of foreign students to ensure maximum attention and better results. While this does not imply an encroachment on academic freedom or individual units' capacity to exercise initiative, it surely would extend the benefit of valuable information from those having it to place it at the disposal of all. By jointly reviewing problems, better strategies that save money, time, and are efficient may be evolved. These are a few of the many steps that the school will have to take to maintain its leadership position in international exchange in education.

APPENDIX B

APPENDIX B

A SURVEY OF GRADUATE STUDENTS AT MSU Winter 1978

INSTRUCTIONS TO RESPONDENTS

1. The questions attached are intended to obtain your views regarding graduate training programs offered at MSU.
2. Please answer the questions as frankly as you can. It would take about 30 minutes to complete.
3. All information supplied will be treated in strict confidence.
4. Don't put your name on the questionnaire, we want to keep you anonymous.
5. Follow the directions given before each question or set of questions.
6. Read first all the questions you are asked to rank-order.
7. Questions to be answered only by foreign students are marked (For Foreign Students Only); those to be answered by American students are similarly marked (For American Students Only); those unmarked are to be answered by all.
8. If you are interested in the results of the survey, inform the interviewer so we can get in touch with you later.
9. If you have any questions to ask the researcher about the study, the numbers to call are: 353-5151 (office), 355-8198 (residence).
10. Thank you very much for your help.

THE QUESTIONNAIRE

PART I. The questions in this section are about your education and work experience.

1. What is the name of your (a) College? _____
(b) Academic Dept.? _____
(c) Major Field of Study? _____
2. What current level of study are you pursuing? Check the appropriate one.

_____ (a) M.A. _____ (d) Graduate Professional
_____ (b) M.S. _____ (e) Doctoral (Ph.D., Ed.D., etc.)
_____ (c) Ed. Specialist _____ (f) Post-Doctoral
3. Which of the statements below best describes the number of years of full-time work experience you had before starting your program?

_____ (a) No experience at all; I started immediately after completing my bachelor's degree.
_____ (b) I had less than 3 years of full-time work experience.
_____ (c) I had from 3 years and up to 5 years of full-time work experience.
_____ (d) I had over 5 years and up to 7 years of full-time work experience.
_____ (e) I had over 7 years of full-time work experience.
Note: American students and foreign students who answered 3(a) above, proceed to question No. 6.
4. Which of the statements below accurately describes the kind of work experience you had? Check as many as apply to you.

_____ (a) public or government (civil service, business, industry, etc.)
_____ (b) private sector (business, industry, etc.)
_____ (c) education (public or private)
_____ (d) non-profit organization (excluding education and self-employment)
_____ (e) self-employed
_____ (f) other (specify: _____)
5. Please indicate which occupation classification best describes your position prior to entering MSU.

_____ (a) Executive/Administrative/Managerial
_____ (b) Professional (doctor, lawyer, engineer, scientist, etc.)
_____ (c) Technician (computer specialist, health technician, etc.)
_____ (d) Teaching (elementary, secondary, university, etc.)
_____ (e) Sales (ad. agency representative)
_____ (f) Clerical (secretary)
_____ (g) Crafts (construction, mechanic, etc.)
_____ (h) Other (specify: _____)

6. Indicate which of the statements below applies to you regarding choice of a career after completing your training.

☐ (a) I am currently employed full-time.
☐ (b) I am on a leave of absence from a full-time position.
☐ (c) I am decided on the career to pursue and expect the current training to help me prepare for it.
☐ (d) I am not decided on the career to pursue.
☐ (e) I don't expect the current training to prepare me for a career.

7. What is the primary source of your financial support. Put down in percentages those which apply to you.

☐ % (a) Government (scholarship, loans, etc.)
☐ % (b) Private organization (e.g. Ford Foundation)
☐ % (c) Parents and relatives
☐ % (d) Self
☐ % (e) Other sources (explain: _____)

8. In which country did you obtain your

(a) bachelor's degree? _____
 (b) master's degree? _____

9. If the school is outside the U.S., how would you describe the educational system in terms of organization, teaching, testing, certification, etc. as compared to the U.S.?

☐ (a) exactly the same ☐ (d) very much different
☐ (b) very much similar ☐ (e) completely different
☐ (c) somewhat similar

10. How many years in total have you spent in the U.S.? (Include all previous visits) _____ years.

11. Do you intend to return to your country after completing all aspects of your training?

☐ (a) I will return home.
☐ (b) I shall return home.
☐ (c) I may return home but not decided.
☐ (d) I shall not return home.
☐ (e) I will not return home.

Note: If you answered No. 11(c), (d) or (e) above, proceed to question No. 13.

12. Are you bound to contribute your skills and talents toward the development of your country when you get home?

☐ (a) Yes, I am legally bound (by contract) to do so.
☐ (b) Yes, I am morally bound (I believe it is necessary).
☐ (c) No, I am not bound and I am not decided about doing so.
☐ (d) No, I am not bound and I don't think it is necessary.

Note: If your native language is English, proceed to question No. 14.

13. For how many years have you been using English (read, write, speak) before your arrival in the U.S.?

- ___ (a) less than 2 years
- ___ (b) from 2 to 4 years
- ___ (c) over 4 years and up to 6 years
- ___ (d) over 6 years.

14. Select the statement from the list below which best describes your attitude toward your country's policy in seeking external aid.

- ___ (a) My country should not rely on any kind of external aid since self-generated efforts are more long lasting than those provided by outside sources.
- ___ (b) My country should welcome only a limited amount of aid from Western nations where considered beneficial.
- ___ (c) My country should strike a 50-50 balance between external aid from Western nations and self-generated effort at home.
- ___ (d) My country should seek external aid from Western nations to promote most of its development effort.
- ___ (e) My country should actively seek not only external aid but should emulate the Western nations approach to development as I believe their method is better.

PART II. This section will deal with questions about your training. Below is a list of reasons in two categories, why students pursue graduate training. Select the one which describes your objectives better.

Personal Reasons: ___15. { * to realize my full potential through the achievement.
 * to enjoy the prestige which the status brings.
 * to prepare me well for the world of work.
 * to qualify me for a better paying job, make money and live comfortably.

Social Reasons: ___16. { * to acquire knowledge and skills needed to solve the problems of my society (environment) more efficiently.
 * to secure leadership position, win friends and influence people.
 * to enable me to secure positions where I can serve my fellow men better.
 * to acquire the techniques of adapting to meet the challenge of change.

Choice of MSU Over Other Schools

Why did you decide to come to MSU for graduate training? Rank-order this (e.g. 1 = most important; 2 = next most important. . . .5 = least important of the reasons).

I came to MSU:

- ☐ 17. because of the reputation of its faculty in my field.
- ☐ 18. because of the reputation of its program in my field.
- ☐ 19. because its tuition fees are fair compared to other schools of similar sizes.
- ☐ 20. because I got financial support (fellowship, assistantship, etc.).
- ☐ 21. because my government, college, or company has a relationship with MSU.
- ☐ 22. other reason (explain: _____)

University's Objectives

What do you think are the reasons why MSU accepts foreign students to pursue graduate training? Rank them in order of their importance (e.g. 1 = most important; 2 = next most important. . .10 = least important).

- ☐ 23. to assist their countries in manpower development.
- ☐ 24. to enable them to acquire the knowledge and skills needed to provide efficient solutions to society's problems.
- ☐ 25. to enable them to tackle the problems of poverty, illiteracy, and disease which are major obstacles to progress.
- ☐ 26. to train skilled hands which would act as change agents bringing innovative ideas to complement development effort.
- ☐ 27. to provide opportunity for cross-cultural experience by ensuring interaction between American and foreign students.
- ☐ 28. to help MSU maintain its international reputation and contacts.
- ☐ 29. to train them to be competent to secure better paying jobs and a comfortable life.
- ☐ 30. to train them to acquire leadership skills, win friends and influence people.
- ☐ 31. to use them as links in building bridge of friendship, understanding and international cooperation.
- ☐ 32. just because those admitted qualified and fulfilled all requirements.

33. Based on the number of credits you are expected to take to complete your program, what percentage of it have you completed?

- | | |
|---------------------------------------|---------------------------------------|
| ☐ (a) 0 - 20% | ☐ (d) 61 - 80% |
| ☐ (b) 21 - 40% | ☐ (e) 81 - 99% |
| ☐ (c) 41 - 60% | |

The next set of questions concerns the courses in your program. Think of all the courses which you have taken so far either in your major (core) or minor (cognate) field. Identify one course which you consider most relevant, i.e., (a) it is both appropriate to your needs (it gave you information you need to grow professionally); (b) it gave you a rewarding learning experience (you learned a lot actively participating and would recommend it to a friend).

34. The most relevant course is

(a) Course No. _____ (Core; Cognate: check one taken)

(b) Name of Instructor _____

Now, you will rate the rest of the courses (excluding those you consider as very poor) in accordance with some key knowledge and skills. Your rating scale is as follows:

0 = does not apply (DNA)

1 = excellent

2 = very good

3 = good

4 = average

5 = fair

6 = poor

7 = very poor

Put the appropriate rating only in the boxes that apply to you in the table below, e.g. "2" in 35 a box means most courses taken in core area were "very good" in terms of practical problem, knowledge and skills.

UNITS	KNOWLEDGE & SKILLS						
	(a) in practical problem-solving	(b) in effective leadership	(c) in effective communication	(d) working well with people	(e) in adapting content to individual exper- ience	(f) learning resources provided	(g) concept of change
35. Core (major field)							
36. Cognate (minor field)							
37. Electives							
38. Research design and methodology							
39. Actual Research							
40. Lab-field/practical experience							

Apart from the professor you mentioned in No. 34(b), who must have been "excellent," and also excluding the ones you consider "very poor," rate the rest according to the same scale used above.

UNITS	TEACHING STYLE									
	(a) flexibly scheduled classes	(b) active student participation	(c) emphasis on things to do	(d) relates learning to world outside	(e) encourages independent thinking	(f) welcomes student feedback	(g) more emphasis on what is learned than on grades	(h) warm and concerned for student progress	(i) respect for individual differences	(j) encourages innovative approach to problem-solving
41. Core (major field)										
42. Cognate (minor field)										
43. Electives										
44. Research design and methodology										
45. Actual Research										
46. Lab-field/practical experience										

Note: If you have not met your academic advisor, proceed to question No. 54. Now, here are a few questions about your major professor or academic advisor. Check the statement that best describes your view of him/her.

47. How often does he/she schedule meetings to review your program, or attend to your problems?

- ☐ (a) He/she does as many times as I want a meeting in a term.
☐ (b) He/she does so as frequently as twice in a term.
☐ (c) He/she does so sparingly (e.g. once a year).
☐ (d) He/she never does it at all.

48. How would you describe his/her concern for your academic needs and general welfare?

- ☐ (a) He/she is constantly concerned.
☐ (b) He/she is frequently concerned.
☐ (c) He/she is concerned sometimes.

- ☐ (d) He/she is concerned only very rarely.
☐ (e) He/she is never concerned.
49. Did he/she ask for your full background information and a clear statement of your goals to use in drawing up your program?
- ☐ (a) Yes, he/she did so and used the information.
☐ (b) Yes, he/she asked but never used the information.
☐ (c) No, he/she never asked.
50. Did he/she encourage major input from you in the choice of courses for drawing up the program?
- ☐ (a) Yes, he/she did.
☐ (b) No, he/she never did.
- Note: American students, proceed to question No. 53.
51. (Foreign Students Only) How much international and cross-cultural experience do you think he/she has?
- ☐ (a) His/her experience is very extensive in this area.
☐ (b) He/she has quite a bit of knowledge in this area.
☐ (c) He/she has some knowledge in this area.
☐ (d) He/she has very limited knowledge in this area.
☐ (e) He/she has no experience at all in this area.
☐ (f) We did not interact well enough for me to know.
52. Is he/she ever concerned whether your cultural values are respected and preserved as you make progress in your program?
- ☐ (a) Yes, he/she is very constantly concerned.
☐ (b) Yes, he/she is frequently concerned.
☐ (c) Yes, he/she is occasionally concerned.
☐ (d) Yes, but only rarely.
☐ (e) No, he/she is never concerned about this.
53. Considering your views above, how would you evaluate your major professor/academic advisor, in terms of overall performance?
- ☐ (a) He/she is the best advisor I have ever met.
☐ (b) He/she is a very good advisor.
☐ (c) He/she is adequate but not exceptional.
☐ (d) He/she has been a rather poor advisor.
☐ (e) He/she is so bad that I have decided to change him/her.
54. Apart from class interaction, how much opportunities did the school provide to help you meet and learn from Americans (or Americans to learn from foreigners?)
- ☐ (a) quite a lot
☐ (b) some
☐ (c) very little
☐ (d) none

55. On the whole, how would you evaluate your experience in the program so far?

- ☐ (a) I am lucky I came to MSU; the program has been most beneficial.
- ☐ (b) The program has been very good; I hope the rest is like this.
- ☐ (c) The program is fair but needs some improvement.
- ☐ (d) The program is poor and needs major review.
- ☐ (e) If I were to choose again, I would go to another school.

PART III. Some personal questions.

56. Age (in years) _____

57. Sex: (a) male _____
(b) female _____

58. (For American Students Only) Check your ethnic group:

- | | |
|--|---|
| ☐ (a) White (Caucasian) | ☐ (e) Hispanic |
| ☐ (b) Black American | ☐ (f) Asian American |
| ☐ (c) Mexican American | ☐ (g) Other (specify: _____) |
| ☐ (d) Native American | |

59. (For Foreign Students Only) What is your country of citizenship?

60. Which of the list below best describes where you grew up?

- ☐ (a) rural farm area
- ☐ (b) rural non-farm area
- ☐ (c) town or city (e.g. pop. 20,000-50,000)
- ☐ (d) suburban area near a large city (e.g. 50,000 to 1 million)
- ☐ (e) large city (metropolitan area: over 1 million)

61. (For Foreign Students Only) Which of the following statements best describes how well-to-do your parents are? Check as many as apply.

- ☐ (a) My parents completed high school education or higher.
- ☐ (b) My parents can finance my training in college without help.
- ☐ (c) My parents own more than two houses in town or city.
- ☐ (d) My parents own a car.
- ☐ (e) My parents are not as well-to-do as the above.

62. (For American Students Only) Which of the statements below best describes how well-to-do your parents are? Check all that apply.

- ☐ (a) My parents have a master's degree or higher.
- ☐ (b) My parents own a home valued \$30,000 or higher.
- ☐ (c) My parents' earning yearly is \$20,000 or higher.
- ☐ (d) My parents are not as well-to-do as the above.

63. Apart from your effort to study, each in a sentence below, state

- (a) one thing provided by the school which made your learning most rewarding: _____
- (b) one thing provided by the school which made learning most difficult: _____
- (c) one thing you would like to see the school provide to improve graduate training at MSU: _____

THANK YOU VERY, VERY MUCH!

APPENDIX C

APPENDIX C1

INSTRUCTIONS TO INTERVIEWERS

1. Read the content of the consent form carefully. All conditions outlined have to be maintained.
2. First contact with subject: (either face to face or on the phone) Identify yourself. "My name is _____, a graduate student at Michigan State University. I am one of the interviewers helping in the survey research being conducted by Mr. Adebayo Ogunbi, a Ph.D. candidate in Instructional Development and Technology. The study wants to find out whether foreign and American graduate students perceive their training as relevant to their career objectives functions and that of the role of change agents. Your name is on the list of students to be asked. Would you like to participate?"
3. If the reply is No, thank him/her and terminate the interaction. If the answer is Yes, give him/her the consent form (if the interaction is face to face), or promise to bring it (if the call is on the phone). After reading the content, let him/her sign it if still interested in participating.
4. Though the screening of those in the sample would be done in the records from English Language Center, ask if the subject can read and understand English very well. If he cannot, terminate the interaction.
5. When meeting respondents, be polite and dress decently. If they ask for further explanation on the study, give them the number of the investigator to call.
6. Ask the respondent when you can stop by to pick up the instrument, or if it is going to be a mail-back response.
7. Record this information in your diary.
8. If the subject changes his/her mind at any point and decides not to participate, terminate it and record the event for onward submission to the investigator.
9. When you return to collect the instrument, express grateful thanks to the subjects for their cooperation.
10. Ask them if they would be interested in the results of the study. Forward this information to the investigator.

11. If phone call is made and there is no answer, use cover letter with mail and call later.
12. If there is a change of address or phone number, call University information.
13. If subject graduated, proceed to next eligible subject.
14. If graduate is wrongly classified, proceed to next eligible subject.
15. If the only student from a country refuses, move on to next eligible subject in the next country.
16. Check the list by putting (✓) for acceptance; (x) for refusals and others.
17. In delivering instruments, face-to-face is (F), pickup is (P), mail out is (M), mail back is (MB).

APPENDIX C2

A BRIEF SUMMARY OF THE SURVEY RESEARCH STUDY

Purpose: The purpose of the study is to assess the extent to which foreign students in graduate programs at selected colleges in MSU perceive their training as preparing them to meet the objective of playing the role of change agents in the national development of their respective countries.

Population: The study would involve a stratified random sample of graduate students in selected colleges (both foreign and American). A sample of 450 of both groups would be made. In addition, key policy makers (especially deans of the selected colleges) would be interviewed.

Rationale: The foreign students are considered appropriate for the study since they are potentially the future leaders of their countries. The university's statement of policy on international exchange in education emphasizes the need to help developing nations toward modernization by training indigenous skilled hands who would act as change agents. American students are included so as to compare their responses with those of the foreigners.

Potential Risks: Since consent procedures would be followed (see the consent form), no potential risks--physical, psychological, social or legal--would be involved.

Procedures for protecting against risks are contained in the instructions for the interviewers who would distribute and collect the instruments. See the instructions attached.

Benefits: The findings would be useful to future foreign students planning to attend MSU's graduate programs. Both faculty and administrators may use the findings in reevaluating the policies and programs affecting the interests of foreign students. Agencies and governments of developing nations may use the results in assessing their policies of sending their students to train in MSU. Scholars in research on cross-cultural education would also be interested in the results.

APPENDIX C3

CONSENT FORM

Professional Programs in
Instructional Development
and Technology
College of Education
Michigan State University

1. I, the undersigned, have freely consented to take part in a research study being conducted by Adebayo Ogunbi under the supervision of Dr. Castelle G. Gentry entitled The Perceived Relevance of Foreign Students' Training to Their Role as Future Change Agents in National Development.
2. The study has been explained to me and I understand the explanation that has been given and that my participation would involve answering questions on a questionnaire.
3. I understand that I am free to discontinue my participation in the study at any time without penalty.
4. I understand the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, the results of the study will be made available to me at my request.
5. I understand that my participation in the survey does not guarantee any beneficial results to me.
6. I understand that at my request, I can receive additional explanation of the study after my participation is completed.

Signed: _____

Date: _____

APPENDIX D

APPENDIX D1

815 K Cherry Lane
East Lansing, Michigan 48823

November 8, 1977

Sir:

Request for an Interview

The purpose of my writing is to seek your permission for an interview in connection with a research study which I plan to conduct among graduate students in selected colleges here at MSU.

My name is Adebayo Ogunbi, a Ph.D. candidate in Instructional Development and Technology, College of Education, and the title of my study is: The Perceived Relevance of Foreign Students' Training to Their Role as Future Change Agents in National Development, and has been approved by my guidance committee for my dissertation.

The design of the study would include viewpoints of the President and Deans of selected colleges regarding the aims and objectives of the University and the college in particular about graduate training for foreigners.

As your position and function are directly related to the subject, I would appreciate having an appointment at a convenient time to you when the interview could be conducted. Thanks very much.

Sincerely,

Adebayo Ogunbi

APPENDIX D2

RESULTS OBJECTIVES FOR TRAINING FOREIGN STUDENTS AT MSU

Arranged in Order of Importance from the Responses of Top Administrators.

Foreign students are trained at MSU

- 1st--to enable them to acquire the necessary knowledge and skills to solve the problems of their societies more efficiently.
- 2nd--to train these skilled hands so they can act as change agents bringing innovative ideas to complement development effort.
- 3rd--to help their countries' effort toward modernization by waging war on poverty, illiteracy, and disease.
- 4th--to assist in manpower development being embarked upon by their countries.
- 5th--to build the bridge of friendship, understanding, and international cooperation.
- 6th--to enable them to use their training to secure leadership positions, win friends and influence people for the common good.
- 7th--to give American students the opportunity for cross-cultural experience by interacting with their foreign counterparts.
- 8th--to ensure that they are better informed and competent to secure a good job and comfortable life.
- 9th--to help MSU maintain its international reputation.
- 10th--just because those admitted qualified and fulfilled all admission requirements.

APPENDIX E

APPENDIX E1

QUESTIONS TO FACULTY MEMBERS WHO HAVE HAD FOREIGN GRADUATE STUDENTS AS ADVISEES

1. How many foreign graduate students have you had as advisees?
Estimate if you're not sure of the exact number. _____

Note: The questions that follow require answers in respect of a
typical foreign graduate student with whom you have inter-
acted.

2. How much of his background (socio-cultural, educational, etc.) did
you find out when you met him?

- ___ (a) quite a lot
___ (b) a little
___ (c) none at all

3. How did you deal with his goals?

- ___ (a) have him state them fully in writing with explanation
___ (b) have him outline them verbally at first meeting
___ (c) make a passing reference at it
___ (d) ignore it completely

4. What part did you play in drawing up his program?

- ___ (a) handle it exclusively without his input
___ (b) let him play a small part, e.g. suggest courses he likes
___ (c) let him play a major part, e.g. suggest most of the courses
___ (d) let him handle it completely followed by your review and
approval

5. On what is the program based?

- ___ (a) student's clearly stated goals
___ (b) student's perception of what he needs
___ (c) professor's perception of what the student needs
___ (d) a strict adherence to the degree requirements
___ (e) combination of (d) above with emphasis on student's per-
spective
___ (f) combination of (d) above with emphasis on professor's per-
spective

6. What is the significant academic problem that the foreign graduate student you have met encountered? _____

7. How did you deal with it? _____

8. What did you find as positive and unique to foreign students in terms of academic experience which is worth sharing? _____

9. What advice would you give to:
- (a) a faculty member in dealing with the academic concerns of foreign students _____
 - (b) an administrator in dealing with the academic concerns of foreign students _____
 - (c) a foreign student in interacting with a major professor _____

10. Any other comment of importance on the subject: _____

APPENDIX E2

RESULT OF A MINI-SURVEY OF SELECTED FACULTY MEMBERS WHO HAVE HAD FOREIGN STUDENTS AS ADVISEES

Introduction

The survey of graduate students concerned the question of the relevance of their training as assessed from the content of their programs' curricula, the professor's mode of handling the courses, and the academic advisor's role in helping to shape individual student's program. It was considered essential to have some input from faculty in these two capacities (as instructors and academic advisors) so as to see the extent to which their views relate to those of the students in addition to sharing valuable information accumulated through years of experience. This report deals with the latter role.

The participants in the mini-survey were purposively selected. A representative was selected from each of the ten colleges from which graduate students who participated in the major survey was drawn. Each has had many years of advising foreign graduate students either as major professor, member of a doctoral student's committee, or as a department or college representative in graduate advising. On the average, each one has interacted with 25 students or more. In terms of number, I daresay this is hardly representative of the total number of faculty members who have acted or are still acting in this

capacity (academic advisors) in the colleges involved. It will take a full scale survey to reveal the wealth of information which can be obtained from this group of people. The purpose in the present study is to catch a glimpse of their reaction which would help in drawing a more realistic conclusion from the views of the students, otherwise the picture would be totally one-sided.

The answers given to each of the questions are summarized with the salient features presented for illustrative purposes. In this report, the term "academic advisor" would be used synonymously with that of "major professor."

On the question about the foreign students' socio-cultural and educational background, the responses were evenly split (50:50) between those who found out "a lot" at the first meeting and those who found out "a little." No one denied that it was necessary to know something about the student one is to direct and assist. The point of difference in the opinion was a function of the personality of the student. With those who were quiet and reserved in their interaction, a little information at the first meeting was considered appropriate. In short, it was a question of how much the student was willing to share with his advisor at the first meeting. Most people seemed to agree that the advisor had to set the tone. Where he was warm and interested, the student could respond by opening up and interacting candidly. The reverse may be the case if this positive sign was not observed.

In response to the question regarding students' goals, the reactions were almost evenly split (50:40) between those who would insist on having students "state these fully in writing" and those who would ask the students to state them verbally at the first meeting. As

pointed out by those in the first category, some departments and colleges require "written goals" or "an essay" as part of the application documents to be submitted, especially for admission into the doctoral program. There was also the unique case where emphasis was on helping the student "redevelop his goals." Though it was not specifically pointed out by others, it can be assumed that all students' goals undergo a good measure of redefinition as they progress in their respective programs. Perspective on professional career and life in general would change, given the factors of growth and environmental conditions in which students train in the school. Whether in written, verbal or joint effort in redevelopment, everyone was in agreement that students' goals needed to be dealt with when helping them to set up their programs.

The answers given to the question regarding the specific role played by the academic advisor were diverse but a majority of the respondents favored the view to "let the student play a major part in drawing up his program" by suggesting most of the courses that should be taken. Some indicated that the doctoral student was to prepare this and bring it forward to his major professor and guidance committee for "review and approval." There were instances where the approach of letting students play major parts did not apply. This is in cases where collegiate programs are in effect, i.e., where students are expected to take the same courses (e.g. Colleges of Human and Osteopathic Medicine). With the exception of this, the general consensus is to let the student prepare his own program outline. There are departments where additional assistance is provided in the form of a one-day academic orientation for new graduate students and the provision of a graduate handbook to help as a quick reference on requirements and procedures.

The College of Education and the Department of Sociology have handbooks and the latter conducts one-day orientation for new students.

Most of the respondents to the question on identification of the elements on which the students' program was to be based agreed that the elements combined should include students' perception of what he needs, his stated objectives the major professor's and guidance committee's perception of the students' needs, all within the bounds of adherence to laid-down degree requirements. A majority favored laying emphasis on the students' perspective in this interaction while some favored the major professor's perspective. An essential point to make here is the fact that these elements are worth considering when preparing the program.

Among the open-ended questions, the first asked participants to identify a significant academic problem encountered by foreign students they have advised. A good majority (70%) mentioned language as the singlemost potent problem encountered by foreign students. Other issues in their order of importance were financial problems, lack of basics in some subjects and the fast pace in which programs were run in the school. A qualifying point here is that language problem does not affect all students. Those whose native language is English or who have been using the language for more than seven years don't experience this problem. But this category of students is a small minority of the total population of foreign students at MSU. It is interesting to note that many of the college deans interviewed included proficiency in the use of English language as one of the major problems with which a good number of foreign students have to cope.

Financial problems are restricted to that group of foreign

students who are self-supporting. Since a large number of them are sponsored by either their government or some other organizations, not too many are affected. Admissions requirements have been further tightened, owing to rising costs, to ensure that those admitted have proof of capacity to finance their training. From time to time, however, events unforeseen may confront a foreign student which may drastically limit his capacity to pay. For example, there may be delays in forwarding a student's fees and support money, or devalued currency may reduce the value of a foreign currency in relation to the American dollar. In any of these and similar circumstances, the foreign student often relies on the university officials to provide temporary assistance.

Some programs that require a sound foundation in some subjects such as mathematics, science (physics, chemistry, etc.), or even the use of laboratory may constitute a problem if the foreign student did not acquire this background before seeking admission into the program. Where admission is granted, it is normally expected that the student deficient in these areas would put in additional time to rectify this shortcoming.

It is worthy of note that some members of faculty should direct attention to the educational system as possible source of problems since it is often different from the ones with which the foreign student is familiar. Among features of the system which may pose problems include the fast pace at which things operate, the testing procedure featuring multiple-choice, machine-scored examinations; all of which require learning techniques quite different from those which the foreign student has mastered.

Other problems that received honorable mention included

uncertainty of goals of training especially among medical students whether to move home to practice, and also the uncertainty among students regarding whether to do their dissertation in their home country or in the U.S. The guidance committee and the major professor often assist him in making an intelligent choice. The second open-ended question asked what faculty who acted as advisors did when confronted with the problems outlined earlier on.

Everyone who suggested a solution to deficiency in the use of English language recommended the English Language Center but some had reservations about the effectiveness of the program since, according to them, a good number of those "graduated" from the Center still had problems in using the language to deal effectively with their academic assignments. It is significant to note that many foreign students who pointed out English language as a major inhibiting factor to their progress in the survey of students also remarked that the Center's staff were not very competent in the teaching of the language and recommended a better qualified staff to handle the assignment. Other suggestions made by the faculty to solve the problem included encouraging foreign students to live in the dormitory and interact more with American students. This has been found to be difficult for foreign students who were married and had their families with them since they often lived in married students' apartments which did not encourage much interaction with Americans. The use of television was also recommended even though this may be counter-productive if the student does not know which type of programs are likely to help in improving his effort. Good programs can be selected for him by helpful American friends. It was stressed that those striving to improve their proficiency in

the use of English language should set aside additional time to speak, read, write, and synthesize. Like any skill, practice is the sure guarantee to better results in the use of English.

To solve the problem of deficiency in some basic courses, all those who made recommendations suggested peer tutoring, preferably working with an advanced student from the same country or speaking the same national language as the one needing help. It was pointed out that this method has worked effectively in the past since the new student often identified more with the helper while the latter's experience about the system was an asset in the interaction. Where this was not possible, a foreign student from a different regional area was recommended, and American graduate students as a third choice if the first two did not work out. Generally, all students derive immense benefit from having an experienced colleague show them "where to go for what" when they enter a program. This may have been the reason why the Foreign Student Office invites old students of varying nationalities to participate in their orientation programs to provide the student perspective to the assistance which the office offers to newcomers.

Where the problem was one of a fast pace which the student cannot cope with, a convenient device which many graduate students (both foreign and American) use is to defer the grade so as to use more time in completing the course. It was cautioned that tact be used in deferring courses as too many deferred courses may accumulate and further increase the pressure which the student was striving to avoid. The foreign students (and some American students) in the survey strongly advocated changing into a semester system to ease the tension

a bit. They stressed that emphasis should be laid more on knowledge and skills gained and less on the grade point average. The solution suggested to the problem of finance was to advise the student not to gamble, hoping to get help especially now that resources are limited. It was pointed out, however, that many have been helped with fellowships, graduate assistantships and similar sources at the disposal of departments and colleges. Where contact with home government or other organizations was considered necessary, advisors have recommended that students seek help from the Foreign Student Office or the administration.

In response to the next question which asked faculty to identify one thing found "positive and unique to foreign students in terms of academic experience," they made these observations:

- a. "Often their experiences show they have dealt with problems confronting U.S. students though in a different context which leads to a consideration of different alternatives to the solution of a common problem."
- b. "Evidence of growth and understanding which they demonstrate."
- c. "The cross-cultural experience gained from interacting with them as well as the contribution which they make to American students' awareness of how things are elsewhere."
- d. "Desire to combine intellectual interests and service to the nation."
- e. "Their humility and concern for their progress toward the degree."
- f. "By being able to bring a variety of perspectives to a laboratory situation so things can be looked at differently."

g. "Interaction with them helps me to see that foreign students, generally are not different from American students. I see them as individual personality and I treat them as such."

h. "Experience with other economic institutional arrangements."

From the foregoing observations, it is evident that the variety of perspectives which the foreign student provides is found to be of immense value to both faculty and American students alike. If the saying "variety is the spice of life" has a meaning, it seems to be strongly shared by faculty if one can judge from their remarks.

In the next questions, they were asked to advise other faculty and administrators dealing with foreign students, and also to advise foreign students on what to do to improve their communication with their major professors.

The following were suggested to faculty and administrators.

a. Be a sensitive listener willing to explore alternative ways of meeting students' needs and aspirations without reducing academic standards.

b. Go slowly and make sure assignments are understood.

c. Be patient and sensitive to the students' concerns.

d. Try and give considerable time to meet often and discuss concerns at length.

e. Keep in mind the probable role he would play on returning home when advising him.

f. Be prepared to be patient.

g. Be patient and stress that foreign students should worry about substance, not administrative details.

h. Have patience.

i. Be patient and understanding.

From the above, it seems that faculty members who advise foreign students must be prepared to invest more time because "being patient" and "going slowly" is a time-consuming technique. It looks like a tough assignment when one recalls how busy professors are and the speed at which things move in this system. The reassuring message, however, is that these pieces of advice come from those who operate in this system also. And if the objective is to help the foreign student accomplish the object of his academic mission, there is no substitute strategy for patience and understanding. As one of them put it, "It is a demanding task but it can also be rewarding."

In addition to patience and understanding, administrators were also advised to:

a. be fair and recognize cultural differences and to plan accordingly;

b. be knowledgeable about why the foreign student is here and what his expectations are;

c. keep in mind the academic opportunities and limitations in various countries;

d. listen, understand before applying the rules.

Though the question has been raised many times in the past how these any varying measures of support could be given to foreign students without lowering or creating a double standard, the observations made showed that it is possible to incorporate these measures without any damage to the quality of programs offered.

The advice to foreign students primarily centered around being "open," "candid," and "honest." It was shown that the measure of the

professors' assistance, no matter how well-intentioned, would be limited by the amount of information which he has of the student--the more he has, the better placed he would be to help. So it is a "two-way traffic" affair, each willing to contribute his own quota to help the success of the total effort. It was also noted that any poor result of this interaction would bring negative outcomes to the student, so it is in his own best interest to make the effort to see that good results come of the interaction.

The following are examples of comments made.

- a. Ask questions and keep in continuing contact; be able to say "I'm feeling confused" when that's the case and express the basis of the confusion.
- b. Be patient and clarify your goals with modifications as events unfold; take time to explain your culture.
- c. Honesty and forthrightness are indispensable.
- d. Make every effort to utilize the assistance of the advisor.
- e. The professor may not and probably won't know a great deal about your country; help him.
- f. Be frank and honest, try not to use being a "foreigner" to get around or out of things.
- g. Be open and discuss your problems candidly.
- h. Don't be hesitant to ask about intellectual academic matters.
- i. Don't be concerned about administrative details.

The final question asked respondents to make additional comments germane to the issues which are not yet covered. A few observations made are:

- a. To the students the advice reemphasized: when in doubt, ask.

Search for several alternative routes to achieve goals.

b. Many advisors need some real first-hand experience about advisee's country. Where this is not possible, interaction with faculty knowledgeable in this area can be of immense value.

c. Some collaborative research and professional contact after graduation could be mutually productive to professor and former advisee.

d. Financial problems can be serious, nagging ones with foreign students unless the assurance is checked from time to time to ensure that the basis of support remains unchanged.

e. The broadening of experience which contact with foreign students brought to both professor and American students is of such value that it is hard to assess at this time since the trend seems to be moving in the direction of an increasingly interdependent world.

APPENDIX F

APPENDIX F1

RESULTS OF COURSES RATED AS "EXCELLENT" BY GRADUATE STUDENTS

Introduction

Since the quality of instruction is central to the subject of "relevance" of programs, the study would be deficient if the views of students were not balanced, in some way, with those of faculty. The ultimate goal is to improve this quality. It is recognized that as effort is made in this direction, there are some members of faculty who have endeavored, in their respective courses, to accomplish this objective. The lists that follow were taken from the responses of graduate students (foreign and American) who participated in a survey conducted in Winter Term 1978. Subjects were asked to identify "a course" either in their "core," or "cognate" which they considered most relevant to their needs, i.e., the content was appropriate information which they needed to grow professionally, and it gave them a rewarding learning experience--they learned a lot, actively participated and would recommend the course to a friend.

Interpretation of the Rating

The following points should be noted in interpreting the results attached:

1. The survey did not cover all colleges. The design of the study made it necessary to exclude the colleges of Natural

Science and Arts and Letters.

2. The study concerned only graduate students, so the "excellent" courses and instructors in the undergraduate level are not covered.
3. Even among colleges covered, only programs where a sizeable enrollment of foreign and American students is concentrated received attention.
4. The results are also a function of those who responded to the question. Some of the subjects did not respond while others could not identify any course which merited the description.
5. Other data left out were instances where the name of a professor was mentioned without a course he or she taught or where a course listed was not associated with an instructor. Similarly names or course numbers which were illegibly written were excluded.
6. The selection of the eleven members of faculty on the list of those to be surveyed was undertaken by examining those who received the highest votes in each college receive either 2 or 3 votes. Where there were ties for top position, a lot was cast to determine who to contact.
7. Those selected exclusively on the votes of foreign students were marked with one asterisk (*), while those selected on the votes of American students exclusively were marked with two asterisks (**); those who received votes from both foreign and American students were marked with three asterisks (***).

PROFESSORS SELECTED TO BE SURVEYED FOR TEACHING STYLE

1. * Allan Schmid, College of Agriculture and Natural Resources (AEC 810, 811).
2. * William Lazer, College of Business (MTA 851).
3. *** Richard Farace, College of Communication Arts and Sciences (COM 815, 940).
4. *** Stephen Yelon, Instructional Development and Technology Program (ED 410).
5. *** Sheila Fitzgerald, College of Education (ED 830A).
6. * Joseph Patterson, College of Human Medicine (MPH 427, 428).
7. * James J. Davis, College of Osteopathic Medicine (RM 530).
8. * Robert Langham, College of Veterinary Medicine (PTH 802, 803).
9. * James Beck, College of Engineering (ME 817, 860).
10. ** Beatrice Paolucci, College of Human Ecology (FE 835).
11. ** Jay Harman, College of Social Science (GEO 451).

THE RESULTS BY COLLEGE

College of Agriculture and Natural Resources

- | | |
|-------------------|-------------|
| 1. AEC 810, 811 | 23. FOR 809 |
| 2. AEC 805, 906 | 24. FOR 807 |
| 3. AEC 802, 862 | 25. AE 822 |
| 4. CSS 811 | 26. CSS 811 |
| 5. AE 812 | 27. HNF 461 |
| 6. EC 460, RD 860 | 28. RSM 430 |
| 7. F.SC. 333, 952 | 29. PHY 945 |
| 8. AEC 941 | 30. RW 424 |
| 9. FOR 975 | |
| 10. AE 807 | |
| 11. F.SC. 933 | |
| 12. AN.H. 926 | |
| 13. FOR 407 | |
| 14. FOR 411 | |
| 15. Dairy 445 | |
| 16. AEC 843 | |
| 17. AE 806 | |
| 18. BOT 414 | |
| 19. BOT 450 | |
| 20. BOT 950 | |
| 21. F.SC. 449 | |
| 22. RD 801 | |

College of Education

- | | |
|------------------|-------------|
| 1. ED 830A | 27. HPR 808 |
| 2. ED 882, 823 | 28. ED 801 |
| 3. ED 965, 465 | 29. ED 820 |
| 4. ED 867 | 30. ED 953 |
| 5. ED 927 | 31. ED 816B |
| 6. ED 950 | 32. ED 817 |
| 7. ED 815D, 819A | 33. ED 911 |
| 8. ED 804D | |
| 9. ED 969B | |
| 10. ED 560 | |
| 11. HPR 824, 825 | |
| 12. ED 982 | |
| 13. ED 950 | |
| 14. ED 973 | |
| 15. ED 975 | |
| 16. ED 882 | |
| 17. ED 882 | |
| 18. ED 869 | |
| 19. ED 982 | |
| 20. HPR 860 | |
| 21. ED 820 | |
| 22. ED 804 | |
| 23. ED 882 | |
| 24. ED 821 | |
| 25. ED 830A | |
| 26. ED 830E | |

Instructional Development and Technology

1. ED 410
2. ED 882 diff, 931B, 882 1Hs, 853A
3. ED 882 IDI, 824, 931B
4. ED 431
5. ED 884

College of Communication Arts and Sciences

1. COM 815, 940
2. COM 870
3. COM 870
4. COM 870
5. COM 821
6. COM 806
7. COM 892
8. JRU 822
9. COM 870
10. TC 489

College of Social Science

- | | | |
|------------------|-------------|-------------|
| 1. PSY 928, 985 | 9. CJ 835 | 17. ANP 802 |
| 2. SOC 866A, 889 | 10. UP 818 | 18. PLS 990 |
| 3. SW 810 | 11. PSY 860 | 19. PSY 870 |
| 4. PSY 969 | 12. PSY 818 | 20. PSY 830 |
| 5. GEO 451 | 13. PSY 975 | 21. SOC 955 |
| 6. UG 402 | 14. PSY 970 | 22. PSY 820 |
| 7. SOC 952 | 15. LIR 824 | |
| 8. CJ 830 | 16. PSY 857 | |

College of Business

1. MTA 851
2. AFA 892
3. EC 800
4. EC 876
5. MTA 804
6. MTA 823
7. AFA 891
8. HRI 861
9. MGT 908
10. MGT 807
11. EC 800
12. MKT 818
13. EC 427
14. MGT 806

College of Engineering

1. ME 817, 860
2. ME 828
3. CPS 805
4. CHE 802

College of Human Ecology

1. FCS 446
2. EE 835

College of Human Medicine

1. MPH 427, 428
2. HM 590
3. HM 513
4. ANT 813
5. BIOCH 501

College of Osteopathic Medicine

1. FM 530
2. PHM 520B
3. OST 531
4. OST 532
5. OST 554

College of Veterinary Medicine

1. PTH 803, 802
2. PHM 521
3. VM 512
3. PSL 500C

APPENDIX F2

EVALUATION OF TEACHING STYLES OF PROFESSORS RATED AS "EXCELLENT"

Note: In a recent survey conducted among graduate students of selected colleges at MSU, your name and course no. _____ were selected as "excellent" among the faculty in your college. It will be appreciated if you can share information on what you did in this survey.

Listed below are ten teaching strategies. With reference to your success in teaching the course(s) identified, how would you rate each one in terms of what you actually did? The five-point scale explained below should be used.

- 1 = essential, i.e., the teaching could not have succeeded without it
- 2 = very important, i.e., it was of significance to consider
- 3 = somewhat important, i.e., did use it when considered helpful
- 4 = not important, i.e., did not use it at all
- 5 = not applicable, i.e., no relevance to the course

Check the appropriate box that best describes what you did.

	1	2	3	4	5
(a) flexibly scheduled classes.					
(b) active student participation in classes . .					
(c) emphasis on things to <u>do</u>					
(d) related learning to real world.					
(e) encouraged independent thinking					
(f) welcomed student feedback through the course(s)					
(g) more emphasis on tangible learning than grades					
(h) respect for students' individual differences					
(i) warm and concerned for student progress . .					
(j) encouraged innovative approach to problem-solving					

Kindly make any other comment or observation which may be pertinent to the subject being discussed below, especially other strategies used which are not mentioned above. Thank you.

APPENDIX F3

REPORT OF A MINI-SURVEY OF SELECTED FACULTY WHOSE COURSES WERE DESCRIBED AS "EXCELLENT" BY STUDENTS ON THE QUESTION OF "TEACHING STYLE"

Introduction

The mini-survey of selected professors was undertaken for the purpose of obtaining useful information about their teaching styles which may be shared with other members of faculty. The information becomes very meaningful when viewed from the fact that the participants' selection was based on the reactions of graduate students in the major survey. It seems to suggest that some of the teaching strategies employed by the participants must have been effective in getting the message across.

Perhaps the most important reason why the mini-survey was conducted was to provide information for a comparative analysis between students' and professors' viewpoints. It may be recalled that students were asked to comment on professors' teaching style as well as the content and structure of the curriculum.

They also had the opportunity to evaluate their professor's teaching style in the response to the open-ended questions which asked them to identify a factor which helped, and a factor which hindered their learning experience. The analysis of the information showed that they were very concerned about the professor's attitude as a

teacher. Where teaching ability was superior, they acknowledged and appreciated it; where the reverse was the case, they expressed disappointment.

It is hoped that the analysis of the data would help, by inference, in assessing the extent of similarity or difference in the philosophical views of professors with regard to the concept of pupil-teaching relationship within the realm of instruction.

The data for this report was gathered from a representative faculty member from each of the colleges participating in the study. The data consisted of responses to each of the ten teaching strategies to which the students already responded in their survey (see the instrument attached). In addition, professors were asked to include other strategies which they considered significant in the preparation and execution of their teaching operations. A five point scale (1 = essential. . . .5 = not relevant) was used in assessing the value of each strategy listed to the course which they taught. A tally of the ratings was made and the final score of each strategy was recorded. Additional strategies suggested were noted in the order of frequency in which they were mentioned. Examples of these are included at the end of this report.

Considering the size of the sample of participants, it does not require a lengthy explanation to realize the limitation imposed by the small number. As pointed out in other reports of surveys using a sample of similar size, the purpose was to provide a viewpoint against which to measure students' reactions. It was also stressed that in order to do justice to this issue, a full-scale survey would be necessary and this would be a separate study in its own right. To embark

on that in this study would amount to conducting two dissertation research studies. Hopefully others interested in the subject would deal with it in a more in-depth fashion.

In spite of the survey's limitations, some interesting results were revealed as can be observed in the tabulated results.

Strategies	Participants' Ratings													
	1	2	3	4	5	6	7	8	9	10	11	Total	1st:2nd	Position
a	3	5	4	2	5	4	4	2	5	4	5	43	0:2	10th
b	3	1	1	1	2	1	2	3	3	2	1	20	5:3	5th
c	1	1	1	2	1	1	2	1	5	2	3	20	6:3	4th
d	1	1	1	2	1	1	1	2	1	2	1	14	8:3	1st
e	3	2	1	1	1	1	1	3	5	2	1	21	6:2	6th
f	1	3	1	2	4	1	1	3	3	2	1	22	5:2	8th
g	2	2	1	2	3	2	3	2	1	2	1	21	3:6	9th
h	1	2	1	1	2	2	1	4	3	3	1	21	5:3	7th
i	1	1	1	2	2	1	1	3	3	2	1	18	6:3	2nd
j	?	1	1	2	1	5	1	3	1	2	1	18	6:2	3rd

Analysis

From the results above, it seems a majority of those surveyed considered "relating learning to real world problems" as the most essential strategy on the list, as far as their teaching styles were concerned. In short, none of them taught their courses in purely abstract or theoretical form without examining their implications for human existence. The next two strategies which tied were to "encourage problem-solving in an innovative way" and "warmth and concern for student progress." It is logical to that if real problems of human existence are to be solved, a creative approach which encourages

trying a variety of alternative measures should be adopted. Though a majority supported the need to be warm and concerned for student progress, some did not consider this item as very important, which goes to reflect individual professor's philosophy: those of the "old school" consider the discipline as most important while those of the "new school" (especially the behaviorists) regard the learner as central to the whole purpose of instruction. What is of interest here is the fact that instructors with these diverse educational philosophies were rated as good. Other factors which made their teaching effective would be examined. The next two strategies which also tied were related: laying emphasis on learning by "doing" and "encouraging active student participation in class." If indeed the instructors were concerned for student progress, it should not come as a surprise that these two strategies were regarded as important. Apart from the fact that knowledge gained this way has a greater chance of being retained, the students, as adults, can make meaningful contribution to the whole learning experience. This point was acknowledged in the responses of faculty who have acted as academic advisors. Further evidence of this was shown in the students' reactions to the open-ended questions: they were appreciative of courses that had a lot of practical components, and the highest ratings of courses taken came in the areas where they participated not only in classroom discussions but where they had the opportunity to try things out for themselves such as in actual research or lab-field experience. Their most vocal complaints came where very little of this occurred.

The next three strategies which also resulted in a tie were: "encouraging independent thinking," "respecting students' individual

differences," and "placing less emphasis on grade rather than what is actually learned." From their scores, these strategies were not regarded as critical to the success of the teaching effort, even though some indicated that these were used when deemed appropriate.

The next strategy which was "welcomed student feedback throughout the course," was not regarded as very important either. The reason for this may be that evidence of feedback could be obtained from another strategy already rated higher, i.e., active student participation. Perhaps the point to make here is whether the instructor used the information received from the interaction. This would depend also on their philosophy: those regarding the subject matter as most important, place little emphasis on student feedback while those who put the student first regard their feedback as valuable information to use in subsequent course review.

A large majority of participants thought "flexibly scheduled class" as not essential to their success. In short, they all scheduled fixed times and places for their classes. A few students complained about the rigidity of the class schedule in their reaction. What is obvious here is the fact that the inconvenience of class scheduling was completely offset by the effectiveness of the instructor's teaching. It also indicates that students won't mind the difficulty posed by scheduling if the course promises to be an exciting one.

Additional viewpoints given regarding strategies used show that all those interviewed took teaching seriously by the effort invested in course organization, mastery of the subject, logical and lucid style of presentation and an atmosphere which demanded student effort, a challenge which the latter enjoy as intelligent adults. Regardless of

the professor's philosophical orientation, it seems all of them thought of how applicable in real world situations the concepts would be; welcomed and indeed encouraged student participation by creating an atmosphere which challenged their intellectual capabilities. They were also similar in the amount of time and effort they invested in preparing their courses--the mastery of the subject, mode of delivery, class assignments given, and additional support in the form of reference sources from their own libraries.

Evidence of this position seems to be supported by findings from the study by Wilson, Gaff and others published in their book, College Professors and Their Impact on Students (1975) in which about ninety percent of professors surveyed regarded teaching as the most important source of satisfaction they derived in the profession. The authors also pointed out that the importance attached to the position of the student in the teaching-learning endeavor was a function of the instructor's disposition. Those who actually enjoy interacting with students employ a teaching style which placed the students first. Those who did not enjoy this approach (i.e., maintained a distance from the students), place more emphasis on mastery of the subject and its presentation with authority. Though the study examined undergraduate teaching, the findings are no less applicable to graduate teaching with slight modification. Of significance is the fact that these two classes of professors were accorded recognition by the students surveyed in the study conducted.

The following are some examples of additional strategies which participants said were helpful in the preparation and execution of their respective courses.

1. Encouraged students to critique research in the field.
2. Gave attention to course organization, specific requirements of student performance, prepared alternative test forms and gave students the options they preferred.
3. Study guide prepared with searching questions to stimulate student thinking.
4. Prepared and distributed hand-outs on topics which were very current and on which references may not be readily available.
5. Oral group report on self-selected topics (usually four topics were given to each group, out of which one would be selected).
6. Oral group examination which is concisely prepared by the group using key concepts covered in the course.
7. Use of the professor's library for current information.
8. Illustration with students' experiences.
9. Thorough knowledge of the subject, enthusiasm to teach and an aggressive method of presenting it.
10. Placing great but manageable demand on the students.
11. Course structured as to demand a good deal of student effort.
12. Have lots of recent research reflected in the content of the course.
13. Encouraged students to use computers in solving problems encountered in the course.
14. Course was well organized, logically and lucidly presented.
15. The course content was new and challenging because very little of it has been covered in the literature.
16. Believe in causing students to think and solve problems for themselves. Course was organized so each student would have a chance

to use his/her intellectual capability.

17. Gave lots of assigned reading and discussion questions and saw to it that each made his own contribution.

18. Gave independent study and project exercise. Emphasis was laid on problem-solving.

19. Task force assignments given with a view to having each group report to the class.

20. Gave ample office hours and encouraged students to call on the phone for assistance on project if they could not make appointments.

APPENDIX G

APPENDIX G

SURVEY OF GRADUATE STUDENTS IN SELECTED COLLEGES Summary of Answers to the Open-Ended Questions

Introduction

Since most of the questions to which students who participated in the survey responded were closed-ended, it was considered necessary to give the students an opportunity to express, in their own words, some views regarding their reaction to their training programs. The open-ended question was divided into three parts. The first asked them to identify one thing which the university provided which made learning most rewarding; the second asked for one thing which made learning most difficult; and the third asked them to offer one suggestion regarding what the university should do to improve present conditions.

As may be expected, the answers were many and varied. Some were general while others were very specific and personal. Some addressed problems affecting university-wide operations while others were confined to specific departments and programs. Because of this, it was difficult to analyze the summarize, but as the comments were examined closely, views on some issues came out more frequently than others. The analysis was therefore set around these issues.

When reading this summary, the limitation in the sample should be remembered. Not all the colleges were covered in the survey,

therefore the report here cannot be regarded as fully representative of the views of all the graduate student population on campus. Even among those who responded in the sample (which is about 60% of the total sampled, some 14% of the respondents: 20% of foreigners and 7% of Americans) did not answer the questions.

Where the same issue was commented upon, the number who did were identified. Comments that were very personal were excluded from the list. Single comments which carry significant messages with implication for learning, teaching, and the school were included.

Most of the comments were classified in accordance with the disciplines (college and department) and cultural background (foreign or American) of those who made them. This way the observations can be placed in perspective and understood more clearly. It is anticipated that each college would find it convenient to examine the comments and see some of its strengths, weaknesses, and helpful suggestions for improving conditions.

In quantified form, the following analysis can be made about subjects' responses to the questions.

Of the 32 respondents in Zone A (Latin America), 26 answered at least one of the three questions. This comprises 22 factors facilitating learning experience, 21 factors inhibiting learning experience, and 22 suggestions for improvement. In Zone B (Middle East), 22 of the 28 who responded listed 12 facilitating factors, 16 inhibiting factors, and 18 helpful suggestions. It should be noted that in Zone C (Africa south of the Sahara), 20 of the 22 who responded listed more facilitating factors (16) than inhibiting factors (9) while offering 12 suggestions, results which are almost in contrast to those of the

respondents from Middle East. Of the 33 from Zone D (Asia), the 27 who responded to the questions also listed more assistance (27) than problems (21) and offered 23 suggestions. The same can be said of the 15 respondents out of 16 from Zone E (Euro-Canadian): they listed 14 facilitating factors, 10 inhibiting factors, and 12 suggestions.

The trend among American students is slightly different. Of the 65 whites who participated in the survey, 57 answered the questions, listing an equal number of facilitating and inhibiting factors (54 in each case), and also 50 suggestions. Among the 25 non-whites, 23 answered the questions, comprising 23 facilitating and 22 inhibiting factors, and 22 suggestions.

The responses of students in ID & T program, a sub-division in the College of Education, are pretty close in distribution to those of the non-white Americans with 24 of the 26 respondents answering the questions. This is made up of 24 facilitating factors, 22 inhibiting factors and 23 suggestions.

Some salient features of the responses to the three questions will now be summarized.

Facilitating Factors

By far the most mentioned thing provided by the university which made learning most rewarding to those surveyed were the learning resources in the form of the main library, departmental library, or the professors' library (where allowed), and also the many laboratories and clinics attached to many departments.

What is interesting is the distribution of the responses. Of the 45 who expressed appreciation for the provision of these resources,

only 6 are Americans. It leaves one to wonder if the reaction can be attributed to the students' frequency of use of these resources or the possibility that American students take these resources for granted, regarding them as what normally should be there. The latter speculation may be true especially if one realizes that schools and colleges attended by foreign students in their home countries may not be as well equipped.

The second cluster of positive comments is centered around appreciation for knowledge and skills gained from professors who were described as "very good," "excellent teachers," "knowledgeable," "worthy of our admiration and respect," etc. In this category emphasis is laid on beneficial professional and social interaction. Also included is the opportunity for professional interaction among graduate students which complements participants' intellectual growth and development. Responses in this category seem to be tilted in favor of American students in the ratio of 31:20. This may be explained by the fact that American students are more inclined to interact with faculty and among themselves than foreign students would, especially if one considers cultural and language constraints imposed on the latter.

The third facilitating factor was the opportunity to translate theory into practice in structured practical activities in the form of laboratory or field experience and participation in the conduct of actual research. In this category, of the 25 who cited this as helpful, only five were foreign students. It is not clear why more Americans would support this position than foreigners. It may be speculated that since the added practical experience would improve the chances of American students on the job market, more of them were quick to

note the advantage which the practical experience would bring, or it may be practical only in U.S. terms so that foreign students cannot relate to it.

Some aspects of structure of programs came up for complimentary comments. These include wide variety in the course offerings, many areas in which to specialize, convenient class scheduling, flexibility in drawing up programs to ensure that they met individual student's career objectives. The breakdown of responses was exactly as shown in the third facilitating factor above, i.e., 20 Americans to 5 foreigners. It is hard to explain why few foreign students responded here. It could be that a good number of them, knowing what their interest areas are, can adjust to the programs without much complaint. By comparison, American students may be more vocal if these conditions are denied and so were appreciative of them where they existed. On the other hand, it may be that they did not see much of these complimentary aspects to be able to make comments on them. If they were guided to explore the curricula more, they might come up with more revealing results than are presently attributed to them.

Next in line among factors which received a good number of positive comments was provision of financial support and privileges through graduate, research and teaching assistantships. Of the nine who made this observation, six are foreign students.

The climate of the university environment was regarded as congenial to learning by five respondents, four of whom were Americans. This attribute included housing facilities, office spaces, and a generally beautiful and healthful landscape.

Inhibiting Factors

The problems that received most attention are centered around program structure with American students (25) complaining more than foreign students (10). Among complaints made by American students include fewer courses than necessary in core areas, lack of program coordination leading to repetition of concepts in different courses, inflexible arrangement which made it difficult to take some courses when a shift to night would have been more convenient, unusually large class which drastically limited interpersonal interaction between professor and students and also among students. Foreign students' attention was focused on such issues as the irrelevance of course content to non-American or non-Western situation, lack of depth of the content of some courses for graduate level quality, and the problem posed by the teaching of English language--many of the instructors are described as not well qualified to teach.

The next issue that received negative reactions was the attitude and teaching style of the professors. Just as the "good" ones were lauded in the preceding summary, those regarded as "bad" received less than complimentary comments. American students led here (19), followed closely by foreign students (13). Their complaints of the professors' attitude and teaching style ranged from being unfriendly and prejudiced (foreign students) to being downright uninterested in teaching and lacking the mastery of the subject enough to command the respect of graduate students.

More foreign students (15) complained about the shortness of the term than American students (6), but all those who pointed this issue out indicated that the shortness of the time available led to generally

rushed work with a resultant loss of quality.

Following the above were the negative comments about the evaluation system: testing and grading. Foreign students, being unfamiliar with this approach, led the way (8), while four Americans who listed this point were concerned (like their foreign counterparts), about the value of the grade as an end in itself.

A point made exclusively by American students (6) which did not have a direct bearing on their programs was lack of access to campus during the day. It is not surprising why this point was made since a substantial proportion of American students live off-campus and traffic regulations ban driving on campus between 8 a.m. and 6 p.m. unless you are a graduate assistant or on the staff of a department.

Another complaint made mostly by American students (5) was about high tuition. Only one foreign student joined in this exercise. This can be explained by the fact that a good number of American students are self-supporting while a large proportion of foreign students are on one form of financial assistance or another.

The negative comments (4) made about the libraries (main and departmental) were directed at the limited time during which they were open, absence of coffee machines, lack of congenial atmosphere in some departmental libraries and limited useful learning resources provided. Where labs were involved, the complaints dealt with lack of equipment.

A good number (6--both foreign and American) of students complained about lack of space either in their department (e.g. Communication) or around their residence (married housing). One specifically pointed out that undergraduate dormitories were the least congenial for studies.

A few (4--mostly American students) decried absence of practical or what one described as "hands-on" experience; another labelled it as "too much emphasis on theory."

Two foreign students pointed out lack of attention and assistance to foreign students between the term breaks.

Suggestions for Improvement

Most of the suggestions were centered around the improvement of program logistics such as increase in number of courses offered in the core area, flexibility in scheduling them, reduction in size of classes for graduates so a more meaningful interaction can occur and elimination of some courses. Under program structure, 22 American students offered suggestions while 11 foreign students did the same. By far the singlemost important emphasis here was on practical, real world activities which attracted 22 suggestions (11 each from both American and foreign students). The next item that received a considerable measure of attention was the question of the relevance of courses to needs. As would be expected, foreign students led the way here (10) with a plea to broaden the scope of courses to include illustrations that are non-Western. American students (3) also joined in this request especially for courses that are relevant to their professional development.

The need for interaction between faculty and students as well as among students was emphasized in the suggestion. Interestingly, more foreign students (13) expressed a desire for this than American students (8). This may have been brought about by the fact that they don't interact as much as their American counterparts.

The importance of improving some professors' teaching testing and grading style as well as their attitude toward the students were noted in the suggestions. American students (11) emphasized this point while eight foreign students supported the position. Where there were few professors, suggestions went for more. Where the quality of their performance was in question, it was suggested that competence in teaching be seriously considered when employing a faculty member; they should be evaluated not only on scholarship but also on teaching ability. The quantitative criteria were to give way to qualitative in the evaluation of graduate student performance. As regards the role of major professors, one foreign, and 8 American students suggested that professors who act in this capacity should take the assignment seriously otherwise decline to take on the responsibility.

On the question of financial support, 4 foreign, and 7 American students advocated support by the university in the form which ranged from increase in assistantship through payment of undergraduate level fees for undergraduate courses, to free tuition! Since many American students pay their own fees, it is not surprising that more should ask for financial support privileges.

In contrast, six foreign and two American students asked for a switch from term to semester system so as to give more time to dealing with their learning activities.

Under "learning resources," seven American students as compared to two foreign students, asked for specialized resources in their respective fields. In some cases it was a question of increasing acquisition in these areas in the main library. Other requests made

which were associated with the library were the need to open for longer hours and to provide coffee machines or a coffee room in the library.

Some students (4 Americans and 1 foreigner) pleaded for greater participation in decisions likely to affect their academic interests on campus.

Some administrative questions were raised and suggestions made about how they could be solved. Eight foreign and five American students offered advice which included building more low-cost housing for students, provision of study lounges for graduate students in some departments and also in the married housing units, genuine concern for students' welfare in spite of the size of the school, and a review of the admissions policy governing foreign students' admission to the school.

Examples of Views Expressed (Arranged by College)

College of Agriculture and Natural Resources

Facilitating Factors--Foreign Students

1. Library facilities (Agriculture Engineering, Forestry)
2. High quality of its faculty (Food Science)
3. A few good faculty with academic responsibility and discipline (Agricultural Economics)
4. Meeting people from all over the world and interacting with them (Plant Research)
5. Its faculty and staff (Forestry)
6. Learning resources and research facilities (Crop Science)
7. Congenial academic environment to learn in (Crop Science)
8. Laboratory facilities (Food Science, Forestry)

9. Office space provided to Ph.D. students (Agricultural Economics)
10. Program flexibility (Agricultural Economics)
11. Research application of what is learned (Resource Development)

Facilitating Factors--American Students

1. Some enthusiastic instructors (Food Science)
2. Flexibility of program allowed subject to choose own research area (Food Science)
3. Opportunity to apply knowledge acquired (Resource Development)
4. Spirit of professionalism inculcated (Forestry)
5. Good learning resources and facilities (Forestry)
6. Exposure to excellent faculty (Agricultural Engineering)
7. Opportunity to develop own program (Crop Science)
8. Excellent research group with superior reputation in their fields (Dairy Science)
9. Opportunity to do nutrition consulting work (Dair Science)
10. Relationship with professors and students found most rewarding (Fisheries and Wildlife)

Inhibiting Factors--Foreign Students

1. Little communication between foreign and American students in structured setting (Plant Physiology)
2. Studying for test and grade, and not for knowledge, the competition which follows is unhealthy (Poultry Science, Agricultural Engineering, Agricultural Economics, Forestry, Food Science)
3. Poor English language teaching courses, the teachers are not very competent (Food Science, Agricultural Engineering)

4. Ten week term is too fast (Forestry)
5. Many professors are not skilled in teaching (Crop Science)
6. Occasional exhibition of prejudice and discrimination against foreign students by some professors (Food Science)
7. Limited interaction between students and professors (Food Science)
8. Pressure of too frequent examinations for graduate level programs (Forestry)
9. Poor instruction in Statistics Department (Agricultural Economics)
10. Mediocre level faculty in other departments where minor courses were taken (Agricultural Economics)
11. Rigid program with limited courses in core area (Fisheries and Wildlife)

Inhibiting Factors--American Students

1. Lack of genuine graduate level courses in which stimulating academic discussion could occur (Food Science)
2. Some required courses had no value in terms of subject's field of interest (Resource Development)
3. Too high tuition for those who pay their own fees (Forestry)
4. Poor teaching quality among some faculty (Forestry Genetics)
5. Large size of school is depersonalizing, making it difficult to adjust or find your way around (Dairy Science)

Suggestions for Improvement--Foreign Students

1. Review program to reflect foreign students' needs and not just what MSU wants (Agricultural Engineering)

2. More attention to the improvement of English language teaching for foreign students (Food Science)
3. Professors should be accountable, in their teaching, to students (Agricultural Economics)
4. More interaction outside of campus (Agricultural Engineering)
5. More courses oriented to developing countries (Forestry)
6. More opportunity for American and foreign students to interact (Agricultural Engineering, Food Science)
7. Include courses dealing with foods of other lands in the curriculum (Food Science)
8. In addition to professors with international experience, encourage and accept faculty from other lands either on full-time basis or as visiting professor (Agricultural Economics)
9. Reduce course work and give the time to more seminars and discussion of problems in concrete research with instructors having broad enough view to see problems from other than Western perspective (Crop Science)
10. More opportunity for practical experience in international development (Agricultural Economics)
11. Make available graduate internship for credit with established research organizations (Fisheries and Wildlife)
12. Encourage inter-departmental communication (Plant Research)

Suggestions for Improvement--American Students

1. Assign academic advisors who really care (Dairy Science)
2. Make room on the curriculum for more graduate level courses where discussion could occur (Food Science)

3. Provide more research or extension assistantships (Resource Development)
4. Free or lowered tuition needed! (Forestry, Agricultural Engineering)
5. Change to semester system (Forestry)

College of Business

Facilitating Factors--Foreign Students

1. Some innovative instructors with useful information (Business)
2. Seminars and conferences (Marketing)
3. Better library facilities and other helpful resources (Marketing, Finance)
4. Generally good faculty (Finance)

Facilitating Factors--American Students

1. Very wide range of courses in major field (Management)
2. The challenge and rigor posed by the program (Economics)
3. Graduate assistantship (Marketing)
4. Marketing Club (Marketing)

Inhibiting Factors--Foreign Students

1. Too much illustration with American examples in business and economy (Business)
2. The testing and grading system does not measure real learning or achievement at graduate level (Marketing)
3. Discrimination against foreign students in financial assistance, objective criteria are not used (Finance)
4. Ten week term is too fast (Business)

Inhibiting Factors--American Students

1. Poor teaching approach by some professors (Management)
2. Inflexible class arrangement (Marketing)
3. Inconvenient program scheduling, no evening classes (Economics)
4. Bad Business Library (Marketing)
5. Short, condensed, fast paced program arranged on term basis makes it difficult to realize potential (Finance)

Suggestions for Improvement--Foreign Students

1. Periodic review of program to make it comparable to other schools in the field (Business)
2. More courses in Banking needed (Finance)
3. Vary the style of testing and grading; lay more emphasis on performance rather than objective tests (Business)
4. More careful selection of professors, some are very bad teachers (Economics)
5. More professional and social interaction among graduate students
6. Give attention in teaching to illustration of business in other parts of the world (Business)
7. More recognition and respect for the socio-cultural differences between U.S. and foreign students (Business)
8. Provide visiting tours to graduate students (Marketing)
9. More practical application of what is being taught (Economics)
10. Provide coffee room in the library (Marketing)
11. More attention should be given to foreign student interest when designing courses (Business)

12. Assign only advisors who are willing to help foreign students (Accounting and Finance)
13. More flexibility in program requirements, students should be able to exercise choice (Business)
14. More seminars and less rigid courses (Marketing)

Suggestions for Improvement--American Students

1. Establish more objective criteria for measuring achievement in Ph.D. program (Management)
2. Make program more flexible so individual students can tailor course requirements to their needs (Marketing)
3. Invite more business professionals to campus for lectures and seminars, get the program out of theoretical milieu and more into the real world (Marketing)

College of Communication Arts and Sciences

Facilitating Factors--Foreign Students

1. Opportunity to work with professors in research teams (Communication)
2. Award of graduate assistantship and the privileges and responsibilities which go with it (Communication Arts and Sciences, Communication)
3. Assistance provided by some members of faculty (Journalism)
4. Excellent library facilities (Journalism)

Facilitating Factors--American Students

1. Variety of course offerings (Communication)
2. Clinical practicum including off-campus assignments (Audio-logy and Speech Sciences)

3. Very rewarding teaching experience (Communication)

Inhibiting Factors--Foreign Students

1. Many professors generally lack understanding of other cultures and political systems different from that of U.S., thus demonstrating some measure of bias; though there are a few exceptions (Communication)
2. Too much illustration with the American background and experience, there seems to be a disregard for foreign students' interests (Journalism)
3. Language and unfriendly classroom atmosphere (Journalism)

Inhibiting Factors--American Students

1. No place to study in the department (Communication)
2. Some aloof, unconcerned and unhelpful professors who are neither interested in students nor up-to-date in their fields (Communication, Audiology and Speech Sciences)
3. Isolationism of students (Communication)

Suggestions for Improvement--Foreign Students

1. More practice in "learning by doing" instead of "learning by merely listening or reading" (Communication)
2. More time and facilities for structured interpersonal interaction between students and professors; class hours are neither sufficient nor appropriate for such interaction (Communication)
3. Provide more financial support--scholarships (Journalism)
4. More cordial relationship between instructors and students (Journalism)

5. Give more attention to development communication (Communication)
6. More decent low-cost housing for students (Communication)

Suggestions for Improvement--American Students

1. Provide study area in the department (Communication)
2. Encourage more inter-departmental design of programs so as to evolve sharing of resources and group problem-solving (Audiology and Speech Sciences)
3. Better professors who are not only interested in students but also competent to teach (Audiology and Speech Sciences)
4. More graduate student input in decisions affecting them (Communication)

College of Education

Facilitating Factors--Foreign Students

1. Useful experience gained from some knowledgeable professors (Philosophy of Education)
2. Options of specialized courses in different fields (Sec/Vocational Education)
3. Field experience provided (Education, Counseling, Personnel and Educational Psychology)
4. Rich library resources, IRC (Education, Curriculum Business and Distr. Education)
5. Some expert professors in respondent's field (Educational Psychology)
6. No constraints are imposed on learning (Higher Education)
7. Theory and practice combined to student's advantage (Student Teaching)

Facilitating Factors--American Students

1. Practical information which subject can use in her classroom (Elementary Education)
2. Rewarding lab/field experience (Secondary Education and Supervision)
3. Scheduled night classes (Educational Psychology)
4. Research assistantship with Learning and Evaluation Service (Educational Psychology)
5. Interest and concern for student's progress by some professors (Educational Psychology)
6. Very educative field trip to Canada (Curriculum & Instruction)
7. A few excellent instructors (Curriculum)
8. A wide variety of courses to choose from (Higher Education, Elementary Education)
9. Opportunity to plan own doctoral program and select professors to work with (Elementary Education)
10. Opportunity to exchange ideas with some competent professional faculty (Elementary Education; Health, Physical Education and Recreation)
11. Rewarding internship classes provided off-campus (Education Administration)
12. Learned how to relate to handicapped individuals (Rehabilitation Counseling)
13. Practicum--the most valuable learning experience in the program (Counseling)

Inhibiting Factors--Foreign Students

1. English language problem is further complicated by the American way of speaking (Education)
2. Monotony of class attendance, as if learning and instruction cannot take place outside of the classroom (Education)
3. Too many courses and too short terms (Philosophy of Education)
4. Too much emphasis on theory (Physical Education)
5. Too much emphasis on the American approach to doing things, looks like an attempt to socialize foreign students into American tastes and lifestyle (Education)
6. Three term system is too short (Educational Psychology)
7. Giving quizzes each week is inappropriate in graduate level programs (Health, Physical Education and Recreation)
8. Lack of patience and understanding of foreign students by some professors (Higher Education)
9. Open exhibition of bias against foreign students by some professors (Curriculum and Instruction)

Inhibiting Factors--American Students

1. Lack of accountability for professors who did not teach their courses well (Administration and Higher Education, Vocational and Technical Education)
2. Very large research classes with little interaction between students and professors; often reflects on the poor quality of dissertation put out by many in the college (Higher Education)
3. Lack of parking facilities for graduate students during the day (Secondary Education)

4. Inadequate choice of courses on the list of required courses to make up the program (Elementary Education--Reading)
5. Lack of coordination among related courses with the result that overlapping and repetition occurs (Educational Psychology)
6. Non-compliance with Title IX (Health, Physical Education and Recreation)
7. Limited access to campus for off-campus students during the day (Administration and Higher Education)
8. Coping with a hectic schedule which the subject found very hard to modify (Educational Psychology, Curriculum and Instruction)
9. Both advisor and career center could not assist in making a career choice; information at their disposal about various fields of education was limited (Curriculum & Instruction)
10. Many courses required were without much content (Elementary Education)
11. Very short term structure (Educational Administration)
12. Negative perception of black people by some professors (Urban Counseling)

Suggestions for Improvement--Foreign Students

1. More graduate assistantships to foreign students and more opportunity for closer interaction between professors and foreign students outside of the classroom (Higher Education)
2. Increase emphasis on practical application of the theories (Curriculum & Instruction, Educational Psychology)

3. Relate learning more to students' background and culture (Higher Education)
4. Switch to semester system and reduce the fast pace (Elementary Education)
5. More concentrated training in the conduct of research especially for doctoral students (Higher Education)
6. Coordinate course offerings with other colleges and departments (e.g. English) and break the rigidly separate operational style (Elementary Education and Reading)
7. Competent and involved professional teachers needed, not just people with Ph.D.s who are concerned only with research (Educational Psychology, Industrial Education)
8. A way should be found to make graduate level instructors accountable (Educational Psychology)
9. Charge only undergraduate fees for undergraduate courses even when taken by graduate students (Health, Physical Education and Recreation)
10. Make all admission requirements explicit in departmental literature; it seems unfair to use hidden requirements in exercising admission procedures (Higher Education)
11. More genuine personal contact between advisors and students; students should be allowed to make meaningful contribution to decisions affecting them (Curriculum)
12. Advisors and counselors should keep in touch with the real world as far as the job situation goes before advising students on what to do (Curriculum)
13. More freedom to plan own program (Elementary Education)

14. Relate methods education to the real world of teaching
(Elementary Education)
15. A more careful assessment of the needs and evaluation of
programs of part-time graduate students should be made
(Higher Education)
16. More emphasis on research in subjects program (College
Student Personnel)
17. Approval needed for the conduct of independent studies
for periods longer than a term (Educational Administration)

I.D. and T. Program--College of Education

Facilitating Factors

1. The experience gained by being a graduate assistant
2. Excellent instructional resources at IRC, and main library
3. Knowledgeable and approachable instructors
4. Interaction with stimulating faculty and fellow students
5. IDI and ED 410 provide space within which to pursue unique
academic interests
6. Program flexibility enables subject to draw up own program
7. Systems approach to problem-solving excellently shown in
IDI
8. Lucky to have an advisor who is open to new ideas, tolerant
of differences and effective in communication and human re-
lations
9. Excellent and inspiring instructor of ED 410
10. Very enjoyable learning environment provided by the univer-
sity

11. Opportunity to discuss questions and issues with selected professors whose judgement the subject respected
12. Opportunity for exchange of ideas and interaction with foreign students in the program

Inhibiting factors

1. Some very poor courses in the core area
2. Difficulty in grasping lectures because of a style of teaching different from the one which the subject is familiar with
3. Ten week term often leads to rushed work and ill-digested ideas
4. Inordinate concern for the grade point average
5. Ineffective program communication systems
6. Many instructors unable to make the systems approach work in their teaching
7. Scattered libraries contribute to waste of time in search of resources
8. Some of the aides at IRC are not friendly
9. Limited access to equipment at IRC
10. Lack of "hands-on" experience
11. Advisor being too busy to attend to students
12. Program requirement generally inflexible--not taking into consideration subject's prior knowledge and experience
13. There are still some unclarified statements of objectives about the field.

Suggestions for Improvement

1. More courses in the core area; more emphasis on practical activities, program is presently theoretical; courses in core area dealing with how professionals should relate to clients and to one another needed
2. Encourage and use simulated activities for non-American environments
3. A graduate study room is needed
4. Give students more opportunity to see and participate in the applied aspect of the profession, e.g. work more at IMC, IRC, Learning and Evaluation Service, etc.; more practice is needed; more emphasis on internship and field experience
5. More careful streamlining of courses to prevent overlapping and unnecessary repetition of what is covered in other courses
6. More courses designed in the format of IDI and ED 410
7. Use of pre-test procedure to determine student characteristics and how to match them with courses for maximum benefit
8. Use of foreign scholars on the faculty needed
9. Improved communication network between faculty and students needed
10. Professors should strive for excellence both in content and mode of delivery; content is sometimes inapplicable and lacking in depth for Ph.D. level work
11. Improve the balance in course offering by reinstating

Library Science courses which were phased out

12. Have more luncheon-type get-togethers preferably at night; many day activities make it difficult to attend the present ones
13. Advisors should be recognized for the time devoted to interacting with students; it's too bad to treat the function as extra-curricular activity
14. There should be more creative use of media in teaching about media
15. Program should be competency based, dealing directly with what students should be doing when they are on the job; the masters degree level of the program does not show this
16. A closer alignment between Educational Psychology and Instructional Development and Technology
17. The program should create a solid research base and seek funding to conduct research on problems in the field

College of Engineering

Facilitating Factors--Foreign Students

1. Learning resources--library, computer lab, etc. (Electrical Engineering & Systems Science)
2. Graduate assistantship (Mechanical Engineering)

Facilitating Factors--American Students

1. Flexible program which accommodates individual differences (Mechanical Engineering)
2. Excellent faculty (Chemical Engineering)
3. Some professors who are genuinely concerned with student learning (Civil Engineering)

Inhibiting Factors--Foreign Students

1. Pressure to do a lot in a limited time (Mechanical Engineering)
2. Teachers overloaded with work, no time for interpersonal interaction and related professional discussion (Civil Engineering)
3. Quarter terms are short; make it into semester (Computer Science)
4. Lack of concern for foreign students during term breaks (Civil Engineering)
5. Some professors are too rigid for change, concerned only for the subject and not for student welfare (Electrical Engineering)

Inhibiting Factors--American Students

1. Ten week term is too short (Chemical Engineering)
2. Some instructors teach as if they are frustrated with both the student and the subject (Civil Engineering)

Suggestions for Improvement--Foreign Students

1. More practical experience, preferably in the industry for engineers (Mechanical Engineering)
2. More up-dated courses on recent developments in the field (Electrical Engineering and Systems Science)
3. More concern for student welfare (Mechanical Engineering)
4. Improve the admissions policy for foreign students (Mechanical Engineering)
5. More dedicated attitude to teaching, a good mastery and in-depth delivery of lectures by some professors (Civil Engineering)

Suggestions for Improvement--American Students

1. Better library and computer facilities (Electrical Engineering, Chemical Engineering)

College of Human Ecology

Facilitating Factors--Foreign Students

1. Library and other learning resources (Family Ecology)

Facilitating Factors--American Students

1. Interaction with faculty and other graduate students (Family and Child Sciences)
2. Interaction with fellow students (Family Ecology)

Inhibiting Factors--Foreign Students

1. Poor staffing (Family Ecology)
2. Sometimes lectures and the content of exams don't agree (Family and Child Sciences)
3. U.S. system of education makes learning hurried and confusing (Human Ecology)

Inhibiting Factors--American Students

1. Current advising system needs to be overhauled; no need why faculty who are not interested in students should be asked to advise them (Family Ecology)
2. Distraction coming from too many competing events (Family and Child Sciences)

Suggestions for Improvement--Foreign Students

1. Employ better qualified staff (Family Ecology)
2. Improve English Language Center; employ better teachers (Human Nutrition)

3. Patience and understanding of the foreign student (Human Nutrition)

Suggestions for Improvement--American Students

1. Better coordination of courses across department lines on topics of common interest (e.g. courses in Social Work); presently the latter department does not open these up to non-majors (Family and Child Sciences)
2. Department should continue to encourage individual students to design their own programs (Family and Child Sciences)
3. A better clarification of the role of major professor and other committee members is needed to ensure more interaction and inputs; in some cases the doctoral student is abandoned as the "sole property" of the major professor (Family Ecology)
4. Research programs in my department and college need much improvement (Family and Child Sciences)

College of Human Medicine

Facilitating Factors--Foreign Students

1. Diversity in student and faculty composition
2. Beneficial interaction with peers and faculty

Facilitating Factors--American Students

1. Inculcation of self-reliance (Medical Anthropology)
2. Care of the student as a person
3. Most successful aspect of the learning experience is the use of focal problem
4. Professors provided excellent background in subject's field (Human Medicine--Anatomy)

5. Amount of control and responsibility which students enjoy in the program is enviable

Inhibiting Factors--Foreign Students

1. Rigid rules and regulations about the program
2. Getting along with a professor who dislikes foreign students
3. Lack of a separate medical science library facility
4. Coping with too much distractions such as lecture-concerts, movies and sports, especially home football games

Inhibiting Factors--American Students

1. Hectic scheduling of classes, no flexibility
2. Inconsistent quality of instruction--some are good and some are very bad; there should be a way of eliminating the bad ones or getting them to improve their performance
3. The curriculum is not yet well organized
4. The conflicting message regarding the progressive nature of programs in the college

Suggestions for Improvement--Foreign Students

1. Provide a medical and health science library
2. More classes with clinical content

Suggestions for Improvement--American Students

1. More methods courses (Medical Anthropology)
2. Better financial assistance to students (Anatomy)

College of Osteopathic Medicine

Facilitating Factors--American Students Only (no foreign students responded in this category)

1. Opportunity to be out to see patients as early as the third

term in the program

2. Chance to interact with warm and professional people
3. Some professors who are generous with their time in interacting with students
4. The practical experience gained in working with practicing physicians

Inhibiting Factors--American Students Only

1. The 3-year program which continues year-round is stressful; more time is needed to digest some of the materials presented
2. There are some really bad instructors who don't care for teaching or students
3. The undergraduate students' dormitories are not congenial for studies
4. Parking problems for students who live off-campus
5. Facilities for our practice are not adequate

Suggestions for Improvement--American Students Only

1. A 4-year program (instead of the present 3-year) is necessary for Osteopathic Medicine at MSU; students need breathing space in the program
2. There should be a better screening of instructors to ensure that those appointed can combine excellence in teaching with research and care for students
3. A better university hospital should be made available to students
4. Lower the course load from 22 to 15 or increase the time

5. Reduce the number of areas of specialization and improve the quality of those retained

College of Social Science

Facilitating Factors--Foreign Students

1. Encouragement given by some professors (Psychology)
2. Research facilities in the library and the department (Psychology, Sociology)
3. Opportunity to work in actual research (Sociology)
4. Fall term orientation for new students (Social Work)
5. Teaching assistantship (Sociology)
6. Computer facilities (Industrial Psychology)
7. Good practical training as a therapist (Clinical Psychology)

Facilitating Factors--American Students

1. Emphasis laid on practical field experience (Psychology)
2. The program's practical orientation designed to prepare students for the real world (Labor and Industrial Relations)
3. Stimulating peer interaction (Social Work, Political Science)
4. Field experience (Industrial Psychology, Clinical Psychology)
5. Opportunity to explore new options in programs offered in the department (Clinical Psychology)
6. Opportunity to draw up subject's own program (Sociology)
7. Study area provides a setting in which students could interact (Sociology)
8. Special programs offered in subject's field (Social Work)
9. Flexibility in pursuing assignments oriented to one's perspective (Social Work)

10. Some concerned instructors willing to help students (Psychology)

Inhibiting Factors--Foreign Students

1. Required courses not available when needed (Criminal Justice)
2. Misleading course description--very short and unclear, there is no way of knowing what the professor would actually teach (Sociology)
3. Too much emphasis on U.S. situation in all lectures (Urban Planning)
4. Quarter terms lead to hectic schedules (Sociology)
5. English language training facilities are inadequate (Social Work)
6. Not enough resources in the department to support research (Clinical Psychology)
7. The school's large size makes learning sluggish, nobody gives subject any attention (Sociology)

Inhibiting Factors--American Students

1. Lack of faculty (Psychology)
2. The 45 credit program is intensive, so much within so short a time that there is little time to assimilate knowledge (Labor and Industrial Relations)
3. The departmental library is not congenial to productive study (Anthropology)
4. Poor quality of resources and lack of good organization of the library (Political Science)
5. Inconvenient and inflexible time schedule for courses (Social Work)

6. Some dull and uninvolved faculty with little aptitude or interest in teaching (Sociology)
7. Very few courses in main area of interest (Clinical Psychology)
8. The 10 week term is short (Psychology)
9. Dealing with instructors who are not concerned with teaching or students (Clinical Psychology)
10. Lack of opportunity to work with other students (Sociology)
11. Instructors' office hours often limited (Social Work)
12. No expertise on minorities are in subject's core program (Social Work)

Suggestions for Improvement--Foreign Students

1. Use semester system and give more time (Political Science)
2. Provide office or study space for graduate students (Geography)
3. More emphasis on practical application and make program responsive to foreign students' needs (Criminal Justice, Sociology)
4. Increase concern for student welfare (Psychology)
5. Design a more broad-based curricula with international focus (Urban Planning)

Suggestions for Improvement--American Students

1. More faculty should be appointed (Psychology)
2. More graduate students' input into academic decisions affecting them (Social Work)
3. More night classes to reduce the scheduling problems encountered during the day (Social Work)

4. Establish more contacts with organizations to help fund research (Psychology)
5. Deal more with concrete human problems in actual case studies instead of constructing hypothetical problems (Sociology)
6. Put all branches of Psychology in one place so one can benefit from the others at close interaction (Psychology)
7. Improve the quality of instructor's teaching and make them accessible to students (Clinical Psychology)
8. More faculty-student contact outside of classroom (Sociology)
9. Improved performance of academic advisors in guiding their students (Social Work)
10. Recruit faculty with expertise on minority experiences (Social Work)
11. Provide more financial aid (Psychology)

College of Veterinary Medicine

Facilitating Factors--Foreign Students

1. Learning resources in some courses
2. The library, computer center, and other facilities for research
3. Periodic assignments in class and the opportunity to work independently

Facilitating Factors--American Students

1. Excellent facilities in the Vet Clinic
2. Useful hands-on experience provided in the program
3. Exposure to professional and admirable colleagues

Inhibiting Factors--Foreign Students

1. Large classes with few graduate assistants to help in small groups

Inhibiting Factors--American Students

1. Rushed program; there should be time to assimilate
2. Stubborn adherence to time schedule with its attendant anxiety and limited flexibility

Suggestions for Improvement--Foreign Students

1. Spread courses evenly over the terms to avoid "clogging"; required courses should be offered when needed
2. Better communication between school officials, faculty and students (Immunology)

Suggestions for Improvement--American Students

1. More time is required to assimilate and use information and ideas learned
2. Conduct seminars in philosophy of education so as to give the program a clearer meaning to all

Conclusion

It will be observed from the foregoing that graduate students who responded to the questions asked were appreciative of the learning resources provided in the form of reference materials, research laboratory, computer facilities, etc. They also appreciated professors who were sufficiently informed in their respective fields and were caring enough to share with them through mature intellectual interaction. They were pleased with all opportunities provided to translate theory into practice in field experience or in actual research. They decried

teaching and learning experiences where there was little room for practical application, where interaction either among students or between students and professors was limited, and especially where the professor did not take mastery of his subject and teaching it effectively as a serious professional calling. They hoped that the current terminal arrangement would be changed to semester to give them more time to assimilate what they learned.

Their suggestions were primarily designed to maximize the facilitating factors while at the same time reducing if not totally eliminating the inhibiting ones.

APPENDIX H

APPENDIX H

TO IMPROVE LEARNING CONDITIONS FOR FOREIGN STUDENTS AT MSU: A Report by an Ad Hoc Committee of Selected Foreign Students*

Introduction

We would like to begin by stating some critical points which are necessary for placing our observations in perspective:

1. We are aware of the state of crisis which education is in today--demand to meet the needs of the society, to be accountable while at the same time the resources placed at its disposal are increasingly limited.

2. Realizing that no educational system is insulated from the socio-cultural values of the society which creates and supports it, we can appreciate the philosophical base on which current educational practices are established and managed.

3. Like any other human organization, the educational system reflects the barometer of the strains and stresses imposed by the sub-systems such as teachers, administrators, legislators (representing the taxpayers), business and industry, and of course, the students.

4. We are aware of the effort made by each component to ensure that the organization responds to issues of special interests to them. The student activism of the late 60's and early 70's reflects their

* Presented to the Dean, College of Education, Michigan State University, June 1977.

to make education more relevant.

5. We are also aware of the development of the international focus in higher education in the United States after World War II.

6. We are conscious of the leading role which Michigan State University has been playing in this dimension, in an effort to broaden the scope of its land-grant philosophy.

7. We appreciate the effort which the University has made and continues to make to ensure that foreign students' learning experiences are richly rewarding.

8. In particular, we appreciate the Dean's interest and genuine concern for our welfare and his desire to welcome suggestions likely to further improve learning conditions for us.

The suggestions outlined below are the product of the deliberations of the ad hoc committee of seven foreign students from Southeast Asia, Middle East, Latin America, and the West Indies. The problem areas identified are by no means exhaustive and some of them may not necessarily be peculiar to foreign students, but the effects on them are no less significant. The suggestions made are not exhaustive of all possible remedial measures that could be taken. They merely represent views on which majority of us are in agreement. We wish we had empirical data to back up our views. A study to supply these may be undertaken in the near future. Criteria used in selecting items on the list are our experiences and the result of interactions which we had with other students on the topic. A scientific study, when conducted, would undoubtedly help in providing empirical evidence to substantiate these views.

Issues

1. Orientation. We acknowledge the meritorious service which the Foreign Student Office has been performing in this regard. Believing that no matter how well an activity is performed, it can always be improved upon, we wish to draw the attention of this organization to two things.

a. The amount of orientation which a foreign student arriving late receives is limited by comparison with those who arrive on time. A mechanism should be provided for meeting the orientation needs of those who arrive late.

b. Though fall term orientation is well organized, the short period when the newcomer is exposed to so much borders on information overload. The activities could be spaced out over a longer period with summaries of essential information in the activities provided so the newcomer could make a quick reference at a later time.

2. English Language Requirement. Like the Foreign Student Office, the immense value of having an English Language Center to help foreign students improve their proficiency in the use of English language cannot be overemphasized. Needless to say, that effective learning in this environment cannot be facilitated without it. The effort being made by the Center is praiseworthy, but the procedures for assessing proficiency needs revising. While some students from nations whose lingua franca is English (which means such students have been using the language most of their lives) are exempted from English Language Tests, there are other students in similar settings who have not been exempted. Realizing that students from Britain, Canada and Australia were exempted, representatives of the West Indian Student

Organization had to request a similar treatment before this was accorded them. Students from many English-speaking African nations deserve this treatment also. Other examples where exemptions may be in order would be those foreign students who finished their first degree or M.A. in another college or university in the United States. Time so saved with these exemptions could be profitably invested on those who need the help most among us.

3. The Academic Advisor. Of all the university officials which the foreign students would interact with, this is the one whose functions may make or mar the latter's progress. The current practice of assigning foreign students essentially on the basis of area of expertise and the number of advisees being directed is inadequate. An effective academic advisor needs to be more than a scholar and an instructor. Other attributes that should be considered are: being world-minded, and skilled in human relations techniques with a genuine concern for "how the other half" lives. An advisor who knows little about the culture and life style of the people of the country where his advisee is from would be drastically limited in the kind of help he can render. To have a comprehensive knowledge of the advisee requires of the advisor much time, energy and a lot of interest. In addition to helping the advisee formulate goals and draw up his program, he has to ensure that the advisee derives meaningful academic experiences from all courses he takes. Wherever problems arise, he provides counsel and direction. Owing to the importance of the role which the advisor has to play, the following suggestions may improve the process:

- a. Knowing how busy professors can be, they should handle

very few advisees (e.g. maximum of five). If this number is to be exceeded, evidence of genuine interest and a preparedness to shoulder the responsibility should be a factor to consider.

b. Since the role of advising looks like a "thankless job," recognition should be accorded those doing it well. Attachment of some reward to the effort may make it more attractive than at present.

c. In addition to the above points, those knowledgeable in a given area would be better suited to the assignment.

d. A workshop for academic advisors of foreign students at the start of the school year would be helpful. The Foreign Student Office in conjunction with faculty knowledgeable in international and cross-cultural affairs can conduct this workshop. It would be a helpful orientation to those who have not acted in this capacity before. Similarly, those who have not traveled extensively outside of the United States or had the experience of interacting at cross-cultural level would benefit from the workshop.

e. The initial meeting of the advisor and the advisee should result in a better understanding of the latter during which his goals are clearly defined. The advisor may ask him to put it in writing for future reference. With the advisor's direction and support, the advisee should play a major role in drawing up his program in accordance with the specified goals.

f. In colleges and departments where a good number of foreign students are enrolled, a substantial part of the burden of advising may be removed by appointing an experienced foreign student as liaison or "minor" advisor: a graduate assistant or administrative assistant may be accorded this function. As a student, he would be able to

relate effectively with other foreign students in the college by sharing experiences with them. As liaison, he would understand the foreign students' problems and be able to present them more clearly to those in authority. He would undoubtedly bridge the communication gap between the foreign student and his advisor.

g. Faculty with expertise in regional areas can act as "consultants" to advisors who need information about these areas. A list of these faculty and their areas of expertise can be prepared and made available to advisors during the workshop.

h. To facilitate further interaction, it would be healthy if the advisor could have periodic sharing of experiences with all of his advisees. Imagine the richness of these experiences if the advisees are from varying socio-cultural backgrounds.

4. Academic Activities.

a. Research--Since most foreign students are in graduate programs, it is pertinent to talk of research. The quantity and quality of research undertaken either individually or as teams would provide valuable training and experience needed in problem solving.

i. Where research programs are funded, more foreign student involvement should be encouraged. We would like to take exceptions for those departments where this is a standard practice. What needs to be emphasized is the kind of role which the foreign student plays. While participating, he should be further encouraged to re-examine the design and procedures and suggest, in a mini-report, how these could be adapted for use in their respective regional areas or point out what factors are likely to limit the effectiveness of applying such designs and procedures.

ii. For those writing theses and dissertations on problems peculiar to their areas, valuable information can be gained if the policy requires them to include a brief report of their experiences. What we have in mind is similar to what Alex Haley is currently doing--he's completing a book, In Search of Roots, which documents the account of his experiences in the twelve year data gathering effort for Roots. It would mean more work, but information so gained would be valuable to prospective researchers in similar settings.

iii. Such resource materials would also be useful if a seminar is organized by colleges dealing in research having international dimension (e.g. Social Science, Agriculture, etc.). With active foreign student participation, a topic such as "Conducting Research in Non-Western Societies: Critical Factors to Note" would rely on these kinds of resource materials.

b. Teaching/Testing--We realize that this topic is a controversial one since there are as many teaching and testing styles as there are professors. Opinions differ widely on which styles are most effective. What styles a professor adopts is a function of his personality and experiences, among other factors. Considering the principle of academic freedom, making value judgements on a subject of this kind is a delicate assignment. Therefore, we would not like to be construed as doing anything to undermine this principle. Regardless of what teaching and testing styles a professor employs, one thing generally agreed upon is the need to ensure that students learn. Like the professors, learners' capabilities of deriving meaningful experiences from learning situations depend, in part, on what they bring into the setting. Most foreign students' culture, tradition, and educational experiences are

different. Lack of recognition of this characteristic on the part of the instructor can be detrimental to students' productive effort. Instructor's concern for the welfare of the student counts in building up confidence and morale. While no attempt is made to prescribe to the instructor what to do, he would be interested to know students' reaction to his teaching and testing style. Of the many testing strategies employed on campus, it is generally agreed that "objective and essay" techniques are the most popular. Most foreign students acknowledge their deficiencies in using the former technique. In the light of this:

i. More training should be given foreign students in the "art" of answering objective questions. It should be pointed out that the encouraging start already made by the Foreign Student Office should be continued on a regular basis and even expanded. Another approach may be to incorporate this activity into English language teaching and testing. There is no doubt that majority of foreign students would like to take advantage of such a service.

ii. While we recognize the disadvantages accompanying the technique of essay paper writing, it can be employed to the benefit of those trained to use it. It would improve their capacity to express themselves in clear, concise and coherent manner. When essay tests conducted are supervised, authenticity is guaranteed. Though it means more work for the professor who is urged to submit grades in a few days, the payoff to students can be tremendous.

iii. Assessment of performance which emphasizes problem-solving in a practical way can be of immense value. As many foreign students would be "called into action" when they return to their respective countries, training that emphasizes "learning by doing" would

be very useful.

iv. Because of the cool and unassuming attitude of most foreign students, coupled by difficulty in expressing themselves fluently in English, the level of interaction between them and the professors either in the class or outside may be very limited. By being patient and understanding, the professor would provide the encouragement needed to improve. It should be noted that the inquiring attitude which the foreign student should exhibit is often tempered by his cultural value which enjoins him to have respect for constituted authority and one of the ways for demonstrating this value is a restraint from questioning what those in authority say. The support of the academic advisor, or the foreign student "minor advisor" can be useful if the foreign student is having problems in any of the classes he's taking. These two officials may help in improving the relationship he needs to have with the professor.

v. Owing to the nature of political and socio-economic conditions of countries from which most foreign students came, the Foreign Student Office, along with colleges enrolling many foreign students, can organize special "enrichment courses" in which all of them would be expected to participate. For instance, workshops or seminars in basic economics, government, and human relations may prove valuable to students who return home and find themselves performing functions they did not train for. Constant change and rapid development going on in many non-Western nations lead to rapid turnovers in professional engagements.

5. Other Items of Importance. It is recognized that the University is trying its best to provide resources to facilitate productive

academic effort on the part of the students. From the experiences of students from the Middle East, however, it has been noted that instructional resources on this region in the Main Library are limited. Whereas this is the area supplying the largest unit of foreign students currently enrolled at MSU,

a. It would be of immense value if Library authorities can give attention to this area in future budget allocations for the acquisition of resources.

b. Similarly, the opening hours of the International Library need to be increased.

c. The Library should set up "reservation service" for spaces where group interaction could occur within the building. Presently, there is no mechanism for regulating access to the spaces available.

d. In view of the effect of decisions taken by the Library on the academic welfare of the foreign students, it would be helpful if they are represented on the Library Committee or similar body.

e. Since they constitute what can be described as a "silent minority" on campus, it would be helpful if they are allowed to participate at meetings either at department or college level where issues affecting their welfare would be discussed. This may be another useful channel for information sharing.

f. More Linkages/Involvement--Michigan State University is an institution of higher learning with enviable international reputation. Its educational and developmental programs around the world, its richly diversified faculty and other resources attest to this. That nearly 1,200 foreign students from 80 different countries should

assemble here for further education is an additional proof. Therefore:

i. More linkages, on a regular basis, in the form of exchange of professors at universities in these regional areas would be useful. Such scholars can help in coordinating seminars and workshops on regional areas. Their visit would provide an opportunity to update information on the given area. What goes on in the semblance of "exchange" seems to be haphazard. It need not be so.

6. Conclusion. As indicated earlier, the suggestions we make above are not exhaustive of all possible measures to improve the lot of the foreign student here. The constraints of time have limited our effort to offer more suggestions. We hope this would prove helpful.

Once more, we very much appreciate the Dean's kind gesture in asking us to undertake this task and we hope it would signal the start of more meaningful dialog between us and those in authority on the subject of our welfare here. We want to assure him of our support and cooperation in any effort made by the administration to make our learning experiences richly rewarding. Consciously or unconsciously, we do imbibe values that may alienate us from our cultures as we learn here. To maintain a sense of balance, our academic activities should equip us intellectually and psychologically to be prepared to squarely deal with problems confronting us when we get back home. The failure of our programs to meet this important objective may have been the reason why the urge to stay here on completing our studies has been hard to resist. While some may argue that students' personal and professional development is more important than the call for patriotic attitude to serve one's country, no one would deny that non-Western nations need all the skilled hands they can get to execute their development programs. The

University's commitment to help in this dimension is a strong factor accounting for our admission to the school here. We also believe this is why the Dean invited our suggestions. We've responded with as much interest and enthusiasm. We hope the University will not relent effort till the noble ideals of this philosophy are translated into meaningful accomplishments for the students who train here, their respective countries and the University itself.

/S/
Adebayo Ogunbi for the Committee

The Ad Hoc Committee:

1. Patric Bennett (West Indies)
2. Noorul Hussain (Bangladesh)
3. Terezinha Maciel (Brazil)
4. Adebayo Ogunbi (Nigeria)
5. Yi Lan Liu (Republic of China)
6. Ali Sultan (Arab Students Organization)
7. Narendra Yadav (Indian Club)

APPENDIX I

APPENDIX I

A CURRICULUM GUIDE FOR GRADUATE FOREIGN STUDENTS AND A COURSE DESIGNED PRIMARILY FOR THEM

"The kitten that has just been weaned may suffer
for a time, but after a while it will be able
to kill rats."

--An African Proverb

Introduction

When Margaret Cormack¹ reviewed the development of international educational exchange in an article in 1969, she summarized the experience in a sentence: "Educational Exchange, thus, is on its way from cult to curriculum--but has yet to devise New Curriculum." Almost ten years after this observation was made, it is safe to say that the situation has not improved substantially. The curricula of most colleges and universities are still too inflexible to accommodate foreign students' interests. At Michigan State University, there isn't a single program designed specifically with foreign students in mind, even though a few have adopted flexible policies and procedures to enable foreign students to maximize resources available in related fields in the university. In short, the university is yet to devise the "New Curriculum" for foreign students. Therefore, the best that they can make of what is available to them would depend on the good advice they receive and more importantly on the effort they invest in the undertaking. The brief curriculum guide to be presented will address the

latter part, i.e., how to help them derive the best possible out of available resources in the current structural arrangement. The results just discussed in Chapter Four clearly showed that their contribution can make a difference between a dull program and an exciting one. In addition, they demonstrated the need for competency-based approach to learning with emphasis on criterion-referenced pattern of testing. Their overwhelming support of practice-oriented dimension of their programs (research, laboratory and field experience activities) attests to their desire to go beyond theory. Benjamin Bloom² provided one of the reasons why in an article in Educational Leadership:

While there is much rote learning in many countries of the world, in some curriculum centers I find great emphasis on problem solving, application of principles, analytical skills, and creativity.

Such higher mental processes are emphasized because the centers believe that this type of learning enables the individual to relate his or her learning to the many problems he or she encounters in day-to-day living. (p. 573)

This viewpoint was further underscored by Gagne³ in his analysis of "Taxonomies of Learning":

The attempt to categorize learning outcomes in terms of human capabilities is integrally related to efforts to define and classify educational objectives (Tyler 1951; 1964). Although approached from different points of view, both of these areas of educational scholarship emphasize the importance of identifying what the learner can do and what choices he can make as a result of his learning. Such taxonomic efforts have the potentiality of increasing the rationality of curriculum design, effectiveness of instruction and the relevance of school learning to more broadly defined social goals. (p. 599)

The pressure to cope in rapidly changing environment has never been so felt as at present. Even among foreign students in physical and biological sciences (who did not participate in this study) the same advice seems to hold as Stone⁴ and Moravcsik⁵ pointed out. They both advocated a broad-based general education for foreign students

specializing in the sciences since many of them may be called upon to perform management and administrative functions in addition to their professional calling.

The same advice was contained in the recommendations made by Ronkin⁶ and Ravenswaay⁷. The students have also demonstrated, in the study, that they were potential change agents. While there is nothing wrong with being a specialist, a change agent can be better placed to serve if he receives the kind of training that makes him a generalist. He would then be equipped to analyze problems holistically and synthesize elements likely to bring about the most effective solution. The guide to be presented below would keep these vital functions expected of an effective change agent in view.

General Guidelines for Foreign Students in the Preparation of Their Programs

The content of this guideline may be regarded as an illustration of some of what the proposed "Foreign Student Handbook" should contain. Though American students may find some of the information useful, this outline is primarily designed for foreign students, especially those in doctoral programs, who:

- (a) enroll in academic or professional programs not specifically designed for foreign students;
- (b) are not lucky to have the assistance of a concerned academic advisor;
- (c) are not supported by contractual arrangements between the university and the sponsoring organization, specifying the kind of knowledge and skills to be acquired;
- (d) are not given a time table when their programs are to be

completed;

- (e) are looking forward to more than a high grade point average and a diploma as the outcome of their training.

It should be noted that procedures may vary from one college or department to another. It is essential to know what applies in one's own situation. This guide assumes that the foreign student has been offered admission and is preparing to come to MSU. There are valuable information in some departmental or college handbooks or brochures. A good example is "Guidelines for Doctoral Students and Their Guidance Committees" published by the College of Education. This one is only intended to supplement such publications.

Before Arrival: You probably already read carefully, the brief description of requirements pertaining to your field before applying. A number of additional questions may have arisen which were not addressed in the handbook. The reason is because the handbook is directed at the American students.

- (a) What you should do is to obtain a small notebook and jot down all questions that cross your mind as you read with a view to asking them when you arrive here.
- (b) Next, you should formulate a tentative set of objectives which you expect to accomplish by the time you complete your program. These should be in "performance terms," i.e., things you expect to be able to do. These are most likely to change, depending on the resources available in your department, college or the university as a whole.
- (c) In some programs, a written statement of objectives is required before your admission is considered. You are only

expected to write one for your own use if it is not specified.

Before meeting your temporary advisor: You are assigned an advisor based on your area of academic or professional interest.

- (a) Whether or not he will be your permanent advisor will depend on your judgment of his interest in helping you. His functions include:
 - (i) helping you to plan your program. It is your responsibility to do all necessary spade work to accomplish this end (this will be described fully later).
 - (ii) assisting you in identifying likely members of faculty to serve on your committee.
 - (iii) assisting you in the selection of those courses likely to be relevant to your needs, and also give approval to them when you intend to register for them.
 - (iv) monitoring your performance to ensure that you are making satisfactory progress toward the attainment of those objectives you set for yourself.
- (b) Do your homework by going through the catalogue of courses offered in your major field. Record those whose descriptions are related to what you intend to do. Think also of a "minor field" and record courses from this area in like manner.
- (c) Look at the schedule of courses for the term and underline each one being currently offered so as to know what to choose from when drawing up the first term's program.
- (d) It is helpful to handle (b) and (c) with the assistance

of a graduate student in the program or better still, a graduate foreign student who is either in the program or sufficiently knowledgeable to help.

At the first meeting:

- (a) During your first meeting, further clarify these objectives and present them as concisely as possible. It is a normal procedure for him to ask about your background. If he doesn't, try to include this as you present your objectives so that he can understand the context in which your career goals are to be interpreted.
- (b) Listen attentively to the description he gives of the program offered, resources available not only in the program but elsewhere on campus, the limitations of the program and likely effect on your goals.
- (c) In addition to the questions likely to arise from his explanation, which you should ask, remember to take the questions you jotted down before you left home and have them answered. If he can't answer them, he can direct you to the appropriate quarters for the answer.
- (d) Put down additional suggestions he may have on the choice of courses. He may advise you against some courses you may have selected which, he knows, may not be appropriate.

Validation of objectives: After the first meeting, go over your objectives again and validate those that are possible within given resources and modify or eliminate those that may not be attainable in the original form.

Survey of facilities: With the aid of an experienced graduate

student or even your academic advisor (where he is sufficiently interested in helping) take a survey of available resources--research libraries: departmental or the main library, clinical laboratories and other facilities for field experience activities. Identify their locations, when and how they can be used, and learn the rules and regulations governing their use.

Choice of Courses for the first term: As this may be part of the outcome of your first meeting with your temporary advisor, select the minimum number of credits allowed and sample the process. If the results, at the end of the term show that you can handle a heavier credit load, proceed and increase it in subsequent terms. A heavy load at the start may create problems which may continue to carry over from one term to another.

Interaction with the professor:

- (a) Before you attend your first class, set your objective for that class and compare with the professor's expectation of what students taking the course should accomplish. If there is a discrepancy in your objectives as compared with his own, try to see him and discuss so as to reconcile the differences. If you won't be able to meet your objective as the course is designed, it is advisable to drop it and select another one. If you elect to take it, however, keep the objectives in mind as you go through the classes.
- (b) Don't be surprised if you find students asking for the professor's testing strategies on the first day of class. In a large majority of cases, students tailor their studies to the demands of the examination.

- (c) You may find a few exceptions where emphasis would be laid on class participation and the meaningful contribution which you can make in class discussions.
- (d) There may be projects assigned dealing exclusively with the American experience and as a newcomer you may find it difficult to follow. It doesn't hurt to ask the professor if you can illustrate with examples from your socio-cultural experience.
- (e) The greatest help you can obtain will come with making your problems known and asking for assistance. Unless this is done, it would normally be assumed that everything is going on well with you.
- (f) You may find that the term is almost over as you are just beginning to understand the topic and you are being asked to sit for end-of-term examinations. This is a limitation on the system. If you feel you have not done enough to derive the best results from your effort, ask the professor that you would like to "defer" your grade on it. This will give you additional time up to three terms to finish it as satisfactorily as you want. Be warned about using this too often though. Too many deferred grades may complicate your future schedules and put more pressure than you can handle.
- (g) Before you complete the course, it is necessary to jot down the beneficial effects of the learning to your society, i.e., assess how much of what you learned you can apply at home. What are the facilitation and inhibiting

factors in the system likely to help or hinder the application. Then give the course a "grade" based on these two elements: the extent to which you accomplished your stated objective for the course, and the degree of applicability which the course offered in the context of your socio-cultural environment. After a number of terms have expired, make a total assessment of what you have learned in terms of their usefulness and compare with the grades you made. These will show you whether you are getting the worth of your money and time from the program.

- (h) When taking an examination (especially objective tests), don't be disturbed if you see many American students walking out before half of the allotted time has been used. Remember it is their system and they are familiar with it. On the other hand, it may mean that they did not understand the questions and would not want to waste their time on it. Take advantage of available time. The professor will tell you if you are out of time.

Selection of guidance committee and approval of program:

- (a) It is advisable to go through at least two terms before deciding to select a committee. During this period, you would have a chance to meet some members of faculty in your major and minor fields. Perhaps more important, you would have met many graduate students in your program. With your judgment and the advice received from the students with whom you interacted, in addition to the help you obtained from your advisor, you are ready to select your committee.

- (b) Present your choice to your advisor (assuming you have selected a permanent one) and obtain his approval.
- (c) While selecting those whose contribution are likely to help your program, check for personality characteristics. Those whose characteristics are incompatible may constitute a potential source of conflict, the net effect of which may be detrimental to your academic interest.
- (d) Having shown a copy of your program outline to your chairman and obtained his sanction, you are ready to present it to the committee for ratification.
- (e) Be ready to explain why you selected what you have on the list.
- (f) Note down suggestions (addition to or deletion from the list) and make necessary modifications.

The Comprehensive Examination: In addition to the procedures contained in many departments or colleges guidelines, it is essential to know what is expected of you when preparing for the examination.

- (a) The assistance of your advisor is crucial at this point. He can show you what steps to take in the preparation. He is the one who will approve your being ready and give details of what the examination requires of a candidate preparing for it.
- (b) In some departments, a copy of the procedures is made available where all steps are clearly laid out. Where this is not available, you can obtain valuable information from graduate students who have taken them, in addition to your advisor's assistance. If you can have access to some

of the past questions, they would give you an idea of the scope and complexity of the questions' design.

- (c) The value of interaction with other graduate students cannot be overemphasized. The advanced members may give you some information which your advisor may not have.
- (d) How you prepare will be a function of the tradition in your department and what is expected of you.

The Dissertation:

- (a) Very many students usually delay till very late before thinking of topics for their dissertation proposal.
- (b) It is better to begin early by setting aside pertinent topics in a special file, following your exposure to them in selected courses. It is helpful to start early so that you may give yourself additional exercises which may yield valuable information about the topic. Your course selection may undergo further modifications when topic areas are identified. If you finish all course work before engaging in the proposal exercise, you may find that you need one or two additional courses to broaden your understanding. This may add more to your cost in money and time.
- (c) Let your advisor know of these areas and with his direction, select one which you would like to work on.
- (d) Attend workshops or seminars where the logistics of proposal writing is undertaken and use your topic as an example of a problem to solve.
- (e) If the study would involve doses of statistical analysis,

give attention to those courses which will enable you to adequately prepare for it. This preparation will include visits to the Computer Center to see the resources available and under what circumstances they can be used.

- (f) Depending on your field, it may be ideal to select a topic dealing with home problems if you will have the resources necessary for executing it.
- (g) Assuming you have a "home topic" in hand, it is essential to do a preliminary analysis of the constraints likely to be imposed by the change of environment and include these in the plan.
- (h) When the study is completed, it is helpful to summarize experiences about it to help newcomers who plan to undertake this venture in the future.
- (i) Review the program again to see how close the results are to your stated objectives. Let this be reflected in the answers which you would give to the survey questions usually posted by the Graduate School. Point out the major difficulties you encountered and what facilitated your learning most.

Outline of Curriculum

Having obtained the necessary information regarding the strengths and weaknesses of the program you enrolled in, it is the student's responsibility to select courses carefully to make up for the shortcoming in the program and maximize its advantageous effects. But the very structure of the curriculum may be a problem. Therefore the structure of the curriculum will be reviewed.

Depending on the academic department or college they belong to, the general outline of the units making up the existing programs will be reexamined. This will be done from the perspective of training potential change agents.

1. In the core area there are two subunits: specialized courses and general courses requiring a minimum number of credits.
2. The cognate (minor) area requiring a minimum number of credits.
3. The electives are assigned a minimum number of credits.
4. Research design and methodology has a minimum number of credits.
5. Laboratory and field experience is flexible.
6. There is a fixed number of credits for dissertation.

In this review it is necessary to introduce a new unit which would be primarily intended for foreign students as a substitute for electives. All of them should be expected to take these, but waivers can be used where students have demonstrated adequate knowledge in each of the topics covered in the area. These "general education" courses should include basic courses in:

- (a) The Theory of Change and Innovation
- (b) Organizational Theory and Group Dynamics
- (c) Basic Course in Government
- (d) The Communication Process (especially interpersonal)
- (e) Principles of Human Relations
- (f) Management (the administrative process)
- (g) Basic Economics and Accounting
- (h) Seminar on Research in Non-Western Societies
- (i) Seminar on Applicability of Selected Concepts and Theories in Non-Western Societies

Regardless of discipline, foreign students would be called upon to use one or more of the above general knowledge in the day-to-day discharge of their functions. The extent of use would be heightened if they move up to the administrative or policy making rank. Since a good number of them may have acquired adequate knowledge, they would be required to take courses only in those areas where the need is evident.

In order to accommodate this unit, the number of credit courses in the "general courses" section may be reduced in addition to converting the credits in electives into this unit. Similarly, the 36 credits usually assigned to "dissertation" may be reduced and the expenses transferred to meet the costs in the new unit. Using the breakdown of the credit requirements for a doctoral candidate in I.D. & T. as an example, the revised form for foreign students would look like this:

	<u>Present Arrangement</u>	<u>Proposed Arrangement</u>
(a) Minimum Courses in Core Area	24%	20%
(b) Minimum Courses in General Education	19%	15%
(c) Minimum Courses in Cognate Area	11%	10%
(d) Minimum Courses in Electives	5%	5% } 18%*
(e) Minimum Courses in "General Knowledge"	0%*	13% }
(f) Research Design & Methodology	7%	7%
(g) Laboratory and Field Experience	7%	10%
(h) Dissertation Research	<u>27%</u>	<u>20%</u>
Total	100%	100%

The above is used merely as an illustration. As can be observed, a significant amount of attention (13%) is given to this "general

knowledge" area. The reduction in the credit load in dissertation research does not mean a lowering of the quality; it only means that part of the cost and credit load could be channelled to other areas where they are critically needed. There is always the option to increase this percentage of dissertation credits if the need arises for it.

Outline of a Course, e.g. Seminar on Conducting Research
in Non-Western Societies

Since it is the primary responsibility of the foreign students to translate what they learn into the context of their respective societies, it is necessary for the university to create the conditions under which this could be done. A course such as the above, if made required for all foreign students, would provide for developing this capability. It can be organized on college basis or better still into two main divisions with students in the fields of Humanities and Social Sciences in one, and those in Physical and Biological Sciences in the other. If organized as a single course, units of instruction should be devoted to each division so that all can benefit from the interaction.

A brief analysis of the course which follows is to guide the instructors who plan to teach the course as well as students who would take them:

1. Goal: Preparation for the Conduct of an Efficient and Relevant Research through Knowledge Sharing on the Constraints Likely to be Imposed by Non-Western Societies.
2. Target Group: Students in Masters or Doctoral programs, foreign or American (especially who plan to go abroad)
3. Entry Conditions: Only those who are advanced in their programs, i.e., those who have taken the required courses

in research design and methodology prescribed by their departments or colleges, e.g. for Education majors, it means those who have taken ED 867 (Educational Research Methods) and ED 869 (Quantitative Methods in Educational Research). They should have recorded items not likely to be applicable in non-Western societies in these courses, to be shared with other members of the class.

4. Objectives in Behavioral Terms: The advanced graduate student will be able to identify at least two research methodologies, list the procedural steps involved in their use, and pinpoint areas where the steps may not be applicable in non-Western societies. Within a 10-week term (10 lessons) he will write a concise proposal using one methodology and introducing appropriate modification where necessary to suit non-Western conditions. His peers' critique should show that he identified and made appropriate changes in at least 80% of those instances where modifications are called for.
5. Justification: As shown in the results of the study (Chapter IV), most foreign students are returning to their countries and are very likely to engage in research either for their dissertation or other activities. A better preparation would be ensured if they think and plan, keeping the home conditions in mind. An opportunity would be provided for sharing vital information and criticisms among peer group.

6. Pre-test:

- (a) Summarize in a few sentences, key points in the course in Research Design and Methodology.
- (b) Show the strengths and weaknesses inherent in applying them in a Western society.
- (c) List areas of difficulty likely to arise when applied in a non-Western context as you record them.
- (d) List steps to take in conducting a research using one methodology with which you are familiar.

7. Pre-test Plan:

- (a) Whoever cannot do (a) to (d) above should not be allowed to take the course.
- (b) The prerequisite is at least a course in research design and methodology.
- (c) Whoever answers (a) to (d) above is ready to take the course.
- (d) Whoever answers (a) to (d) and has conducted at least a research study (preferably at home) should skip (a) to (d) in pre-test and be a resource person in the class.

8. Learning Activities:

- (a) It will be primarily cognitive and will involve use of rules--and a careful assessment of the context in which the rules would be valid.
- (b) The affective component of the learning would be an opportunity to think more of home and recall conditions there when attempting to apply theories and concepts.

This way, more interest in problems at home and strategies for solving them would develop.

9. Formative Evaluation:

- (a) Distribute course outline among students showing the scope of activities in which they would participate (see task description).
- (b) List the varying methodological approaches which students have noted and the problems likely to be attendant on their use in non-Western societies.
- (c) Let others contribute additional points to each methodology assessed.
- (d) Let them select one methodology they would use in their proposal writing.
- (e) They should then select a topic for their proposal.
- (f) Visits to the research library for the collection of references dealing with the methodology and sharing with others in the class would follow.
- (g) For instance, if a student selects "survey research" methodology, he should given attention to the implication for non-Western societies, of such topics as
 - i questionnaire design
 - ii method of data collection
 - iii ethics of survey research, etc.
- (h) Each should then receive a feedback in the form of critiques.
- (i) They should assemble reference sources and salient points dealing with modifications to make sure that

methodologies discussed can be better applied in non-Western societies.

- (j) The experienced students and the instructor should add viewpoints which may not have been included.
- (k) Review steps to be taken in proposal writing.
- (l) Let each one develop his topic keeping the above points in mind and bring them for class critique.

10. Post Test:

- (a) Given the references and the points to note in applying selected research methodologies in non-Western societies, the student's proposal is assessed. The class lists what should be considered in each proposal and compares with the amount already recalled and used by the writer of the proposal.
- (b) Final assessment would consider:
 - i List of issues brought in an participation in class.
 - ii List of references assembled in respect of the methodology used.
 - iii The content of the proposal in relation to given points assembled in the class.

11. Task Description:

- (a) Check if students have completed the required courses in research design and methodology.
- (b) Give the exercises in the pre-test section.
- (c) Refer those who did not qualify to the pre-requisite courses to take.

- (d) Appoint those who have actually done research in non-Western settings as resource persons.
- (e) Invite those who have conducted research for their dissertation to share thoughts on the subject.
- (f) Distribute the course outline stating the objectives, student activities and evaluative criteria.
- (g) With the students' help each supplying two, assemble a list of methodologies and problems associated with applying them in a non-Western context.
- (h) Let the experienced students and the instructor add to the list to make it comprehensive.
- (i) Let students select one methodology they would like to use in their proposal.
- (j) Let them select a topic to write on; then visit the library and assemble reference sources related to the chosen methodology.
- (k) Go through the basic steps in proposal writing using such references as David Krathwohl's "How to Prepare a Research Proposal."
- (l) Allow each to write his proposal using the guidelines assembled from the students.
- (m) Each presents his proposal and is critiqued by other members of the class with suggestions to improve it where necessary.
- (n) He evaluates what was supported and what was challenged in his presentation.
- (o) He then modifies his proposal based on the suggestions

made before submitting it to the instructor.

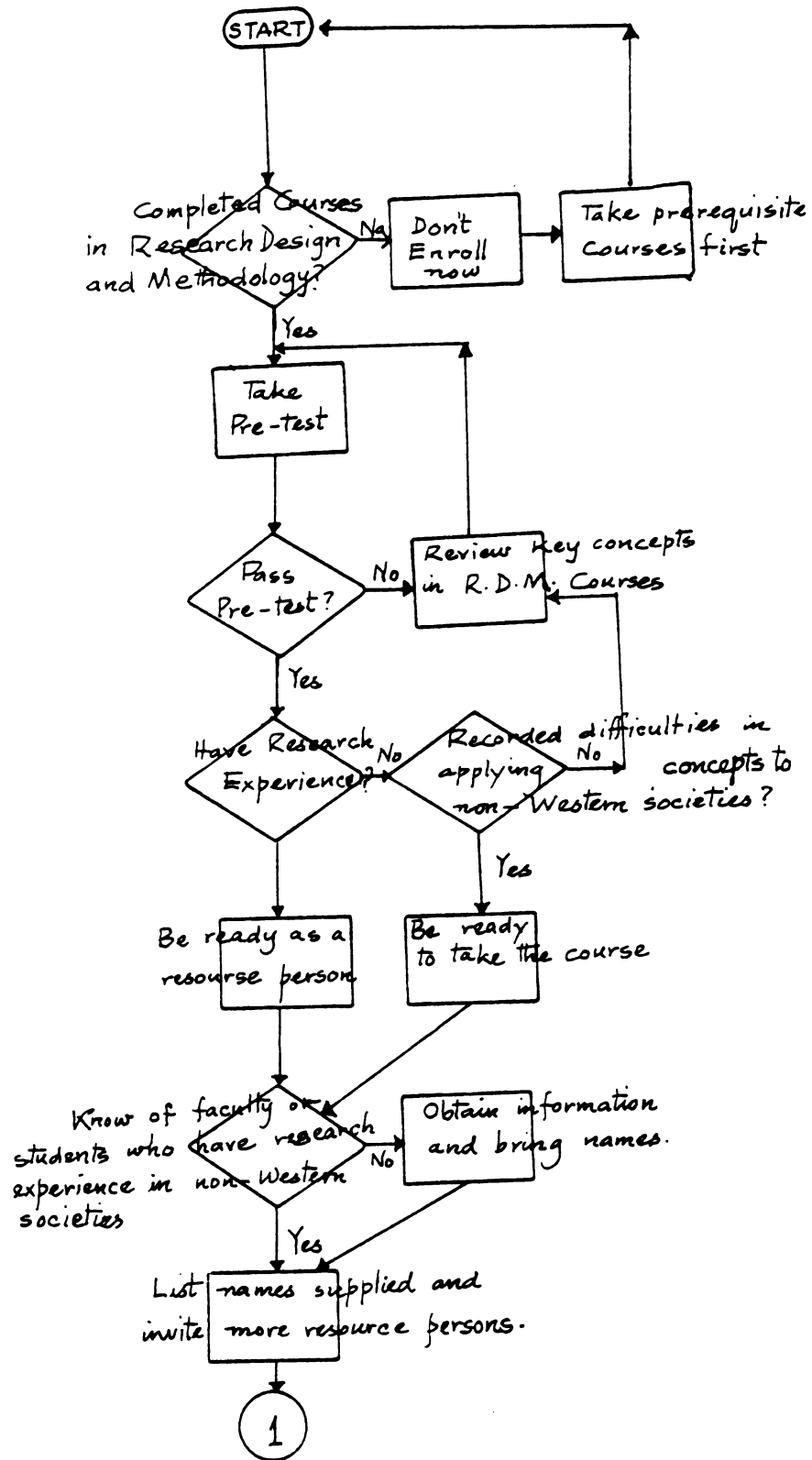
12. A flow chart of the procedures and exercises follows (see next page).

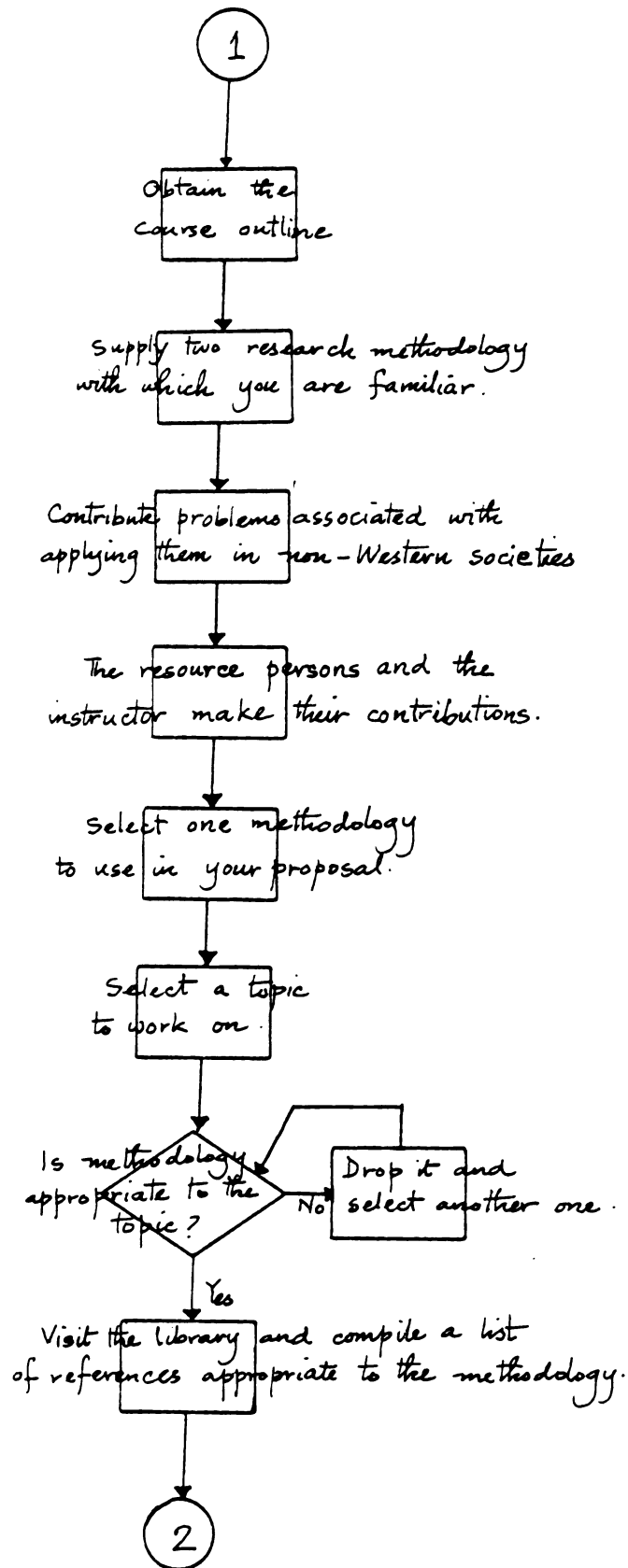
13. Resources:

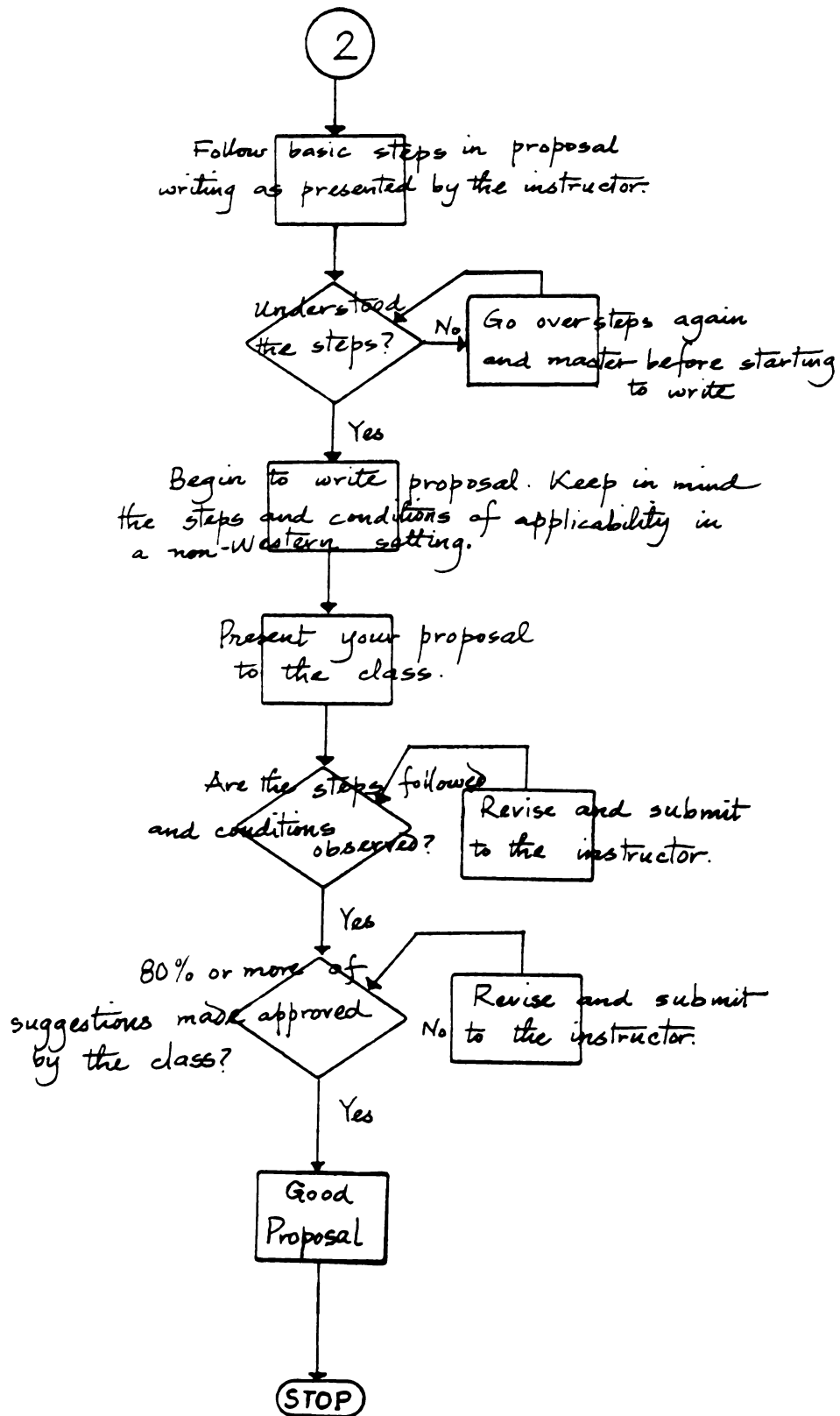
- (a) Texts on research dealing with chosen methodologies.
- (b) Experiences of students and the instructor.
- (c) Experiences of candidates who have conducted their dissertation research at home.

Summary: The above outline is intended to give a glimpse of the opportunity which may open to foreign students if care is taken to design a few key courses tying together information obtained in other courses with a view to assessing their applicability in settings other than the U.S. The information so generated can be of significance not only to foreign students but also to social research and to Americans, especially those who plan to conduct research in these areas. The design may be more specific by detailing activities which would be involved in each unit of the ten lessons to be covered in the term.

FLOW CHART FOR THE STUDENT







FOOTNOTES TO APPENDIX I

¹Margaret Cormack (1969), op. cit., p. 65.

²Benjamin S. Bloom. "New Views of the Learner: Implications for Instruction and Curriculum," Educational Leadership, Vol. 35, No. 7 (April 1978), pp. 563-576.

³Robert M. Gagne. "Taxonomies of Learning," in Deighton (ed.), Encyclopaedia of Education, Vol. 9, p. 599.

⁴Benjamin Stone. "Gaps in Graduate Training of Students from Abroad," Science, June 6, 1969, p. 1118.

⁵Michael J. Moravcsik. "Foreign Students in the Natural Sciences: A Growing Challenge," International Educational Exchange, Vol. 9, No. 1 (Summer 1973), pp. 45-66.

⁶R. R. Ronkin. "Modifying the Ph.D. Program for Foreign Students," Science, Vol. 63 (January 1969), p. 20.

⁷C. A. Ravenswaay. "International Students and Technical Assistance," Higher Education and Research in the Netherlands, Vol. 11 (January 1967), pp. 38-45.

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