

1984

Academic advising of foreign graduate students from developing nations

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**ACADEMIC ADVISING OF FOREIGN GRADUATE STUDENTS FROM
DEVELOPING NATIONS**

Iowa State University

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Academic advising of foreign
graduate students from
developing nations

by

John E. Greisberger

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Department: Professional Studies in Education
Major: Education (Higher Education)

Approved:

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In Charge of Major Work

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~~For~~ the Major Department

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For the Graduate College

Iowa State University
Ames, Iowa

1984

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INTRODUCTION

The number of foreign students in the United States has grown tremendously since the end of World War II. According to Open Doors: 1981/82, the most recent annual census of foreign students in the United States published by the Institute of International Education, there are 326,299 students from abroad studying at the various academic levels in post-secondary institutions in this country. Statistics reveal that the total number of foreign students in the United States has steadily increased since the late 1940s, and that graduate students comprise slightly more than 35 percent of the total (Boyan, 1983). United States agencies and organizations involved in international educational exchange expect this trend to continue through the 1980s and the 1990s. Therefore, it is imperative for United States institutions of higher education to develop policies and practices that will enable them to meet the educational needs of these students specifically, and the challenges of international education in general.

A recent national survey found that students from developing nations have special needs related to meeting their educational objectives (Lee, 1981). Central to meeting these needs is sound academic advising. Faculty advisors, therefore, need to be aware of, and sensitive to, these special needs and strive to acquire the knowledge, experiences, behaviors, and attitudes essential to advising foreign students effectively. This study will focus on the relationship between the faculty advisor and the

foreign graduate student. Its purpose is to assess the needs of faculty advisors who advise students from developing nations.

Background of the Problem

Surveys conducted on academic advising generally conclude that it has low institutional status, is ill-defined, and is seldom rewarded or systematically evaluated (McLaughlin and Starr, 1982). As a result, faculty members understandably concentrate their efforts on research and teaching, relegating advising to a low priority. Students, however, have a much different outlook on advising. According to a study conducted on the Iowa State University (ISU) campus during the 1968-69 academic year, students viewed their academic advisor as the connecting link to their department and as the person most responsible for guiding and assisting them through their degree program (Lewis et al., 1970).

A more recent survey conducted at Iowa State University on the needs of foreign students from developing nations indicated that many important needs of these students relate to obtaining information about the role and function of the academic advisor, obtaining adequate advice from the faculty advisor/major professor, and getting a relevant education (Lee, 1979). These specific needs of foreign students in the United States are but a few of the many educational and cultural barriers that must be overcome in order for them to achieve their academic and personal goals. Because the culture and the educational system in the United States can be, and often are, quite different from those of a foreign student, it is doubtful that any one person on a campus can assist foreign students with

all of their problems and concerns. Therefore, a system has developed where the faculty advisor in the student's department has dealt with academic problems, and the foreign student advisor has taken care of personal concerns such as cultural differences, financial problems, and immigration questions. This, however, is not a satisfactory system. Cultural, social, financial, and immigration problems intertwine with academic problems. A nonacademic problem may often cause an academic problem. This necessitates, in turn, dealing with the whole person in seeking viable solutions to problems. Therefore, it is essential that the academic advisor and the foreign student advisor work together and pool their knowledge and experiences to best advise foreign students. This combination of academic advisor and foreign student advisor works best when it serves as the nucleus of a team of campus personnel which strives to assist foreign students adjust to life and study in the United States, and meet all of their educational and personal goals.

Benson (1968) investigated aspects of the foreign student advisor's on-the-job behavior that knowledgeable faculty members at Michigan State University perceived to be significant in facilitating the academic progress of foreign students. His study indicated that faculty perceive an important role for foreign student advisors in the academic guidance area. According to Benson, this role can and should be extended further at the initiative of foreign student advisors. He suggested that foreign student advisors allocate time and effort to build bridges to academic departments. In concluding his study, he recommended that a research effort be launched to determine from faculty what foreign student advisors can do

or provide to help them be more comfortable and effective in dealing with foreign students.

The idea of a faculty survey was also recommended in the NAFSA publication The Role of the Foreign Student in the Process of Development (Jenkins, 1983a). The purpose of the survey would be to ascertain from faculty their level of knowledge about the special problems of foreign students and to develop ways of improving faculty advising and counseling skills in dealing with foreign students.

In response to these challenges, this survey of faculty advisors of developing world students is undertaken.

Statement of the Problem

The problem to be investigated is the need to improve the academic advising of foreign graduate students from developing nations. The hypotheses to be tested are as follows:

1. Faculty advisors will perceive that the following experiences would be helpful in advising foreign graduate students:
 - a. travel in developing countries
 - b. professional experience in developing countries
 - c. good working relationship with the foreign student advisor
2. Faculty advisors will perceive that information and programs on the following would assist them to advise foreign students more effectively:
 - a. role and function of the foreign student advisor
 - b. orientation programs for foreign students

- c. printed information on advising foreign graduate students
 - d. orientation sessions for faculty on advising foreign graduate students
3. Faculty advisors will indicate that foreign graduate students should be trained differently from United States graduate students.
4. Faculty advisors will indicate a preference for a system of academic advising where a major professor is chosen after a certain amount of time with a temporary faculty advisor.
5. In order to advise graduate students effectively, faculty advisors will perceive the need for more information about foreign graduate students than for United States graduate students in the following areas:
 - a. cultural background
 - b. academic background
 - c. English language proficiency
 - d. career goals
 - e. job opportunities and the conditions in which students will work in the home country
6. In order to advise graduate students effectively, faculty advisors will perceive the need for the same information about foreign graduate students as they do for United States graduate students in the following areas:
 - a. financial support
 - b. family background
 - c. reasons for studying a particular field at Iowa State University
 - d. educational objectives
 - e. previous work experience

7. Faculty advisors will perceive that certain personality traits, characteristics, and behaviors important in advising United States graduate students are needed to a greater extent in advising foreign graduate students in the following areas:
 - a. communication skills
 - b. patience
 - c. availability
 - d. flexibility
 - e. check on academic progress

8. Faculty advisors will perceive that certain personality traits, characteristics, and behaviors important in advising United States graduate students are needed to the same extent in advising foreign graduate students in the following areas:
 - a. interest in personal welfare of the student
 - b. responsibility for student's professional development
 - c. friendliness
 - d. treat student with respect
 - e. relate studies and research to student's future work

9. College of faculty advisor, length of time on graduate faculty, and number of foreign students a faculty advisor has advised as major professor will be related to the level of satisfaction derived from advising foreign graduate students.

Definition of Terms

Four terms need adequate definition at the outset of this study.

They are:

1. foreign student - a degree seeking student at Iowa State University (ISU) at the graduate level who is temporarily in the United States on a nonimmigrant visa, and who is from a developing nation.
2. developing nations - for the purpose of this study developing nations include Spain, Portugal, Greece, Turkey, Yugoslavia, all of Africa, Latin America, and Asia except for Israel and Japan (Sivard, 1979).
3. faculty advisor - an ISU graduate faculty member who is qualified to serve as a major professor for an ISU graduate student or serve on a graduate committee of an ISU graduate student.
4. foreign student advisor - an Office of International Educational Services (OIES) staff member who assists foreign students in meeting their personal, professional, and educational goals at Iowa State University.

Significance of the Study

Research indicates that academic advising is perceived by foreign students as an important need area (Lee, 1981). Advising students, and foreign students in particular, is a skill requiring specialized knowledge in an area where little or no training is available, and where experience is often the only teacher. This study builds on previous educational research and provides information and ideas which, it is hoped, will enable faculty advisors at United States colleges and universities to improve their academic advising of foreign students. By improving the quality of academic advising, foreign students will have a more positive and relevant educational experience in the United States, enabling them to make a greater contribution to the development of their home countries.

Results of the survey will indicate the needs of the graduate faculty at Iowa State University in advising foreign graduate students from

developing nations. It may also serve as a model for generalizing about the needs of faculty advisors who advise foreign graduate students at other United States research institutions. In addition, the role and function of the foreign student advisor at Iowa State University will be better defined in terms of meeting some of the needs of faculty advisors in this area, allowing them to deal more effectively with foreign graduate students.

REVIEW OF LITERATURE

This chapter reviews the literature and the relevant research which is related to the study. The literature search was completed by reviewing journal articles, books, reports, dissertations, and an ERIC literature search using the Iowa State University Library Computer Data Base. The following review is organized as follows:

- A. Overview of literature on foreign students in the United States.
- B. Advising and counseling foreign students in the United States.
- C. Impact on, and response of, United States institutions that enroll foreign students.
- D. Summary

Overview of Literature on Foreign Students in the United States

Four major studies reviewing pertinent research on international education, and focusing on foreign students in the United States, have been published in this country since 1962. Prior to this time, no major studies had been conducted. Two of these studies were conducted by the United States Department of State, one in 1962 and the other in 1967. A third study was done by the United States Advisory Commission on International and Cultural Affairs in 1962. The fourth study entitled The World's Students in the United States (Spaulding and Flack, 1976) extensively reviews the literature and the research conducted since 1967 on foreign students in the United States. This study will be one of

three major references in this review, along with "Research on Foreign Graduate Students" (Walton, 1971), and Needs of Foreign Students from Developing Nations at U.S. Colleges and Universities (Lee, 1981).

Spaulding and Flack (1976) examined the many studies that were conducted on various United States campuses. Generally, they were concerned with a particular nationality group, or a region of the world, or they examined students in a particular academic area, or participants in sponsored training programs. From all of these studies, they concluded that the major reasons foreign students study in the United States were:

1. to get advanced education and/or training not available in the home country
2. to acquire prestige by obtaining a degree
3. to utilize scholarship funds that were available
4. to escape unsettled political or economic conditions
5. to learn more about the United States (p. 23).

Knowing why foreign students come to the United States is essential in helping them meet their goals. However, knowing is not enough. Action must be taken to assist them to gain as much as possible from their experiences in the United States. According to Lee (1981), colleges and universities in this country have done very little to orient new foreign students to life and study in the United States, despite large numbers of these students currently on our campuses. In other words, their special needs are not being addressed, and the most important of these needs are mainly educational.

Ursua (1969) found that one of the major problems facing foreign students in the United States is securing good academic advice. The national

survey conducted by Lee (1981) supports this finding and sheds more light on the actual needs of foreign students in this area. Lee found that foreign students want an academic advisor assigned to them before their arrival in the United States. They want to share with their academic advisors the responsibility for planning the degree program; and they want to receive credit for work done at home. Their needs in terms of the relationship they desire with an academic advisor are straightforward. They want advisors who are available and willing to give them time, and they want advisors who have had international experience (p. 39).

Foreign students need both good academic advice and good personal advice to achieve their educational objectives in the United States. Spaulding and Flack (1976) have asserted that many faculty consider dealing with foreign students a special chore and a problem due both to language difficulties and to the advisor's lack of understanding of the student's culture. If this is so, then a concerted effort must be made among all those who deal with foreign students to communicate with each other and to work as a team to meet the special needs of these students. The core of this team should be made up of the academic advisor and the foreign student advisor.

A National Association for Foreign Student Affairs (NAFSA) publication entitled An Inquiry into Departmental Policies and Practices in Relation to the Graduate Education of Foreign Students (1972) indicates that academic departments and the foreign student advisor's office cooperate on almost all nonacademic problems and matters of general student welfare. In some instances, consultation on academic concerns

is part of this cooperative relationship between foreign student advisors and departmental administrators. It is questioned, however, if faculty members were aware of this cooperation.

Spaulding and Flack (1976) found through their extensive review of the literature that "few studies related to or involved academic departments in such a way as to acquaint academic staff with the learning needs of foreign students or to suggest solutions to difficulties stemming from either personal or academic background differences or from language difficulties" (p. 43).

Foreign students appear to find counseling and orientation procedures inadequate, particularly the lack of coordination between academic advisors and foreign student advisors. Spaulding and Flack (1976) recommend that there be closer cooperation between the foreign student advisor and the academic advisor to better guide the foreign student through the entire sojourn in the United States. A hypothesis posed by Spaulding and Flack and supported by their review of the literature was that there are few organized efforts on campuses to work with faculty in developing skills and understanding necessary to work effectively with foreign students.

Walton (1971) in her review of the literature on foreign graduate students in the United States found that university policy planners and administrators preferred to enroll foreign graduate students over foreign undergraduates. According to Walton, they did this because they felt that graduate students would contribute more to economic growth in the home country, that they would be less likely to remain in the United

States, and that foreign students would be better off completing the education offered at home before going abroad.

Institutions that admit foreign students, whether it be at the undergraduate level, graduate level, or both, must develop a rationale to support the presence of these students on the campus. This is the catalyst which stimulates administrators, faculty, and staff to work together to support the institution's commitment to international education, and to meet the educational and personal needs of all the foreign students on that campus. The key to meeting the goals of the student, the institution, the home government, home country employers, and the United States government is effective communication (Lee, 1981).

Advising and Counseling Foreign Students in the United States

Advising is helping. It is the process of enabling a person to grow in the direction he or she chooses; it is both a science and an art (Brammer, 1973). The key to a successful helping/advising situation is establishing a trusting relationship. University faculty members as advisors are in a position to contribute significantly to the creation of a positive learning environment for students. Basic to this is an attitude of genuine concern for the development of the student, coupled with a maturity that fosters community rather than competition with and among students (Barger and Mayo-Chamberlain, 1983).

Most students regard academic advising and counseling about academic careers as very important services. Poor advising is often cause for dropping out or transferring (Palmer, 1984). McLaughlin and Starr (1982)

found the literature on academic advising to be highly critical of traditional advising systems. However, two principles have been maintained consistently: faculty members are the core of effective academic advising, and advising is an important element to student success and satisfaction in college. Katz and Hartnett (1976) report that graduate student relations with members of the faculty are regarded by most graduate students as the single most important aspect of the quality of their graduate experience; unfortunately, many also report that it is the single most disappointing aspect of their graduate experience.

Winston et al. (1983) are advocates of the concept of developmental advising which stresses the education of the whole student. They call for an integrated approach in educating students, including both the personality and the intellect. They believe this approach is possible through the academic advising process and actualized through a unified effort among faculty, students, student affairs staff, and other institutional administrators. In other words, academic advising offers a means to bring the expertise and resources of faculty and student affairs staff members to full impact on the student.

This approach to academic advising puts the faculty member squarely in a position where he or she has had little or no training and, perhaps worse, has little or no interest. To complicate matters further, Weill (1982) contends that advising foreign students requires a different process involving considerably more time than is normally required to advise United States students. He goes on to state that since individual foreign students possess various backgrounds, advising, therefore, must

be highly individualized. Emphasizing still other problems to be addressed, Goodwin and Nacht (1983) state that the unwillingness on the part of faculty to commit extra time and effort, fear of the unknown (culture, academic background, etc.), lack of professional or intellectual incentives, and the foreign students' different attitudes toward education and learning all contribute to faculty antipathy in this area.

Academic advising will only improve when institutions of higher learning accord it the status it deserves. Faculty need to receive training and recognition for their advising efforts. Periodic evaluation is necessary. Responsibilities of all those involved in advising must be clearly defined, and their efforts must be coordinated (McLaughlin and Starr, 1982). Advising is not a single person effort. A full team of faculty and staff who have full support of the administration is necessary for advising to be effective (Peters, 1977). Altscher (1976) believes that there is a need for special counseling for foreign students to solve their unique problems. Althen (1981) maintains that effective cross-cultural advising requires an awareness of the influences of culture on the way people think, feel, and act, and that advisors must be concerned with their own attitudes, knowledge, and skills.

The NAFSA publication, Academic and Personal Advising (1966), states that the overall function of the foreign student advisor is to act as the focal point which coordinates, organizes, and integrates diversified areas of competence and responsibility on a campus to respond to the needs and problems of foreign students. The foreign student advisor and the academic advisor need to be in communication with each other to share

information and to support each other. The academic advisor needs to be aware of the fact that the foreign student advisor can and will function as a liaison between the advisor and the student. Also, the foreign student advisor has access to a team of people ready to cope with problems that may interfere with the student's academic success.

A foreign student's academic advisor may be the most important and influential person he/she encounters in the United States. The advisor certainly is the academic focal point. In addition, the advisor may also be the student's closest identification point, especially at the graduate level. In other words, the advisor may be the first to know of both academic and personal problems. This is why most foreign student advisors have some involvement in the process of giving academic advice. Higbee (1961) states that good academic advising is fundamental to a foreign student's overall adjustment. Therefore, it is imperative that the academic advisor and the foreign student advisor serve as the nucleus of a team that assists foreign students meet their educational and personal objectives for study in the United States.

Baron (1975) wrote that the primary goal in the relationship between the foreign student advisor and the academic advisor is for each to understand fully the unique contribution that the other can make in helping foreign students. Baron goes on to say that there is every reason for the two to work together successfully as long as the faculty member perceives the foreign student advisor as an interpreter of the special difficulties foreign students face, and not as an interloper into the faculty member's area of expertise.

A study conducted by Benson (1968) indicated that faculty members believed an essential function of foreign student advisors was to develop an academic guidance program for foreign students which would provide an introduction to the academic environment, provide for periodic review of academic progress, and provide advice regarding academic concerns. This, he says, provides the foreign student advisor with an opportunity to assist the faculty advisor in providing the best advice possible to the foreign student.

Foreign student advisors should work toward the improvement of academic advising for foreign students. They need to be concerned with what faculty think and with what faculty need regarding academic advising of foreign students. Foreign student advisors should make special efforts to focus attention, time, and resources on those aspects of their job which are closely related to the academic goals and concerns of foreign students (Benson, 1968).

Miller (1968) further stresses this point. He believes that the functions of the foreign student advisor should be defined in terms of the academic objectives of foreign students. His study revealed that the area of academic advising is one of the weakest of the foreign student advisor. He encourages further research in this area, and he would like to see foreign student advisors become international educators placing greater emphasis on scholarly understanding.

The foreign student advisor's position requires unique skills. Probably the most important skill is the ability to understand the foreign student as a whole person, a person who relates to other people and who

encounters problems. Mastering the talent of being truly helpful to the foreign student in the full context of relationships and problems is the most difficult of foreign student advising tasks (Baron, 1975).

Impact on and Response of United States Institutions that Enroll Foreign Students

For almost forty years, the educational resources of the United States have attracted foreign students in constantly growing numbers. This tremendous increase in foreign student enrollment over the years has placed new demands on United States colleges and universities to meet the unique needs of this group. Jenkins (1980) believes that the steady growth of students from abroad has been both a source of satisfaction and a cause for concern on American campuses. The concerns involve questions of finance, the relevance of the education foreign students (especially those from developing countries) receive in the United States, the end results of the education, and the impact on the institution itself. The impact, according to a NAFSA publication entitled An Inquiry into Departmental Policies and Practices in Relation to the Graduate Education of Foreign Students (1972), stems from the fact that foreign students bring different sets of expectations with them; and it appears that departments have not paid much attention to these differences. This report further indicates that faculty often are not aware of the complexities of cross-cultural education, and may not understand the emotionalism and dynamics of cross-cultural learning.

The impact is obvious; however, the response of United States universities and colleges concerning the admission, education, and social accommodations of foreign students vary from the comprehensive to the nonexistent, and programs for these students range from the carefully designed and well administered to the ad hoc and expedient (Berendzen, 1982). Institutions that admit foreign students assume certain responsibilities and obligations that cannot in good conscience be evaded. Sound policies must be formulated to guide administrators, faculty, staff, and students toward meeting their mutual educational goals.

The role of the faculty member, as both teacher and advisor, cannot be overemphasized as the prime mover for successful implementation and achievement of the institution's goals in international education. Faculty support and participation are vital to creating a receptive climate for foreign students (Hood and Reardon-Anderson, 1979). Therefore, academic advising is a major responsibility of the faculty and an extremely important need of foreign students to which institutions must respond. Academic advising is at the heart of a school's ability to give the foreign student the best possible education.

Many studies and articles support the idea that academic advising is the key to a successful educational experience for foreign students in the United States. The academic advisor of a foreign student has to be willing to invest more time and effort than is normally required to advise United States students. The College, the University, and the Foreign Student (NAFSA, 1974) recommends that the academic advisor

become familiar with the foreign student's culture and academic background; that there be regular contact between advisor and advisee; that the advisor become acquainted with work opportunities in the student's home country; and that the advisor work closely with the foreign student advisor so they can pool their knowledge in order to best advise the student.

Curriculum flexibility is often discussed in the literature as a way for the foreign student to get an education relevant to his/her needs in the home country. Putnam (1965) stresses that this is not done at the expense of compromising standards, but rather to recognize the fact that the academic needs of foreign students are different from the academic needs of United States students. Baron (1979) through his research found that 48 percent of the faculty make no changes in curriculum on behalf of foreign graduate students from developing nations, but, mostly in the social sciences and professional schools, 37 percent made changes in course content. The feeling among many faculty in Baron's survey was that a good graduate program already has sufficient flexibility to meet the needs of any individual student. University, Government, and the Foreign Graduate Student (College Entrance Examination Board, 1969) supports this notion and further states that the development of curricula tailored made for foreign students is generally infeasible and that careful course planning with competent academic advice can help substantially in meeting the academic needs of foreign students.

It should also be stressed that foreign students themselves play an important role in obtaining good academic advice. Shrestha (1983) states

that students who are sponsored by their home governments, the United States government, or by their families must take the initiative to increase their major professor's cross-cultural awareness and sensitivity. This is done by informing the advisor of the problems faced by the home country in a particular area and by indicating the type of education and skills needed back home. Faculty with experience advising foreign students recommend that all major professors of foreign students early on ask students explicit questions regarding their special needs and interests as they relate to their future professional careers in the home country (Baron, 1979).

Standards and Responsibilities in International Educational Exchange (NAFSA, 1979) states the need for faculty to develop an effective advising relationship by treating all students with patience, understanding, and respect, and by interpreting academic practices and regulations of the institution. This publication also outlines the responsibilities of the foreign student advisor in helping the faculty advisor and the student develop an effective advising relationship. These responsibilities include maintaining close liaison with faculty and staff, interpreting the student's background and needs, and discussing appropriateness of academic programs with foreign students and faculty advisors. Goodwin and Nacht (1983) found through their research that the foreign student advisor is a well-informed resource who should be used as a catalyst, a source of information, and an accumulator of campus wisdom far more frequently than is presently the case on most campuses. A quote from An Inquiry into Departmental Policies and Practices in Relation to the

Graduate Education of Foreign Students (NASFA, 1972) provides an appropriate concluding statement for this section:

The education of the foreign graduate student is, or should be, a team effort - an effort in which the faculty, administration, and, of course, the students themselves fully participate. In this process, the foreign student advisor should play a central role as a professional who is skilled in the dynamics of international educational exchange (pp. 34 & 35).

Summary

This review of literature reveals a number of insights on the education of foreign students in the United States. First, foreign students will continue to come in increasing numbers to institutions of higher learning in this country. Second, they bring with them special needs that can best be met by a team of campus personnel with the academic advisor and the foreign student advisor as the nucleus of this team. Third, research needs to be done and programs should be developed to meet the needs of faculty, thereby enabling them to work more effectively with foreign students. And fourth, the foreign student advisor serves not only as the focal point, but also as the catalyst for improved academic advising of foreign students.

METHODS AND PROCEDURES

This chapter describes the methods and procedures utilized in the study. The four major subheadings in this section are: description of sample and population, research procedures, instrumentation, and procedure for analysis of data.

Description of Sample and Population

The population for this study included all 1,138 full and associate members of the graduate faculty at Iowa State University who represent sixty-three departments and programs. A systematic sample of 600 graduate faculty members was surveyed by means of a mail questionnaire. Since the total number in the population (N) divided by the sample size (n) does not equal two, i.e., $N/n \neq 2$, it was necessary to go to the table of random numbers to determine the starting point of the sample. Once the starting point was determined, every other graduate faculty member on the list provided by the Graduate College was selected for the sample. This sampling technique was utilized instead of a simple random sample because the population list was in random order (alphabetical by department).

Members of the graduate faculty have a dual role of teaching and research. Also, through a program of study committee system, they supervise individual programs of study which are designed to meet the specific needs of each graduate student. According to the 1983 Graduate Faculty Handbook, the graduate faculty includes the president of the university,

the vice-president for academic affairs, the dean and associate deans of the Graduate College, the deans and the associate deans of the university's seven colleges, and the directors and associate directors of research institutes as full members. Departmental executive officers and other members of the general faculty may be elected to associate or full membership in the graduate faculty in recognition of their accomplishments in their fields of study. All graduate courses offered for major or minor credit are taught by graduate faculty members or graduate lecturers.

Research Procedures

The research methodology employed in this study is commonly referred to as descriptive. More specifically, it is termed survey research which is a distinctive research methodology that owes much of its recent development to the field of sociology (Borg and Gall, 1979). Surveys provide a method of systematically collecting data, and it is well known that a substantial proportion of the studies conducted in the field of education involve surveys.

As was mentioned in the previous section, data were collected by means of a questionnaire. The questionnaire, with a cover letter, was sent through campus mail to six-hundred graduate faculty members on the Iowa State University campus on January 18, 1984. A follow-up letter was sent after ten days to all of those who had not yet returned the survey instrument. Fourteen days later, a second letter and another questionnaire were mailed to those graduate faculty members who had not

yet responded. A number of the faculty members responded by returning blank questionnaires because they were no longer involved in advising graduate students, or they were full-time administrators who felt they had no basis upon which to respond. Copies of the cover letter and the two follow-up letters are provided in Appendix A.

Instrumentation

A seven-part survey instrument was developed by the researcher to assess the needs and attitudes of faculty advisors in advising foreign graduate students from developing nations. Part I of the instrument consisted of 28 items and was designed to compare the importance faculty advisors, as major professors, placed on having certain knowledge about foreign graduate students, and on having the same information about United States graduate students. For example, faculty advisors were asked to rate on a scale of one to seven (one being "very unimportant" and seven being "very important") the importance of knowing a foreign student's career goals. Advisors then noted the importance of knowing a United States student's career goals on the same kind of scale.

Part II of the survey instrument consisted of 26 items and was designed to assess the importance faculty advisors, as major professors, placed on having certain attitudes and characteristics when advising foreign graduate students as compared with advising United States graduate students. For example, faculty advisors were asked to rate on a scale of one to seven (one being "very unimportant" and seven being "very important") the importance of relating a foreign student's

studies and research to his or her future needs. Then, on a similar scale, they rated the importance of being able to do this for United States students at the graduate level.

Part III consisted of eight items which were designed to assess the importance faculty advisors, as major professors, placed on having certain experiences which would enable them to better advise foreign graduate students. Again, the scale used was a seven point response scale with one being "very unimportant" and seven being "very important." This part was different from the previous two parts in that it was not comparing the importance of having certain experiences in advising foreign graduate students with the importance of having those same experiences in advising United States graduate students. It was concerned only with the importance of certain experiences enabling faculty advisors to better advise foreign graduate students.

Part IV of the instrument contained only two items. The first asked faculty advisors to indicate their level of satisfaction in advising United States graduate students. The second asked them to indicate their level of satisfaction in advising foreign graduate students from developing nations. A seven point response scale was used with the number one indicating "very dissatisfied" and the number seven indicating "very satisfied."

Part V of the survey instrument asked faculty advisors to indicate their level of agreement with eight statements concerning the academic advising of foreign graduate students from developing nations. The

seven point response scale ranged from strongly disagree (the number one) to strongly agree (the number seven).

Part VI consisted of one item only and sought to identify the type of advising system preferred most by graduate faculty advisors.

The last part of the instrument gathered demographic data and situational data on the respondents.

Instrument development

Items for the instrument (Parts I-VI) were identified and compiled through twelve individual interviews conducted by the researcher. Interviewed were six graduate faculty members with experience in advising foreign graduate students, and six foreign students from developing nations who had been graduate students for at least two years at Iowa State University.

These interviews served as the basis for constructing the faculty needs assessment questionnaire by verifying the assumption that faculty advisors do have special needs in advising foreign graduate students from developing nations. The interviews also helped to develop and to clarify key problematic areas which were researched.

The next step in developing the survey instrument was a pretest. The instrument was administered to ten faculty advisors who were selected by the researcher and who represented a wide range of experience in advising foreign graduate students. The objectives of the pretest were:

1. to insure that important needs of faculty advisors were not overlooked, and
2. to detect language or technical problems respondents might face in completing the survey.

The final version of the instrument incorporated the comments and ideas generated through the pretest. As a result of the pretest, the wording of certain items was changed, section headings were added, and the definition of developing nations was reworked and placed in a separate section above the directions in Parts I, II, and III. In general, the pretest significantly clarified the entire instrument which is contained in Appendix B.

Procedure for Analysis of Data

Data gathered from the survey instrument were analyzed by utilizing subprograms from the Statistical Package for the Social Sciences (SPSSX).

The data were first submitted to a frequency count to control for coding errors and to determine how the subjects responded to certain questionnaire items from which the researcher formulated specific hypotheses (numbers one through four).

Next the SPSSX subprogram T-TEST (CORRELATED SAMPLES) was used to determine if there is a significant difference between the needs of faculty advisors of foreign graduate students from developing nations and faculty advisors of United States graduate students in terms of specific variables (hypotheses numbers five through eight).

SPSSX subprogram PEARSON CORR was utilized to compare relationships between the following variables: ADSAT2 (a faculty member's satisfaction

advising foreign graduate students), COLL (a set of dummy variables representing the Iowa State University academic colleges with which the faculty member is associated), RANK (faculty rank), SEX (male or female), YEARS (number of years a faculty member has been on the graduate faculty), FULL (status of faculty member on the graduate faculty), GSNOMP (number of graduate students a faculty member has advised as major professor at Iowa State University), PCFSMP (percentage of foreign students a faculty member has advised as major professor), NOCOMS (number of graduate committees a faculty member has served on at Iowa State University), PCFSCOM (percentage of committees a faculty member has served on for foreign students from developing nations), PE1 (a faculty advisor's cumulative professional experience in developing nations), PE2 (a faculty member's cumulative professional experience in developed nations), and MP1 (the number of foreign students a faculty member has advised as major professor at institutions other than Iowa State University).

This procedure laid the groundwork for running the SPSSX subprogram REGRESSION (STEPWISE LINEAR) which was done to describe and predict the relationship between the dependent variable ADSAT2 (level of satisfaction in advising foreign graduate students from developing nations) and the following independent variables: ADSAT1 (level of satisfaction in advising United States graduate students), GSNOMP (number of graduate students a faculty member has advised as major professor at Iowa State University), PCFSMP (percentage of foreign students a faculty member has advised as major professor), NOCOMS (number of graduate committees a faculty member has served on at Iowa State University), PCFSCOM (percentage of committees

a faculty member has served on for foreign students from developing nations), and F1 (full or associate member of the graduate faculty). These SPSSX subprograms were selected as the best means to test hypothesis number nine in this research project.

FINDINGS AND DISCUSSION

The purpose of this study was to assess the needs of graduate faculty advisors at Iowa State University in advising foreign graduate students from developing nations. To achieve this goal, a systematic sample of 600 faculty members was surveyed by means of a mail questionnaire. A response rate of 73 percent was attained (438 questionnaires were returned), but only 63.2 percent (389) were useable. Forty-nine survey instruments were returned blank. The most often stated reasons for not completing the questionnaire were that the advisors had never advised a foreign graduate student from a developing nation, or that it had been many years since they had advised a foreign student.

The following tables provide information on the respondents. It should be noted that every respondent did not answer each survey item in the biographical information section of the questionnaire. As a result, the percentages presented in tables 2, 4, 5, 6, 7, 8, 9, 10, 11, and 12 do not total to 100 percent.

Table 1 summarizes the distribution of faculty respondents by their college affiliation at Iowa State University. It should be noted that 75.8 percent of the respondents were from three colleges: sciences and humanities - 33.4 percent, agriculture - 25.4 percent, and engineering - 17.0 percent. One possible explanation for this is that the vast majority of foreign graduate students at Iowa State University (80 percent) are enrolled in these three colleges according to a 1983 Graduate College report. Therefore, the following report of the

Table 1. Response rate of faculty members by college

<u>College</u>	<u>Frequency</u>	<u>Percent</u>
Agriculture	99	25.4%
Design	10	2.6%
Education	27	6.9%
Engineering	66	17.0%
Home Economics	22	5.7%
Sciences and Humanities	130	33.4%
Veterinary Medicine	<u>35</u>	<u>9.0%</u>
TOTAL	389	100.0%

Table 2. Distribution of respondents by rank

<u>Rank</u>	<u>Frequency</u>	<u>Percent</u>
Assistant Professor	48	12.3%
Associate Professor	111	28.5%
Professor	<u>229</u>	<u>58.9%</u>
TOTAL	388	99.7%

Table 3. Distribution of respondents by sex

<u>Sex</u>	<u>Frequency</u>	<u>Percent</u>
Male	346	88.9%
Female	<u>43</u>	<u>11.1%</u>
TOTAL	389	100.0%

Table 4. Distribution of respondents by number of years on the graduate faculty

<u>Years</u>	<u>Frequency</u>	<u>Percent</u>
1-5	87	22.4%
6-10	92	23.7%
11-15	68	17.5%
16-20	75	19.3%
21-25	30	7.7%
>25	<u>33</u>	<u>8.5%</u>
TOTAL	385	99.0%

Table 5. Distribution of respondents by membership on the graduate faculty

	<u>Frequency</u>	<u>Percent</u>
Full Member	241	62.0%
Associate Member	<u>146</u>	<u>37.5%</u>
TOTAL	387	99.5%

Table 6. Distribution of respondents by number of graduate students advised as major professor at Iowa State University

<u>Number</u>	<u>Frequency</u>	<u>Percent</u>
None	18	4.6%
1-5	114	29.3%
6-10	79	20.3%
11-20	88	23.0%
21-30	47	12.3%
>30	<u>37</u>	<u>9.7%</u>
TOTAL	383	98.5%

Table 7. Distribution of respondents by percentage of foreign students advised as major professor

<u>Percentage</u>	<u>Frequency</u>	<u>Percent</u>
0-10%	158	40.6%
11-20%	79	20.3%
21-30%	45	11.6%
31-45%	37	9.5%
46-60%	31	8.0%
>60%	<u>26</u>	<u>6.7%</u>
TOTAL	376	96.7%

Table 8. Distribution of respondents by number of graduate committees served on at Iowa State University

<u>Committees</u>	<u>Frequency</u>	<u>Percent</u>
<10	89	22.9%
10-19	76	19.5%
20-29	51	13.1%
30-39	51	13.1%
40-49	40	10.3%
>50	<u>76</u>	<u>19.5%</u>
TOTAL	383	98.5%

Table 9. Distribution of respondents by percentage of foreign student committees that they have been members of

<u>Percentage</u>	<u>Frequency</u>	<u>Percent</u>
0-10%	132	33.9%
11-20%	94	24.2%
21-30%	59	15.2%
31-45%	47	12.1%
46-60%	35	9.0%
>60%	<u>16</u>	<u>4.1%</u>
TOTAL	383	98.5%

Table 10. Distribution of respondents by amount of professional experience in developing nations

<u>Experience</u>	<u>Frequency</u>	<u>Percent</u>
None	204	52.4%
0-4 Weeks	51	13.1%
1-3 Months	39	10.0%
3-12 Months	37	9.5%
1-5 Years	31	8.0%
>5 Years	<u>24</u>	<u>6.2%</u>
TOTAL	386	99.2%

Table 11. Distribution of respondents by amount of professional experience in developed nations

<u>Experience</u>	<u>Frequency</u>	<u>Percent</u>
None	109	28.0%
0-4 Weeks	60	15.4%
1-3 Months	48	12.3%
3-12 Months	45	11.6%
1-4 Years	58	14.9%
>5 Years	<u>59</u>	<u>15.2%</u>
TOTAL	379	97.4%

Table 12. Distribution of respondents as advisors of foreign students at institutions other than Iowa State University

<u>Other Advising</u>	<u>Frequency</u>	<u>Percent</u>
Yes	53	13.6%
No	<u>333</u>	<u>85.6%</u>
TOTAL	386	99.2%

findings and the discussion largely represent the needs of Iowa State University graduate faculty advisors in the natural sciences, agriculture, and engineering who were predominantly male and professors with full membership on the graduate faculty.

The remainder of this chapter is organized into nine sections, one for each hypothesis. At the beginning of each section the hypothesis is restated. Then, except for hypothesis four, a table is used to summarize the data. This is followed by a discussion of the results.

Hypothesis 1

Faculty advisors will perceive that the following experiences would be helpful in advising foreign graduate students:

- a. travel in developing countries
- b. professional experience in developing countries
- c. good working relationship with the foreign student advisor.

Hypothesis 1a

Table 13 summarizes the responses of those surveyed regarding the experience of travel in developing nations as being perceived as helpful in advising foreign graduate students.

Table 13. Summary of faculty advisors' responses regarding the importance of travel in developing nations

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Very Unimportant	1	28	7.4%
Quite Unimportant	2	34	9.0%
Somewhat Unimportant	3	30	7.9%
Neither Important Nor Unimportant	4	69	18.2%
Somewhat Important	5	119	31.4%
Quite Important	6	58	15.3%
Very Important	7	<u>41</u>	<u>10.8%</u>
TOTAL RESPONDING		379	100.0%
Mean	4.464		
Standard Deviation	1.672		
Standard Error	.0859		
Z-Score	5.403		
α Level	.05		

Respondents perceive that travel in developing nations is beneficial to them in terms of advising foreign graduate students. The Z-score of 5.403 is significant at the .05 level. The mean score of 4.464 deviates significantly from the hypothesized population mean of 4.0.¹

Travel in developing nations provides firsthand experience in cultures very different from that of the United States. Venturing outside of the capital city and remaining there for an extended period of time can be both a beneficial and sensitizing experience for faculty members who advise foreign students. This type of experience enables faculty advisors to better understand the needs of students from developing nations because they have observed the environment their students will return to and work in as professionals. Faculty advisors have indicated that this is an important experience for them because the knowledge they gain allows them to ask relevant questions of their advisees, and places in proper perspective the answers to those questions. This ability provides an appropriate framework from which to guide the student's course work selection and research project.

Hypothesis 1b

Faculty members selected for the survey were asked if professional experience in developing nations would be helpful to them in advising foreign graduate students. Their responses are summarized in the following table.

¹For statistical testing purposes in hypotheses one, two, and three, the population mean of four was selected as it is the neutral point on the seven point response scale; and the null hypothesis states that the sample mean is equal to four.

Table 14. Summary of faculty advisors' responses regarding the importance of professional experience in developing nations

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Very Unimportant	1	31	8.2%
Quite Unimportant	2	36	9.5%
Somewhat Unimportant	3	29	7.6%
Neither Important Nor Unimportant	4	90	23.7%
Somewhat Important	5	111	29.2%
Quite Important	6	54	14.2%
Very Important	7	<u>29</u>	<u>7.6%</u>
TOTAL RESPONDING		380	100.0%
Mean	4.295		
Standard Deviation	1.630		
Standard Error	.0827		
Z-score	3.712		
α Level	.05		

Respondents believe that professional experience in developing nations is helpful to them in advising foreign graduate students. The Z-score of 3.712 is significant at the .05 level. The mean score of 4.295 deviates significantly from the hypothesized population mean of 4.0.

Faculty advisors perceive that professional experience in developing nations is beneficial to them in terms of advising students from those countries; but they perceive it to be less of a need than travel in developing nations. Perhaps they feel that travel in developing nations is more feasible than actual professional experience there, and that the travel is as useful in terms of sensitizing themselves to the culture and needs of foreign students as the professional work experience. Therefore, foreign graduate students should be informed that faculty with travel experience in developing nations believe that they can advise them as well as faculty with professional experience in those countries.

Hypothesis 1c

This hypothesis deals with the relationship between the academic advisor and the foreign student advisor. Faculty advisors were asked to indicate how important it was for them to have a good working relationship with the foreign student advisor in terms of helping them to effectively advise foreign graduate students. Table 15 summarizes their responses.

Those surveyed perceive that having a good working relationship with the foreign student advisor is helpful to them in advising foreign graduate students from developing nations. The Z-score of 9.848 is significant at the .05 level. The mean score of 4.746 deviates significantly from the hypothesized population mean of 4.0.

Table 15. Summary of faculty advisors' responses regarding the importance of having a good working relationship with the foreign student advisor

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Very Unimportant	1	19	5.1%
Quite Unimportant	2	16	4.3%
Somewhat Unimportant	3	14	3.7%
Neither Important Nor Unimportant	4	99	26.5%
Somewhat Important	5	103	27.5%
Quite Important	6	90	24.1%
Very Important	7	<u>33</u>	<u>8.8%</u>
TOTAL RESPONDING		374	100.0%
Mean	4.746		
Standard Deviation	1.465		
Standard Error	.0757		
Z-score	9.848		
α Level	.05		

This finding supports earlier research conducted by Baron (1975) which found that the foreign student advisor has a role to play in working with faculty to improve the academic advising of foreign graduate students. The Iowa State University faculty have shown support for this concept, and have indicated that more than travel and professional experience in developing nations, they can become more effective in

advising foreign graduate students by establishing a good working relationship with the campus foreign student advisor.

Hypothesis 2

Faculty advisors will perceive that information and programs on the following would assist them to more effectively advise foreign students:

- a. role and function of the foreign student advisor
- b. orientation programs for foreign students
- c. printed information on advising foreign graduate students
- d. orientation sessions for faculty on advising foreign graduate students.

Hypothesis 2a

The following table (number 16) reflects the responses of those surveyed regarding their perception that information and programs on the role and function of the foreign student advisor would assist them to more effectively advise foreign students.

Faculty advisors strongly believe that information and programs on the role and function of the foreign student advisor would assist them to more effectively advise foreign students. The Z-score of 11.099 is significant at the .05 level. The mean score of 4.798 deviates significantly from the hypothesized population mean of 4.0.

Table 16. Summary of faculty advisors' responses regarding the importance of information on the role and function of the foreign student advisor

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Strongly Disagree	1	12	3.2%
Disagree	2	17	4.5%
Somewhat Disagree	3	21	5.6%
Neither Agree Nor Disagree	4	93	24.7%
Somewhat Agree	5	107	28.5%
Agree	6	94	25.0%
Strongly Agree	7	<u>32</u>	<u>8.5%</u>
TOTAL RESPONDING		376	100.0%
Mean	4.798		
Standard Deviation	1.394		
Standard Error	.0719		
Z-score	11.099		
α Level	.05		

This finding is highly supportive of hypothesis 1c. It further demonstrates a willingness on the part of faculty members to learn about the role and function of the foreign student advisor in order to provide their foreign advisees with the best academic advice possible. A possible explanation for this finding is that academic advisors realize that advising foreign graduate students is more complicated and time consuming than

advising United States graduate students. Assistance, they feel, is needed from other professionals on campus who can make their job less difficult in this area, and perhaps even make it a satisfying experience. Foreign student advisors on the Iowa State University campus should seize the opportunity to provide faculty with information and programs on what they can do for them, and begin to strengthen ties with academic advisors to give foreign students the best opportunity for academic success.

Hypothesis 2b

Lee (1981) found that most institutions of higher learning do very little to orient new foreign students to life and study in the United States. This, however, is not the case at Iowa State University. Prior to each new academic term, a week-long orientation program is conducted for newly arrived foreign students. Faculty advisors surveyed were asked to indicate if knowledge about the extent and content of this and other orientation programs would assist them to more effectively advise these students. Table 17 provides a summary of the results.

The findings reveal that faculty advisors do not believe that information and programs on foreign student orientation sessions would assist them to more effectively advise these students. The Z-score of 1.768 is not significant at the .05 level, and the mean score of 4.151 does not deviate significantly from the hypothesized population mean of 4.0.

Table 17. Summary of faculty advisors' responses regarding the importance of information about orientation programs for foreign students

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Very Unimportant	1	48	12.7%
Quite Unimportant	2	25	6.6%
Somewhat Unimportant	3	22	5.8%
Neither Important Nor Unimportant	4	101	26.7%
Somewhat Important	5	110	29.1%
Quite Important	6	53	14.0%
Very Important	7	<u>19</u>	<u>5.0%</u>
TOTAL RESPONDING		378	100.0%
Mean	4.151		
Standard Deviation	1.660		
Standard Error	.0854		
Z-score	1.768		
α Level	.05		

Apparently, faculty members regard initial orientation programs for foreign students as general introduction programs to the university and the community which have very little, if any, impact on their role as academic advisor. Faculty advisors may feel differently toward this if they were involved in these orientation programs and could share general information in group settings. This would reduce the amount of time

they would have to spend initially with each new advisee. Faculty participation in foreign student orientation programs would be an opportunity for the faculty advisor and the foreign student advisor to work as partners from the beginning of a student's academic career.

Hypothesis 2c

Academic advisors were asked if having printed information on advising foreign graduate students would assist them to more effectively advise students from developing nations. Their responses are summarized in table 18.

Respondents perceived that having printed information on advising foreign graduate students would assist them to more effectively advise these students. The Z-score of 8.967 is significant at the .05 level. The mean score of 4.651 deviates significantly from the hypothesized population mean of 4.0.

This indicates that faculty advisors are interested in improving their knowledge and skills in this area, and that the printed word is an appropriate means to reach them. In response to this need, foreign student advisors, and perhaps even a team of professionals on a campus which may include faculty members, should pool their knowledge and list ideas and suggestions that would assist faculty members in the advising process. A set of materials could be developed which would range from a simple checklist of questions to ask a new foreign advisee to a brochure which focuses on the educational needs and expectations of foreign students from developing nations. The advantage to having a variety of printed materials available would be that depending on the experience of a faculty

Table 18. Summary of faculty advisors' responses regarding the importance of printed information on advising foreign graduate students

<u>Value</u> <u>Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Strongly Disagree	1	13	3.4%
Disagree	2	30	7.9%
Somewhat Disagree	3	12	3.2%
Neither Agree Nor Disagree	4	93	24.6%
Somewhat Agree	5	129	34.1%
Agree	6	75	19.8%
Strongly Agree	7	<u>26</u>	<u>6.9%</u>
TOTAL RESPONDING		378	100.0%
Mean	4.651		
Standard Deviation	1.412		
Standard Error	.0726		
Z-score	8.967		
α Level	.05		

member in this area, the particular needs of an advisor could be better addressed. Benson (1968) and Miller (1968) concluded that foreign student advisors should be concerned with the needs of faculty in terms of advising foreign students, and that an aspect of the foreign student advisor's job that should be developed and emphasized is that of international educator. Preparing printed materials for faculty advisors would be an

excellent opportunity for foreign student advisors to assume the responsibility that Benson and Miller found to be both necessary and appropriate through their research at Michigan State University.

Hypothesis 2d

Table 19 summarizes the responses of those surveyed concerning their perception of orientation programs as a means to help them more effectively advise foreign graduate students.

Faculty advisors perceive that orientation sessions on advising foreign graduate students would assist them to more effectively advise these students. The Z-score of 5.695 is significant at the .05 level, and the mean score of 4.430 deviates significantly from the hypothesized population mean of 4.0.

Although the respondents felt that orientation sessions on advising foreign graduate students would be beneficial, academic advisors showed a preference for printed information on this topic. A possible explanation for this may be that printed material is available when it is needed, and that an orientation session may be held when interested individuals could not attend. Both means of orienting faculty to academic advising of foreign graduate students, covering the needs of the foreign student and the role and function of the foreign student advisor, should be considered and acted upon by foreign student advisors. Orientation sessions and printed information need to be developed to provide information to the faculty through the means they prefer to receive it. Spaulding and Flack (1976) found very few organized efforts to assist faculty in developing the skills and understanding necessary to work effectively with foreign

Table 19. Summary of faculty advisors' responses regarding the importance of orientation programs to assist them in advising foreign students

<u>Value</u> <u>Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Strongly Disagree	1	17	4.5%
Disagree	2	35	9.2%
Somewhat Disagree	3	23	6.1%
Neither Agree Nor Disagree	4	107	28.2%
Somewhat Agree	5	109	28.8%
Agree	6	66	17.4%
Strongly Agree	7	<u>22</u>	<u>5.8%</u>
TOTAL RESPONDING		379	100.0%
Mean	4.430		
Standard Deviation	1.470		
Standard Error	.0755		
Z-score	5.695		
α Level	.05		

students. They strongly recommended that efforts be made to provide orientation programs and printed information for faculty advisors to rectify this situation. This two-pronged approach of information dissemination would address the needs of the majority of the faculty at Iowa State University.

Hypothesis 3

Faculty advisors will indicate that foreign graduate students should be trained differently from United States graduate students.

Three items in the faculty survey questionnaire addressed this hypothesis. The first was:

- a. Foreign graduate students should receive the same classroom training as United States graduate students.

The following table summarizes the responses of those surveyed to this item.

Faculty advisors believe very strongly that foreign graduate students should receive the same classroom training as United States graduate students. The Z-score of 24.2313 is significant at the .05 level and the mean score of 5.655 deviates significantly from the hypothesized population mean of 4.0.

This finding supports the research conducted by Baron (1979) which found that 48 percent of the faculty surveyed made no changes in curriculum on behalf of foreign graduate students from developing nations. Faculty members apparently believe that the curricula are relevant to the needs of both the United States and foreign graduate students, and that there is no need to develop special or modified academic programs for foreign students. A possible explanation for this is that course work is the theoretical basis upon which all students need to build whether they are from a developed or a developing nation. A student's special needs and interests can then be met through additional course work and/or research projects.

Table 20. Summary of faculty advisors' responses concerning the classroom training of foreign graduate students

<u>Value</u> <u>Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Strongly Disagree	1	3	.8%
Disagree	2	8	2.1%
Somewhat Disagree	3	30	7.9%
Neither Agree Nor Disagree	4	17	4.5%
Somewhat Agree	5	68	17.9%
Agree	6	146	38.4%
Strongly Agree	7	<u>108</u>	<u>28.4%</u>
TOTAL RESPONDING		380	100.0%
Mean	5.655		
Standard Deviation	1.331		
Standard Error	.0683		
Z-score	24.2313		
α Level	.05		

The second item that addressed the issue of educational training was:

- b. research projects of foreign graduate students should be applicable to home country conditions.

The responses of those surveyed are summarized in table 21.

Table 21. Summary of faculty advisors' responses concerning the relevance of foreign students' research projects

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Strongly Disagree	1	14	3.7%
Disagree	2	26	6.8%
Somewhat Disagree	3	35	9.1%
Neither Agree Nor Disagree	4	81	21.1%
Somewhat Agree	5	103	26.9%
Agree	6	75	19.6%
Strongly Agree	7	<u>49</u>	<u>12.8%</u>
TOTAL RESPONDING		383	100.0%
Mean	4.708		
Standard Deviation	1.550		
Standard Error	.0792		
Z-score	8.9393		
α Level	.05		

Respondents indicated that the research projects of foreign graduate students should be relevant to home country conditions. The Z-score of 8.9393 is significant at the .05 level, and the mean of 4.708 deviates significantly from the hypothesized population mean of 4.0. Discussion of this finding will be combined with the discussion of the third item regarding the academic training of foreign graduate students which was:

- c. Research techniques used by foreign graduate students should be ones that can be used in the student's home country.

Table 22 summarizes the faculty advisors' responses to this statement.

Table 22. Summary of faculty advisors' responses regarding the relevance of research techniques used by foreign students

<u>Value Label</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
Strongly Disagree	1	14	3.7%
Disagree	2	24	6.3%
Somewhat Disagree	3	34	8.9%
Neither Agree Nor Disagree	4	64	16.8%
Somewhat Agree	5	112	29.3%
Agree	6	94	24.6%
Strongly Agree	7	<u>40</u>	<u>10.5%</u>
TOTAL RESPONDING		382	100.0%
Mean	4.775		
Standard Deviation	1.515		
Standard Error	.0775		
Z-score	10.00		
α Level	.05		

Faculty advisors feel that research techniques used by foreign graduate students should be ones that are applicable and useable in the student's home country. The Z-score of 10.0 is significant at the .05 level. The mean of 4.775 deviates significantly from the hypothesized population mean of 4.0.

Academic advisors believe that research is the flexible component of a student's program of study. Further, they believe that the theoretical or classroom training should be the same for all students, foreign and domestic alike. As a result, when foreign students choose a research project, they should explain to their major professors what they expect to do when they return home, and what the conditions are (especially the level of technological development) in the home country. Advisors have indicated a willingness to help foreign students design research projects relevant to the needs of the home country. They would also allow foreign students to use research techniques which can be utilized at home, even if those research techniques are not presently used in the United States.

In summary, faculty advisors at Iowa State University believe that foreign graduate students should receive the same basic classroom training as United States graduate students. They also believe that research projects offer the opportunity for students to address their special academic needs, and, that in conducting their research, students should employ techniques appropriate for use in their home countries.

Hypothesis 4

Faculty advisors will indicate a preference for a system of academic advising where a major professor is chosen after a certain amount of time with a temporary faculty advisor.

Nearly half (48.4 percent) of the 370 graduate faculty members who responded to this item preferred an academic advising system where students are appointed to a temporary academic advisor for some period of time before they choose a major professor. Slightly less than one-quarter of the respondents (24.6 percent) indicated a preference for a system in which all new foreign students had the same temporary advisor for a certain period of time before selecting a major professor. Twenty-seven percent felt that assigning a major professor at the beginning of a student's first term was the best system of advising to utilize.

These results indicate that there is no one advising system that would be satisfactory for all faculty members in every department due to the nature of the discipline, the research being done, the number of faculty members, and the number of students. However, if a department is considering changing its current academic advising system, the results of the survey have indicated that faculty advisors prefer students to work with someone temporarily in order for them to have time to learn about the department, get some course work completed, become acquainted with the faculty, and to choose a research topic relevant to their needs.

Hypothesis 5

In order to effectively advise graduate students, faculty advisors will perceive the need for more information about foreign graduate students than for United States graduate students in the following areas:

- a. cultural background
- b. academic background
- c. English language proficiency
- d. career goals
- e. job opportunities and the conditions in which students will work in the home country.

The findings of all five of these hypotheses included in hypothesis number five will be presented first, and then they will be discussed and summarized together.

Hypothesis 5a

On a seven point response scale, faculty advisors were asked to indicate how important it was for them as a major professor to have information about a foreign student's cultural background, i.e., cultural beliefs and values. They were then asked to indicate the importance of having this type of information about their United States graduate students. Table 22 summarizes their responses.

The null hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have more information about the foreign student's cultural background to effectively advise them. The T value of 9.25 with a probability of less than 0.001 indicates that there is a highly

Table 22. Summary of faculty advisors' responses regarding the importance of having information about their advisees' cultural background

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Cultural Background of Foreign Student	4.8794	1.506	0.078
Cultural Background of United States Student	4.4182	1.409	0.073
Number of Cases	373		
T Value	9.25		
2-tail Probability (p)	0.000		

significant difference between the needs of faculty advisors of foreign and United States students in terms of having more information about the foreign students cultural beliefs and values in order to effectively advise them. The null hypothesis, therefore, is rejected.

Hypothesis 5b

Those surveyed were asked to indicate the importance of knowing the academic background of the students that they advise as major professor, both foreign and domestic. The following table (number 23) provides a summary of their responses.

The null hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have more information about the academic background of the foreign students in order to effectively advise them. This null

Table 23. Summary of faculty advisors' responses regarding the importance of having information about their advisees' academic background

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Academic Background of Foreign Students	6.4005	0.953	0.048
Academic Background of United States Students	6.3359	0.911	0.046
Number of Cases	387		
T Value	1.99		
2-tailed Probability (p)	.047		

hypothesis is rejected because both the T value of 1.99 and the two-tailed probability of .047 indicate that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students in this area.

Hypothesis 5c

Being able to communicate well in all aspects of the English language is extremely important for graduate students. Recognizing the fact, however, that the language problems of foreign students tend to be more severe, often interfering with basic communication, faculty advisors were asked to indicate the importance of knowing the English language proficiency of their foreign and United States advisees in order to effectively advise them. Their responses are reported in the following table.

Table 24. Summary of faculty advisors' responses regarding the importance of having information on the English language proficiency of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
English Language Proficiency of Foreign Students	6.5104	1.020	0.052
English Language Proficiency of United States Students	5.6554	1.462	0.074
Number of Cases	386		
T Value	12.13		
2-tail Probability (p)	0.000		

In null form this hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have more information about the English language proficiency of the foreign students in order to effectively advise them. The T value of 12.13 with a probability of less than 0.001 indicates that there is a highly significant difference between the needs of faculty advisors of foreign and United States graduate students to have more information about the English proficiency of their foreign advisees to most effectively advise them. The null hypothesis, therefore, is rejected.

Hypothesis 5d

Respondents were asked to indicate the importance of knowing the career goals of the students, both foreign and domestic, that they advise as major professor in order to effectively advise them. Table 25 reveals their responses.

Table 25. Summary of faculty advisors' responses regarding the importance of knowing the career goals of their students

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Career Goals of Foreign Students	5.4987	1.211	0.061
Career Goals of United States Students	5.5861	1.178	0.060
Number of Cases	389		
T Value	- 2.41		
2-tail Probability (p)	0.017		

The null hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have more information about the career goals of the foreign students in order to effectively advise them. This null hypothesis is rejected because the T value of -2.41 and the 2-tail probability of 0.017 indicate that there is a significant difference between the needs of faculty advisors of both United States and foreign graduate students in this area. However, those surveyed indicated a

greater need to have more information about the career goals of their United States advisees and not their foreign advisees as hypothesized.

Hypothesis 5e

The members of the graduate faculty that were surveyed were requested to indicate the importance of having knowledge about the job opportunities and the conditions in which their students would work in order to effectively advise them as their major professor. Their responses are listed in table 26. It should be noted that this hypothesis was analyzed as two survey questionnaire items. Therefore, the mean scores presented in table 26 reflect this.

Table 26. Summary of faculty advisors' responses regarding the importance of having information about job opportunities for their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Job Opportunities for Foreign Students	9.2722	2.400	0.125
Job Opportunities for United States Students	9.0243	2.299	0.119
Number of Cases	371		
T Value	2.85		
2-tail Probability (p)	0.005		

In null form the hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have more information about the job opportunities for foreign students and the conditions in which they would work in their country in order to more effectively advise them. The T value of 2.85 and the p value of 0.005 indicate that there is a highly significant difference between the needs of academic advisors of foreign and United States students in this area. Therefore, the null hypothesis is rejected.

Summary

All of the null hypotheses in hypothesis number five were rejected. It can be concluded that faculty advisors who serve as major professors for graduate students from the United States and from developing nations have a need for information about their advisees which covers a very broad spectrum. In four of the areas examined in this hypothesis (cultural background, academic background, English language proficiency, and job opportunities), faculty advisors perceived the need for more information on these topics when advising foreign graduate students. In one area (career goals) they perceived the need for more information about their domestic advisees. Concerning the five areas tested in this hypothesis, those surveyed perceived their greatest need for information to be in the area of the English language proficiency. This was followed by their need to have information about their academic background, their career goals, their cultural background, and finally by their job opportunities. It can be concluded, then, that faculty advisors are more concerned with those areas that are directly related to their role as

academic advisor, such as English language proficiency and academic background. Advisors also considered these two areas as most important in advising their United States advisees, but their greater need was for information about academic background followed by English proficiency information. In general, it can be stated that graduate faculty advisors recognize the need for more information in a number of different categories when advising foreign graduate students. Apparently advisors realize that there are basic differences between their foreign and United States advisees, and that to effectively advise their foreign students they need to obtain more information than they normally have when advising United States students. This finding supports the concept presented by Spaulding and Flack (1976) that advising foreign students is a more time consuming process than advising United States students for faculty advisors.

Hypothesis 6

In order to effectively advise graduate students, faculty advisors will perceive the need for the same information about foreign graduate students as they do for United States graduate students in the following areas:

- a. financial support
- b. family background
- c. reasons for studying a particular field at Iowa State University
- d. educational objectives
- e. previous work experience.

The format to be used in reporting the findings and presenting the discussion will be the same as utilized for the previous hypothesis, i.e., the findings for all five of the hypotheses that come under hypothesis number six will be given separately, followed by a discussion of all of them together.

Hypothesis 6a

Graduate faculty advisors were asked to indicate how important it was for them as major professors to have information about the financial support of their foreign graduate students, and also how important it was to have this type of information about their United States graduate students. The results of this survey item are presented in table 27.

Table 27. Summary of faculty advisors' responses regarding their need for information about the financial support of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Financial Support of Foreign Student	5.7158	1.617	0.083
Financial Support of United States Student	5.1026	1.502	0.077
Number of Cases	380		
T Value	10.51		
2-tail Probability (p)	0.000		

In null form this hypothesis asserts that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to have the same information about the financial support of these students in order to effectively advise them. This null hypothesis is rejected because the T value of 10.51 with a probability of less than 0.001 indicates that there is no highly significant difference between the needs of graduate faculty advisors of both foreign and United States students to have the same information about their financial support. This can be interpreted to mean that the respondents perceive that they need more information about the financial support of their foreign graduate students in order to more effectively advise them.

Hypothesis 6b

This survey item addressed the issue of family background. Respondents were asked to indicate how important it was for them as major professors to have information about the family background of their advisees, both foreign and domestic, in order to more effectively advise them. Table 28 summarizes their responses.

The null hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to have the same information about their advisees family background in order to effectively advise them. The T value of 5.03 with a probability of less than 0.001 indicates that there is no significant difference between the needs of faculty advisors in this area. Therefore, the null hypothesis is rejected and the alternate hypothesis which states

Table 28. Summary of faculty advisors' responses regarding the importance of having information about the family background of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Family Background of Foreign Student	3.7859	1.489	0.076
Family Background of United States Student	3.6397	1.444	0.074
Number of Cases	383		
T Value	5.03		
2-tail Probability (p)	0.000		

that faculty advisors need more information about the family background of their foreign advisees is accepted. However, it should be noted that the mean scores reveal that this is not (relative to other items) an important need area for faculty advisors.

Hypothesis 6c

Faculty members that were surveyed were asked to indicate the importance of knowing their advisee's reasons for studying a particular field at Iowa State University in order to more effectively advise them as major professor. The following table (number 29) provides a summary of their responses which represents a combination of two survey items resulting in mean scores of twice the normal magnitude.

Table 29. Summary of faculty advisors' responses regarding the importance of knowing the reasons an advisee has chosen to study a particular field at Iowa State University

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Reasons of Foreign Students	9.5300	2.600	0.133
Reasons of United States Students	9.4804	2.522	0.129
Number of Cases	383		
T Value	1.03		
2-tail Probability (p)	0.304		

The null hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to have the same information about their advisee's reasons for studying a particular academic field at Iowa State University in order to effectively advise them. The T value of 1.03 which is not significant at the .05 level indicates that the null hypothesis is not to be rejected. This is interpreted to mean that faculty advisors perceive no difference between the amount of information needed about a foreign student's reasons for studying in a certain field at Iowa State University than for a United States student's reasons for studying in a certain area at Iowa State University.

Hypothesis 6d

Academic advisors were asked to indicate the importance of having information about the educational objectives of their foreign graduate students, as compared to having information about the educational objectives of their United States graduate students, in order to effectively advise them as major professor. Table 30 summarizes their responses.

Table 30. Summary of faculty advisors' responses regarding the importance of having information about the educational objectives of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Educational Objectives of Foreign Students	6.0311	1.155	0.059
Educational Objectives of United States Students	6.0363	1.137	0.058
Number of Cases	386		
T Value	- 0.24		
2-tail Probability (p)	0.809		

The null form of this hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to have the same information about the educational objectives of their advisees in order to effectively advise them. The null hypothesis fails to be rejected because the T value of -0.24 is not significant at the .05 level. Therefore, it can be stated that

faculty advisors perceive the need for, and the importance of, having the same information about the educational objectives of all their advisees, whether foreign or domestic, in order to effectively advise them.

Hypothesis 6e

Respondents were asked to indicate how important it was for them as major professors to have access to information about the previous work experiences of their foreign and United States graduate students in terms of helping them to effectively advise them. The responses are summarized in table 31.

Table 31. Summary of faculty advisors' responses regarding the importance of having information about the previous work experience of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Previous Work Experience of Foreign Students	4.8814	1.366	0.069
Previous Work Experience of United States Students	4.9253	1.319	0.067
Number of Cases	388		
T Value	- 1.49		
2-tail Probability (p)	0.138		

The null hypothesis asserts that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to have the same information about the previous work experience of their advisees to effectively advise them. Due to the fact that the T value is -1.49, which is not significant at the 0.5 level, the null hypothesis is not rejected. Therefore, the results of this finding suggest that faculty advisors perceive the need to have the same amount of information about the previous work experience of their foreign and domestic advisees in order to effectively advise them.

Summary

In this set of hypotheses, faculty advisors perceived that their greatest need for information was in the area of knowing their advisees educational objectives, followed by information about their financial support, previous work experience, reasons for studying a particular field at Iowa State University, and by information on family background. This is the order of their needs for both their foreign and United States advisees. Faculty advisors perceived the need for more information about their foreign advisees regarding their financial support. This can possibly be explained by a number of factors: a foreign student's inability to take time off to work full-time due to visa restrictions; devaluation of foreign currencies; restrictions on buying United States dollars in certain countries; and a foreign student's inability to apply for financial aid due to United States government regulations. Also, it is often difficult to predict how long a program of study will take. If

a foreign student has limited resources and limited time, then this information is extremely important to the major professor.

Advisors also perceived the need for more information about a foreign student's family background in order to effectively advise them. However, relative to the other areas tested in this hypothesis, this is a low priority area with a mean score below the 4.0 neutral point. It should not, therefore, be considered an important need area for advisors.

The results of the remaining three hypotheses in this group revealed that faculty advisors believe that they need the same amount and type of information about all their advisees regarding their reasons for choosing to study a particular subject, their educational objectives, and their previous work experience in order to advise them most effectively. This can be interpreted to mean that in certain matters, faculty advisors regard all their advisees as being the same, no matter where they may come from, especially in these three areas which are closely related and can be categorized as career goals. Apparently, advisors see these items as having equal importance to them in terms of advising all of their students. Graduate students then, both foreign and domestic, need to inform their major professors of their career goals and their previous work experience to receive the best academic advice possible.

Hypothesis 7

Faculty advisors will perceive that certain personality traits, characteristics, and behaviors important in advising United States

graduate students are needed to a greater extent in advising foreign graduate students in the following areas:

- a. communication skills
- b. patience
- c. availability
- d. flexibility
- e. check on academic progress.

The findings of each of these five hypotheses will be presented separately and then a discussion of all five will follow.

Hypothesis 7a

Graduate faculty members were asked to indicate on a seven point response scale the importance of communication skills (being able to talk precisely, to listen carefully, and to say "no") in advising foreign and United States graduate students. Table 32 summarizes their responses, and it should be noted that this item is a combination of three survey items which is reflected in the mean scores.

The null hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have better communication skills when dealing with foreign students rather than United States students in order to effectively advise them. The T value of 7.98 with a probability of less than 0.001 indicates that there is a highly significant difference between the needs of faculty advisors in this area. Therefore, the null hypothesis is rejected. This shows that faculty advisors perceive that well developed communication skills are even more important to them when advising foreign graduate

Table 32. Summary of faculty advisors' responses regarding the importance of communication skills in advising graduate students

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Communication Skills for Foreign Students	18.6115	2.668	0.137
Communication Skills for United States Students	17.8845	2.763	0.142
Number of Cases	381		
T Value	7.98		
2-tail Probability (p)	0.000		

students from developing nations than when advising United States graduate students.

Hypothesis 7b

Advisors of graduate students were asked if greater patience was more important, or more desirable, when advising foreign students as opposed to advising domestic students in order to effectively advise them. Their responses are summarized below in table 33.

The null hypothesis that was tested regarding this item asserts that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to have more patience when dealing with foreign students in order to effectively advise them. This hypothesis is rejected because the T value of 6.52 with a probability of less than 0.001 indicates that there is a highly significant difference

Table 33. Summary of faculty advisors' responses regarding the importance of being patient when advising graduate students

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Patience with Foreign Students	6.0551	1.068	0.055
Patience with United States Students	5.8425	1.029	0.053
Number of Cases	381		
T Value	6.52		
2-tail Probability (p)	0.000		

between the needs of faculty advisors in this area who serve as major professor to both foreign and United States graduate students. It can be concluded from the results that faculty members believe that it takes more patience to advise foreign graduate students from developing nations.

Hypothesis 7c

This hypothesis is concerned with the availability of a student's major professor. Those faculty members surveyed were asked to indicate the importance of being available to advise, counsel, and work with their advisees. They were first requested to indicate the importance of being available for foreign students, and then for domestic students. Their responses are summarized in the following table.

The null form of this hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to be more available for the foreign students

Table 34. Summary of faculty advisors' responses regarding the importance of their availability to their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Availability for Foreign Students	6.0370	1.016	0.052
Availability for United States Students	6.0185	0.976	0.050
Number of Cases	378		
T Value	0.94		
2-tail Probability (p)	0.346		

than for the United States students in order to advise them effectively. Statistics show the null hypothesis is not rejected because the T value of 0.94 is not significant at the .05 level. Therefore, it can be concluded that faculty advisors perceive the need to be available to the same extent for all their graduate advisees.

Hypothesis 7d

Graduate faculty advisors were asked to indicate how important it was for them as a major professor to be flexible regarding an advisee's course work and research projects. They were first asked to do this for foreign students from developing nations and then for United States students. Two items from the survey instrument were combined in testing this hypothesis which is reflected in the computation of the mean scores. Table 35 provides a summary of their responses.

Table 35. Summary of faculty advisors' responses regarding the importance of their being flexible concerning the program of study of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Flexibility for Foreign Student	10.2296	2.529	0.130
Flexibility for United States Student	9.9367	2.441	0.125
Number of Cases	379		
T Value	5.71		
2-tail Probability (p)	0.000		

The hypothesis in null form states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to be more flexible with the course work and research projects of foreign students than for United States students in order to effectively advise them. The T value of 5.71 and the 2-tail probability of 0.000 demonstrate that there is a highly significant difference between the needs of faculty advisors of foreign and domestic graduate students in this area. Therefore, the null hypothesis is rejected. It can be concluded that faculty advisors perceived the need to be more flexible with the academic programs of their foreign students than with those of their United States students.

Hypothesis 7e

Academic advisors were also asked to indicate how important it was for them as a major professor to periodically check on the academic progress of their advisees, both foreign and domestic. Their responses are summarized in table 36.

Table 36. Summary of faculty advisors' responses regarding the importance of checking periodically on the academic progress of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Check Academic Progress of Foreign Student	5.9578	1.090	0.056
Check Academic Progress of United States Student	5.8865	1.064	0.055
Number of Cases	379		
T Value	3.70		
2-tail Probability (p)	0.000		

The null hypothesis states that there is no significant difference between the needs of faculty advisors of foreign and United States graduate students to check more often on the academic progress of the foreign graduate students than on the academic progress of the United States graduate students in order to effectively advise them. This null hypothesis is rejected because the T value of 3.70 with a probability of less than 0.001 indicates that there is a highly significant difference between

the needs of academic advisors of United States and foreign students in this area. Faculty advisors perceived the need to check more often on the progress that their foreign students were making toward their academic objective.

Summary

Academic advisors at the graduate level believe that certain traits, characteristics, and behaviors such as communication skills, patience, flexibility, and periodic checks on academic progress are important in academic advising. They also believe that these traits, characteristics, and behaviors are needed to a greater extent when advising foreign graduate students from developing nations. A possible reason for faculty indicating that communication skills need to be better developed when interacting with foreign students is that English is usually not the native language of these students. Advisors may have a difficult time understanding a particular student's accent, or the student may use words in a context that is unfamiliar to the advisor. The advisor may use slang or colloquial expressions that are not known to the student, or speak too rapidly. Nonverbal communication can also be a problem. New students who are having their first few meetings with an advisor often nod their head in a fashion meaning "yes," but are in actuality understanding very little of what the advisor is saying.

Spaulding and Flack (1976) found that faculty consider communication problems to be the main reason for feeling that working with foreign students is a special chore and a problem. Lee (1981) states that the key to meeting a foreign student's academic goals is effective communication.

Faculty advisors need to be sensitized to the language difficulties many foreign students face especially during their first few months in the United States. Advisors need to keep their own language simple, help students choose courses carefully considering language skills needed to be successful in that course, and start advisees slowly regarding total number of credits. Perhaps because of language problems and other cultural differences, advisors also perceive the need to be more patient when dealing with foreign graduate students. Checking on their academic progress often and regularly is a good technique to ensure that communication is occurring as it should. If progress is not being made, it may be due to a lack of understanding of instructions or suggestions that the major professor has made to the student.

Flexibility is an important trait in an academic advisor, especially at the graduate level where specific needs and interests of students can be met. Those surveyed perceived that more flexibility was needed when advising foreign graduate students. Research projects should address problems in the home country when possible, and coursework should prepare foreign students for the various roles they will play at home. The key issue is communication between the student and the academic advisor which enables the advisor to give appropriate academic advice regarding course selection and choosing an appropriate research project. The foreign student advisor can and should play a part in fostering this communication and in so doing contribute to the academic success of the student.

In review, faculty advisors believe that these traits, behaviors, and characteristics are important, and needed to a greater extent, when

advising foreign graduate students. Based on the mean scores, they perceived communication skills as being the most important, followed by patience, availability, periodic checks on academic progress, and flexibility.

Hypothesis 8

Faculty advisors will perceive that certain personality traits, characteristics, and behaviors important in advising United States graduate students are needed to the same extent in advising foreign graduate students in the following areas:

- a. interest in personal welfare of the student
- b. responsibility for student's professional development
- c. friendliness
- d. treat student with respect
- e. relate studies and research to student's future work.

As in the last three hypotheses, the findings under this hypothesis will each be presented separately, and then discussed together in a summary section.

Hypothesis 8a

Academic advisors were requested to indicate how important it was for them as a major professor to show interest in the personal welfare of their advisees, both foreign and domestic, in order to effectively advise them. Their responses are summarized in table 37.

Table 37. Summary of faculty advisors' responses regarding the importance of taking interest in the personal welfare of their students

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Welfare of Foreign Student	5.8234	1.013	0.052
Welfare of United States Student	5.7091	1.022	0.052
Number of Cases	385		
T Value	4.37		
2-tail Probability (p)	0.000		

The null hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to have the same amount of interest in the personal welfare of their foreign advisees as they have in their United States advisees. This hypothesis is rejected as the T value of 4.37 with a probability of less than 0.001 indicates that there is no significant difference between the needs of faculty advisors to have the same amount of interest in the personal welfare of all their students. It can be stated, then, that faculty advisors perceive the need to show more interest in the personal welfare of their foreign graduate students in order to effectively advise them.

Hypothesis 8b

This hypothesis deals with the role major professors play in the professional development of their students. Graduate faculty advisors

were asked to indicate how important it was for them to take responsibility for the professional development of both their foreign and domestic advisees. Table 38 provides a summary of their responses.

Table 38. Summary of faculty advisors' responses regarding the importance of taking responsibility for the professional development of their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Professional Development of Foreign Students	5.2427	1.265	0.065
Professional Development of United States Students	5.2320	1.250	0.065
Number of Cases	375		
T Value	0.58		
2-tail Probability (p)	0.564		

The null hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to take the same amount of responsibility for the professional development of both their foreign and United States advisees. This null hypothesis is not rejected because the T value of 0.58 is not significant at the .05 level. This demonstrates that academic advisors believe that they should take the same amount of responsibility for the professional development of all their advisees, be they domestic or foreign.

Hypothesis 8c

Graduate faculty members were requested to indicate how important it was for them as major professors of students from the United States and from developing nations to be friendly when dealing with them. A summary of the advisors' responses are provided in table 39.

Table 39. Summary of faculty advisors' responses regarding the importance of being friendly toward their advisees

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Friendly toward Foreign Students	5.9532	1.007	0.051
Friendly toward United States Students	5.9065	0.990	0.050
Number of Cases	385		
T Value	2.34		
2-tail Probability (p)	0.020		

The null form of this hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to exhibit the same level of friendliness to their foreign and United States advisees. This hypothesis is rejected since the T value is 2.34 and the p value is 0.020. Faculty advisors, therefore, perceive the need to show a more friendly attitude toward their foreign graduate students in order to more effectively advise them.

Hypothesis 8d

Academic advisors of graduate students were also asked how important it was for them as major professors to treat their advisees, both foreign and domestic, with respect. Their responses are summarized in table 40.

Table 40. Summary of faculty advisors' responses regarding the importance of treating their advisees with respect

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Respect for Foreign Students	6.5729	0.885	0.045
Respect for United States Students	6.5729	0.852	0.043
Number of Cases	384		
T Value	0.0		
2-tail Probability (p)	1.000		

In null form, the hypothesis states that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to treat all their advisees with the same level of respect. This hypothesis is not rejected because the T value of 0.0 is not significant at the .05 level. This indicates that faculty advisors perceive that it is important to respect to the same degree all their advisees, both foreign and domestic, in order to establish a relationship that promotes communication.

Hypothesis 8e

Faculty advisors were requested to indicate how important it was for them as major professors to be able to relate their advisees' studies and research to their future work. They were first asked to do this for foreign graduate students from developing nations, and then for United States graduate students. Their responses are presented in table 41.

Table 41. Summary of faculty advisors' responses regarding the importance of relating their advisees' course work and research to future work

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Relate Studies to Future Work of Foreign Students	5.6359	1.172	0.060
Relate Studies to Future Work of United States Students	5.5529	1.156	0.059
Number of Cases	378		
T Value	2.89		
2-tail Probability (p)	0.004		

The null hypothesis asserts that there is a significant difference between the needs of faculty advisors of foreign and United States graduate students to be able to relate to the same extent their advisees' studies and research to their future work. This hypothesis is rejected due to a T value of 2.89 and a p value of 0.004. Therefore, the alternate hypothesis is accepted which states that faculty advisors perceive the

need to be able to relate their foreign student's academic program to future work conditions more than being able to do this for their domestic graduate students.

Summary

Faculty advisors of graduate students perceive the importance of possessing and exhibiting certain behaviors, traits, and characteristics in their advisor/advisee relationships. This hypothesis dealt with five particular traits, characteristics, and behaviors: showing interest in the personal welfare of their students, taking responsibility for the student's professional development, being friendly toward the student, treating the student with respect, and being able to relate their student's studies and research to their future work. Advisors were first asked the importance of these items in dealing with foreign graduate students from developing nations, and then they were asked to do the same for United States graduate students. Survey results indicated that academic advisors perceived the need to treat all their advisees with the same amount of respect, and to take the same amount of responsibility in the professional development of their students. Apparently, advisors believe it is necessary to deal equally with all their graduate students on a professional basis and not to favor any individual or group over another. Perhaps this is so because advisors realize that their students may be future colleagues who will reflect their ideas and attitudes.

When it comes to establishing the personal relationship, however, faculty advisors perceived the need to show a greater interest in the

personal welfare of their foreign graduate students, be friendlier toward them, and be able to relate to a greater extent their foreign student's studies and research to future work conditions. A possible explanation for this is that foreign students are far from home and in an unfamiliar culture. They often need more personal attention to get settled and to feel comfortable in their new academic and social environment. Faculty members, especially major professors, have much contact with individual students. Through the establishment of a professional relationship, a personal relationship usually develops between a foreign student and an advisor. This fosters communication on many levels which gives advisors insight as to what foreign students hope or plan to do upon their return home. Domestic graduate students have grown up in this society and may have had work experiences enabling them to relate for themselves their studies and research to future job opportunities.

These results are supportive of the National Association for Foreign Student Affairs (NAFSA) publication, The College, the University, and the Foreign Student (1974), which states that the academic advisor should become familiar with the foreign student's culture and academic background, and with work opportunities in the student's home country. Faculty advisors can accomplish this by showing an interest in the personal welfare of their students, being friendly, treating them with respect, and demonstrating an active interest in their professional development. All of these behaviors promote communication and understanding which make it possible to give and obtain the best possible academic advice.

In conclusion, it should be noted that faculty advisors perceived that treating their students with respect was the most important of the five traits tested in this hypothesis. This was followed by being friendly, being concerned with their personal welfare, being able to relate their studies and research to future working conditions, and taking responsibility for the professional development of their students. The order of importance was the same for both foreign and United States graduate students.

Hypothesis 9

College of faculty advisor, length of time on graduate faculty, and number of foreign students a faculty advisor has advised as major professor will be related to the level of satisfaction derived from advising foreign graduate students.

This hypothesis deals with advising satisfaction through a stepwise multiple regression procedure. It is an attempt to determine the key factors, ingredients, and experiences which enable faculty members to be satisfied academic advisors of foreign students from developing nations. The dependent variable is level of satisfaction derived from advising foreign graduate students. Table 42 presents the findings of the regression procedure with level of satisfaction derived from advising United States graduate students as the first independent variable in the equation (ADSAT 1).

Table 42. Summary of results of multiple regression procedure (ADSAT 1)

Multiple R	.53433
R Square	.28551
Adjusted R Square	.28336
Standard Error	1.06030
F	133.06548
Significant F	.0000

Table 43 summarizes the findings of the multiple regression procedure when a second independent variable PCFSCOM (percentage of graduate committees a faculty member has served on that were for a foreign student) has been added to the equation.

Table 43. Summary of results of multiple regression procedure (ADSAT 1 and PCFSCOM)

Multiple R	.55691
R Square	.31015
Adjusted R Square	.30599
Standard Error	1.04343
F	74.63200
Significant F	.0000

Table 44 includes all the variables found in the regression equation.

Table 44. Regression equation variables

<u>Variable</u>	<u>B</u>	<u>SE B</u>	<u>BETA</u>	<u>T</u>	<u>SIG T</u>
ADSAT 1	.71831	.06179	.53009	11.625	.0000
PCFSCOM	.13328	.03870	.15703	3.444	.0006
CONSTANT	.70777	.36949		1.916	.0563

The regression equation is as follows:

$$Y = .70777 + .72(\text{ADSAT } 1) + .13(\text{PCFSCOM}) + E$$

These results indicate that the level of satisfaction derived from advising foreign graduate students is related to level of satisfaction derived from advising United States graduate students. This can be interpreted to mean that those faculty members who are satisfied with their advising in general, and enjoy that aspect of their work, will also be satisfied with their advising experiences when they involve foreign students. Also significant to foreign student advising satisfaction is the percentage of committees a faculty member has been on that are foreign student committees. This percentage may be effected by the length of time a faculty member is on the graduate faculty, and by the degree of success a faculty member has had working with foreign students. It would also be effected by the number of foreign students a faculty member advises as major professor because new foreign students would seek out, and be referred to, advisors with experience advising foreign students. Thirty-one percent of

the satisfaction a graduate faculty member derives from advising foreign students can be attributed to these two independent variables. No other variables were significant at the .05 level. It should be noted that when ADSAT 1 was not in the equation, the two significant variables were percentage of foreign students advised as major professor (PCFSMP) and the number of graduate committees a faculty member has served on (NOCOMS). These variables, however, explain only 3.5 percent of the satisfaction derived from advising foreign graduate students.

Measuring satisfaction is a difficult task because many variables are involved which are hard to segregate. Results of this research indicate that almost 31 percent of the satisfaction derived from advising foreign students is related to satisfaction derived from advising United States students and the number of foreign graduate student committees of which an advisor has been a member.

The other variables (rank, sex, college, length of time on graduate faculty, number of foreign students advised as major professor) were not significant in predicting advising satisfaction. Obviously, other variables affect advising satisfaction which were not dealt with in this study, such as teaching satisfaction, research satisfaction, satisfaction derived from friendships in the department, homelife, and many more. Since 30 percent of the satisfaction derived from advising foreign students can be explained by the satisfaction derived from advising United States students, more research should be done on advising in general to determine additional factors which are related to satisfaction obtained in dealing with foreign students.

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to assess the needs of graduate faculty members at Iowa State University in advising foreign graduate students from developing nations. This was done to focus attention on academic advising in general, and also on the special educational needs of students from the developing world. Data were collected from faculty advisors by means of a survey questionnaire developed by the investigator. The instrument was mailed to a systematic sample of 600 faculty members and a 63.2 percent response rate was obtained. By assessing faculty needs in terms of advising graduate students from developing nations, the problem of how to improve upon the advising that is being done can be addressed.

Following are the nine hypotheses posed in the study and a brief summary of the findings:

- Hypothesis 1. Faculty advisors will perceive that the following experiences would be helpful in advising foreign graduate students:
- a. travel in developing countries
 - b. professional experience in developing countries
 - c. good working relationship with the foreign student advisor.

Respondents perceived that all of these experiences would be helpful to them in terms of advising students from developing nations. They indicated that the most helpful experience was having a good working relationship with the foreign student advisor. The next most helpful experience was travel in developing nations, followed by professional experience in developing nations.

Hypothesis 2. Faculty advisors will perceive that information and programs on the following would assist them to more effectively advise foreign students:

- a. role and function of the foreign student advisor
- b. orientation programs for foreign students
- c. printed information on advising foreign graduate students
- d. orientation sessions for faculty on advising foreign graduate students.

Those surveyed believe that information and programs on the role and function of the foreign student advisor would be the most helpful to them to more effectively advise their foreign advisees. They indicated that printed information on advising foreign graduate students would be the next most helpful alternative for them as a means to improve upon their advising. And lastly, orientation programs for them on advising foreign students would be helpful. They do not perceive that information about orientation programs for foreign students would be helpful to them in their advising of these students.

Hypothesis 3. Faculty advisors will indicate that foreign graduate students should be trained differently from United States graduate students.

Respondents strongly believe that foreign graduate students should receive the same classroom training as United States graduate students. They also believe that the research projects of foreign graduate students should be applicable to home country conditions, and that research techniques used by foreign graduate students should be ones that can be used in the student's home country.

Hypothesis 4. Faculty advisors will indicate a preference for a system of academic advising where a major professor is chosen after a certain amount of time with a temporary faculty advisor.

According to those surveyed, the preferred system of academic advising is where a major professor is chosen after a certain amount of time with a temporary faculty advisor. The next preferred system is having a major professor assigned at the beginning of the first term. The least preferred system of academic advising is the one where all new foreign students have the same temporary advisor for a certain period of time.

Hypothesis 5. In order to effectively advise graduate students, faculty advisors will perceive the need for more information about foreign graduate students than for United States graduate students in the following areas:

- a. cultural background
- b. academic background
- c. English language proficiency
- d. career goals
- e. job opportunities and the conditions in which students will work in the home country.

Respondents perceived the need for more information in all of these categories except career goals when advising foreign graduate students from developing nations.

Hypothesis 6. In order to effectively advise graduate students, faculty advisors will perceive the need for the same information about foreign graduate students as they do for United States graduate students in the following areas:

- a. financial support
- b. family background

- c. reasons for studying a particular field at Iowa State University
- d. educational objectives
- e. previous work experience.

Graduate faculty members who were surveyed perceived the need to have the same amount of information about all their advisees regarding their reasons for studying a particular field at Iowa State University, their educational objectives, and their previous work experience. They indicated, however, a need for more information about their foreign advisees concerning their financial support and their family background.

Hypothesis 7. Faculty advisors will perceive that certain personality traits, characteristics, and behaviors important in advising United States graduate students are needed to a greater extent in advising foreign graduate students in the following areas:

- a. communication skills
- b. patience
- c. availability
- d. flexibility
- e. check on academic progress.

Respondents perceived the need to be more patient and flexible when dealing with foreign graduate students as opposed to dealing with United States graduate students. They also expressed a greater need for well developed communication skills when advising foreign students, and that checking on the academic progress of foreign students needed to be done more often than with United States graduate students. They felt, however, that they needed to be available to the same extent for all their advisees.

Hypothesis 8. Faculty advisors will perceive that certain personality traits, characteristics, and behaviors important in advising United States graduate students are needed to the same extent in advising foreign graduate students in the following areas:

- a. interest in personal welfare of the student
- b. responsibility for student's professional development
- c. friendliness
- d. treat student with respect
- e. relate studies and research to student's future work.

Survey results indicated that academic advisors perceive the need to treat all their advisees with the same amount of respect and to take the same amount of responsibility in the professional development of their students. They believe, however, that it is necessary to show a greater interest in the personal welfare of their foreign advisees, be friendlier toward them, and be able to relate to a greater extent their studies and research to future working conditions in their home countries.

Hypothesis 9. College of faculty advisor, length of time on graduate faculty, and number of foreign students a faculty advisor has advised as major professor will be related to the level of satisfaction derived from advising foreign graduate students.

Survey results indicated that the best predictor of satisfaction obtained from advising foreign graduate students was the level of satisfaction an advisor reached in advising United States graduate students. Also related to level of satisfaction derived from advising foreign graduate students was the percentage of the total number of committees that a graduate faculty advisor has been a member of that have been foreign student committees.

Conclusions

Based on findings from the study, the following conclusions concerning the needs of graduate faculty advisors in terms of advising foreign graduate students are made:

1. Knowledge of the role and function of the foreign student advisor, and having a good working relationship with the foreign student advisor, assist academic advisors to more effectively advise foreign graduate students.
2. Travel and/or professional work experience in developing nations is beneficial to advisors of foreign graduate students in terms of helping them to more effectively advise these students.
3. Printed information and orientation sessions for faculty advisors on advising foreign graduate students would assist them to more effectively advise foreign graduate students.
4. Special academic programs only for foreign students should not be developed, but their research projects and the research techniques they utilize should be relevant to conditions in the student's country.
5. A major professor should be chosen carefully after a foreign student has become familiar with a number of faculty members and the educational system.
6. In certain areas, faculty advisors need more information about their foreign advisees than they do about their domestic advisees in order to effectively advise them.
7. Certain behaviors, characteristics, and traits important in advising United States graduate students are needed to a greater extent in advising foreign graduate students from developing nations.
8. Faculty members who are satisfied with their advising of United States students are generally satisfied with their advising of foreign students from developing nations.

Implications

The following implications can be inferred from the conclusions:

1. The foreign student advisors on the Iowa State University campus should actively work to inform faculty advisors of their role and function in the academic advising area in order to assist faculty to more effectively advise foreign graduate students.
2. Graduate faculty members have special needs in advising foreign graduate students and the foreign student advisor can be a resource in meeting many of these needs.
3. Faculty advisors should expand their own horizons through travel or work overseas to more effectively advise foreign graduate students.
4. The foreign student advisor and the academic advisor should form the nucleus of a team which can best deal with the personal and educational needs of foreign students.
5. Because advising is helping, faculty advisors need to develop to a greater extent certain traits, characteristics, and behaviors which have been identified as being important in advising graduate students.
6. Foreign graduate students can obtain a relevant education in the United States by carefully choosing a major professor who takes an active interest in course selection and who shows flexibility regarding research projects and research techniques.
7. Foreign students should seek out experienced faculty advisors who enjoy advising United States students because they are also likely to enjoy advising foreign students.

Recommendations

The following recommendations for future research are derived from the conclusions:

1. Foreign student advisors should adapt the instrument developed for this study to conduct applied research on their own campuses in order to build bridges with faculty members and departments which would enable foreign students to obtain the best academic advice possible.
2. Future studies on this topic at Iowa State University should be college specific (Sciences and Humanities, Agriculture, and Engineering in particular) to determine better the needs of faculty members in particular disciplines; and they should look at the needs of faculty advisors who have had professional experience in developing nations as compared with those who have not had such an experience.
3. Research on the needs of faculty members in advising graduate students in general should be undertaken since the level of satisfaction derived from advising foreign graduate students is closely related to the level of satisfaction derived from advising United States graduate students.

The following recommendations for the Iowa State University campus are derived from the conclusions:

1. The findings of this study should be summarized for distribution to graduate faculty members on the campus.
2. Foreign student advisors on the campus should present the results of this survey to the faculty in the various colleges to develop good working relationships with them.
3. The results of this survey should be made known to incoming foreign graduate students to enable them to develop the best advisor/advisee relationship possible.

4. Foreign student advisors on the campus should develop materials, i.e., guidelines to advising foreign graduate students, to assist faculty to more effectively advise their foreign advisees.

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APPENDIX A: CORRESPONDENCE

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Telex: ISU INTL AMES 9105201157

Dear Graduate Faculty Member:

Enclosed please find a survey instrument which is designed to assess the needs of Iowa State University (ISU) faculty in advising foreign graduate students from developing nations. Foreign student enrollment in the Graduate College continues to increase annually. With this increase comes the need for better faculty understanding of these students in order to help them achieve their academic objectives.

This project is being supported by a research grant from the National Association for Foreign Student Affairs, through their contract with the Agency for International Development (AID). Your response will contribute significantly toward solving some of the problems facing major professors of foreign graduate students from developing nations.

The results of the survey are of significant interest to the Graduate College and the Office of International Educational Services. Data generated from this survey will be used to develop printed information and to plan seminars for graduate faculty members to aid them in being more comfortable and effective in advising foreign graduate students.

This instrument has been reviewed by several ISU graduate faculty members, and it has been revised to obtain the necessary data while requiring a minimal amount of your time. The average time required to complete the survey was 20 minutes.

Would you please complete the enclosed form and return it through campus mail before February 3, 1984? Your participation is voluntary and the data you provide will be kept confidential.

We will be pleased to send you a summary of the survey results if you desire. The instrument has been numbered only for follow-up purposes. Thank you for your cooperation.

Sincerely,

John Greisberger
Coordinator of
Special Programs

Larry Ebbers
Assistant Dean
College of Education

JG:ryo
Enclosure

Iowa State University *of Science and Technology* Ames, Iowa 50011



February 3, 1984

Office of
International Educational Services
E. O. Building
Telephone 515 294-1120
Telex: ISU INTL AMES 9105201157

Dear Graduate Faculty Member:

On January 25, 1984, we mailed you a survey entitled "Academic Advising of Foreign Graduate Students from Developing Nations." Enclosed with the survey was a cover letter requesting your cooperation in completing it and returning it through campus mail to John Greisberger before February 3, 1984. As of today, we have not received a reply from you. If you have already completed the survey and returned it, please disregard this request.

This project is being supported by the National Association for Foreign Student Affairs (NAFSA) through their contract with the Agency for International Development (AID). The Dean of the Graduate College has expressed interest in this survey and believes the results will contribute significantly toward solving some of the problems facing academic advisors of foreign graduate students from developing nations.

Your participation is critical to the success of this project. Data generated from this survey will be used to develop printed information and to plan seminars for graduate faculty members which will assist them in being more comfortable and effective in advising foreign students.

If you have misplaced your copy of the survey, please call 294-1120 and request another one. The completed survey instrument can be folded and returned through campus mail.

Thank you for your cooperation in completing the survey.

Sincerely,

John Greisberger
Coordinator of
Special Programs

Larry Ebbers
Assistant Dean
College of Education

JG/LE:ryo

Iowa State University *of Science and Technology* Ames, Iowa 50011



Office of
International Educational Services
E. O. Building
Telex: ISU INTL AMES 9105201157
Telephone 515 294-1120

February 17, 1984

Dear Graduate Faculty Member:

On January 25, 1984, we sent you a copy of a survey entitled "Academic Advising of Foreign Graduate Students from Developing Nations." Your cooperation in completing it and returning it through campus mail by February 3, 1984, was requested. As of this date, we have not received a reply from you. Perhaps our first follow-up did not reach you. Therefore, we are enclosing another survey and request that you take the twenty minutes necessary to complete it. If you have already completed the survey, please disregard this request.

Your participation in this project is essential for its success. The results of the survey are of significant interest to the Graduate College, the Office of International Educational Services, the National Association for Foreign Student Affairs (NAFSA) and the Agency for International Development (AID). Data generated from the survey will be used to develop printed information and to plan seminars for graduate faculty members which will assist them in being more comfortable and effective in advising foreign students.

If you have questions about the survey, please call 294-1120 and ask for John Greisberger. Thank you for your cooperation.

Sincerely,

John Greisberger
Coordinator of
Special Programs

Larry Ebbers
Assistant Dean
College of Education

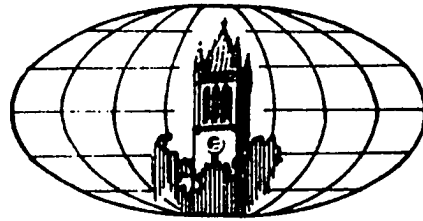
JG/LE/lf

Enclosure

APPENDIX B: INSTRUMENT FOR DATA COLLECTION

**Academic Advising
of Foreign Graduate Students
from Developing Nations**

**A Study to Assess
the Needs of Faculty Advisors**



OIES

**Office of International Educational Services
Iowa State University**

We are interested in what you think, and in assessing your needs in advising foreign graduate students from developing nations. This survey consists of seven parts and your assistance will be of great value to us and to graduate faculty advisors of foreign students.

Important Information

Definition: Developing Nation - for the purpose of this study developing nations include Spain, Portugal, Greece, Turkey, Yugoslavia, all of Africa, Latin America, and Asia except for Israel and Japan.

Circle one number to indicate how important it is for you as major professor to know the following about a foreign graduate student from a developing nation. Also, **circle one number** to indicate how important it is for you as major professor to know the same information about United States graduate students.

- Very Unimportant 1
- Quite Unimportant 2
- Somewhat Unimportant 3
- Neither Important Nor Unimportant 4
- Somewhat Important 5
- Quite Important 6
- Very Important 7

Foreign United States
Graduate Students Graduate Students

Information about . . .

1. English language proficiency	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. Career goals	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. Academic background	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. Job possibilities (in U.S. for U.S. students, in home country for foreign students)	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. Student's educational objectives at Iowa State University	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. Previous work experience	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. Educational system of previous education	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. Thesis interest	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. Length of time since previously enrolled in school	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. Faculty-student relationships at school last attended (U.S. or abroad)	1 2 3 4 5 6 7	1 2 3 4 5 6 7

- Very Unimportant 1
- Quite Unimportant 2
- Somewhat Unimportant 3
- Neither Important Nor Unimportant 4
- Somewhat Important 5
- Quite Important 6
- Very Important 7

	<u>Foreign</u> <u>Graduate Students</u>							<u>United States</u> <u>Graduate Students</u>						
11. Level of technological, social, and economic development in home country for foreign students, and in the U.S. for U.S. students	1	2	3	4	5	6	7	1	2	3	4	5	6	7
12. Reasons for choosing field of study	1	2	3	4	5	6	7	1	2	3	4	5	6	7
13. Reasons for choosing Iowa State University	1	2	3	4	5	6	7	1	2	3	4	5	6	7
14. Research techniques relevant to student's future needs	1	2	3	4	5	6	7	1	2	3	4	5	6	7
15. Financial support	1	2	3	4	5	6	7	1	2	3	4	5	6	7
16. Time available to complete studies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
17. Meaning of failure in own culture	1	2	3	4	5	6	7	1	2	3	4	5	6	7
18. Cultural beliefs and values	1	2	3	4	5	6	7	1	2	3	4	5	6	7
19. Home state or home country	1	2	3	4	5	6	7	1	2	3	4	5	6	7
20. Previous educational experience in the U.S. for a foreign student, and abroad if a U.S. student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
21. Adaptability to new environment	1	2	3	4	5	6	7	1	2	3	4	5	6	7
22. Family background	1	2	3	4	5	6	7	1	2	3	4	5	6	7
23. Marital status	1	2	3	4	5	6	7	1	2	3	4	5	6	7
24. If married, spouse needs	1	2	3	4	5	6	7	1	2	3	4	5	6	7
25. Personal needs (housing, clothing, etc.)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
26. Previous orientation to Iowa State University and Ames	1	2	3	4	5	6	7	1	2	3	4	5	6	7
27. Visa category and related implications	1	2	3	4	5	6	7							
28. Stereotypes and national characteristics of the student's culture	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Behaviors and Characteristics

Definition: Developing Nation - for the purpose of this study developing nations include Spain, Portugal, Greece, Turkey, Yugoslavia, all of Africa, Latin America, and Asia except for Israel and Japan.

Circle one number to indicate how important it is for you to have or to do the following as a major professor of a foreign graduate student from a developing nation. Also, **circle one number** to indicate their importance to you as a major professor of a United States graduate student.

- Very Unimportant 1
- Quite Unimportant 2
- Somewhat Unimportant 3
- Neither Important Nor Unimportant 4
- Somewhat Important 5
- Quite Important 6
- Very Important 7

	<u>Foreign</u> <u>Graduate Students</u>							<u>United States</u> <u>Graduate Students</u>						
29. Show interest in personal welfare of the student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
30. Be friendly with the student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
31. Be unbiased and unprejudiced toward the student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
32. Treat the student with respect	1	2	3	4	5	6	7	1	2	3	4	5	6	7
33. Invite student to dinner	1	2	3	4	5	6	7	1	2	3	4	5	6	7
34. Visit student's home for dinner	1	2	3	4	5	6	7	1	2	3	4	5	6	7
35. Show interest in student's home country or home state	1	2	3	4	5	6	7	1	2	3	4	5	6	7
36. Ability to talk precisely	1	2	3	4	5	6	7	1	2	3	4	5	6	7
37. Ability to listen carefully	1	2	3	4	5	6	7	1	2	3	4	5	6	7
38. Ability to say "no"	1	2	3	4	5	6	7	1	2	3	4	5	6	7
39. Follow up to be sure previous discussion understood	1	2	3	4	5	6	7	1	2	3	4	5	6	7
40. Be flexible with course work	1	2	3	4	5	6	7	1	2	3	4	5	6	7
41. Be flexible with research expectations	1	2	3	4	5	6	7	1	2	3	4	5	6	7

- Very Unimportant 1
- Quite Unimportant 2
- Somewhat Unimportant 3
- Neither Important Nor Unimportant 4
- Somewhat Important 5
- Quite Important 6
- Very Important 7

	<u>Foreign</u> <u>Graduate Students</u>							<u>United States</u> <u>Graduate Students</u>						
42. Have experience editing theses	1	2	3	4	5	6	7	1	2	3	4	5	6	7
43. Give advice on courses and instructors	1	2	3	4	5	6	7	1	2	3	4	5	6	7
44. Check on academic progress of the student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
45. Relate studies and research to student's future work	1	2	3	4	5	6	7	1	2	3	4	5	6	7
46. Take responsibility for student's professional development	1	2	3	4	5	6	7	1	2	3	4	5	6	7
47. Help build student's confidence in the academic area	1	2	3	4	5	6	7	1	2	3	4	5	6	7
48. Develop a close <u>professional</u> relationship with the student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
49. Develop a close <u>personal</u> relationship with the student	1	2	3	4	5	6	7	1	2	3	4	5	6	7
50. Be sensitive to adjustment period	1	2	3	4	5	6	7	1	2	3	4	5	6	7
51. Be available	1	2	3	4	5	6	7	1	2	3	4	5	6	7
52. Have a sense of humor	1	2	3	4	5	6	7	1	2	3	4	5	6	7
53. Give attention to non-educational problems	1	2	3	4	5	6	7	1	2	3	4	5	6	7
54. Have patience	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Important Experiences

Definition: Developing Nation - for the purpose of this study developing nations include Spain, Portugal, Greece, Turkey, Yugoslavia, all of Africa, Latin America, and Asia except for Israel and Japan.

Circle one number to indicate how important it is for you to have the following experiences as a major professor of a foreign graduate student from a developing nation.

- Very Unimportant 1
- Quite Unimportant 2
- Somewhat Unimportant 3
- Neither Important Nor Unimportant 4
- Somewhat Important 5
- Quite Important 6
- Very Important 7

**Foreign
Graduate Students**

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 55. Travel in developing nations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 56. Travel in developed nations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 57. Professional experience in developing nations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 58. Professional experience in developed nations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 59. Involvement in Iowa State University/Ames international community | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 60. Experience on foreign student graduate committees | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 61. Experience as major professor for United States students | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 62. Good working relationship with the foreign student advisor | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 63. Other: _____ | | | | | | | |

Advising Satisfaction

Circle one number to indicate the level of your satisfaction in advising graduate students.

- Very Dissatisfied 1
- Quite Dissatisfied 2
- Somewhat Dissatisfied 3
- Neither Satisfied Nor Dissatisfied 4
- Somewhat Satisfied 5
- Quite Satisfied 6
- Very Satisfied 7

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 64. Advising United States students | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 65. Advising foreign students from developing nations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

General Information

Circle one number to indicate your level of agreement with the following statements.

Strongly Disagree 1
 Disagree 2
 Somewhat Disagree 3
 Neither Agree Nor Disagree 4
 Somewhat Agree 5
 Agree 6
 Strongly Agree 7

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 66. Good advisors of United States graduate students are also good advisors of foreign graduate students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 67. Foreign graduate students should receive the same classroom training as United States graduate students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 68. Research projects of foreign graduate students should be applicable to home country conditions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 69. Research techniques used by foreign graduate students should be ones that can be used in the home country. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 70. It takes more time to advise foreign graduate students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 71. Knowledge of the role and function of the foreign student advisor would help me to more effectively advise foreign graduate students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 72. Orientation sessions on advising foreign graduate students would help me more effectively advise them. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 73. Printed information on advising foreign graduate students would help me more effectively advise them. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
-

Advising System

Circle one number to indicate your choice.

74. The system of advising I prefer most is:
- 1) Major professor assigned at beginning of first term.
 - 2) Temporary advisor is assigned for a certain period of time.
 - 3) All new foreign students have the same temporary advisor for a certain period of time.

Biographical Information

Please answer the following questions about yourself by circling the number of the appropriate category.

75. With which college are you associated? For joint appointments, circle the college in which you vote for Faculty Council.
- | | | |
|----------------|-------------------|----------------------------|
| 1) Agriculture | 4) Engineering | 6) Sciences and Humanities |
| 2) Design | 5) Home Economics | 7) Veterinary Medicine |
| 3) Education | | |
76. What is your rank?
- | | |
|------------------------|------------------------|
| 1) Instructor | 3) Associate Professor |
| 2) Assistant Professor | 4) Professor |
77. What is your sex?
- | | |
|---------|-----------|
| 1) Male | 2) Female |
|---------|-----------|
78. How many years have you been a member of the graduate faculty?
- | | | | | | |
|--------|---------|----------|----------|----------|------------|
| 1) 1-5 | 2) 6-10 | 3) 11-15 | 4) 16-20 | 5) 21-25 | 6) over 25 |
|--------|---------|----------|----------|----------|------------|
79. Are you a full member of the graduate faculty?
- | | |
|--------|-------|
| 1) yes | 2) no |
|--------|-------|
80. Approximately how many graduate students have you advised as major professor at Iowa State University (include current advisees)?
- | | | | | | |
|---------|--------|---------|----------|----------|------------|
| 1) none | 2) 1-5 | 3) 6-10 | 4) 11-20 | 5) 21-30 | 6) over 30 |
|---------|--------|---------|----------|----------|------------|
81. Approximately what percentage of those graduate students you have advised as major professor were or are foreign students from developing nations?
- | | | | | | |
|----------|-----------|-----------|-----------|-----------|-------------|
| 1) 0-10% | 2) 11-20% | 3) 21-30% | 4) 31-45% | 5) 46-60% | 6) over 60% |
|----------|-----------|-----------|-----------|-----------|-------------|
82. Approximately how many graduate committees have you served on at Iowa State University (include current committees)?
- | | | | | | |
|-----------------|----------|----------|----------|----------|------------|
| 1) less than 10 | 2) 10-19 | 3) 20-29 | 4) 30-39 | 5) 40-49 | 6) over 50 |
|-----------------|----------|----------|----------|----------|------------|
83. Approximately what percentage of those committees were or are for foreign students from developing nations?
- | | | | | | |
|----------|-----------|-----------|-----------|-----------|-------------|
| 1) 0-10% | 2) 11-20% | 3) 21-30% | 4) 31-45% | 5) 46-60% | 6) over 60% |
|----------|-----------|-----------|-----------|-----------|-------------|

84. How much cumulative professional experience (work, study, or travel) have you had in developing nations?

- 1) none 2) 0-4 weeks 3) 1-3 months 4) 3-12 months 5) 1-5 years 6) over 5 years

85. How much cumulative professional experience (work, study, or travel) have you had in developed nations?

- 1) none 2) 0-4 weeks 3) 1-3 months 4) 3-12 months 5) 1-5 years 6) over 5 years

86. Have you been major professor to foreign students from developing nations at other institutions?

- 1) yes 2) no

If yes, to how many?

- 1) less than 10 2) 10-19 3) 20-29 4) 30-39 5) 40-49 6) over 50

Thank you. Please tape or staple this questionnaire together and send it through campus mail to John Greisberger, E. O. Building.

Campus Mail

**John Greisberger
E. O. Building**

APPENDIX C: HUMAN SUBJECTS COMMITTEE APPROVAL

INFORMATION ON THE USE OF HUMAN SUBJECTS IN RESEARCH
IOWA STATE UNIVERSITY

(Please follow the accompanying instructions for completing this form.)

1. Title of project (please type): Academic Advising of Foreign Graduate Students
from Developing Nations

2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are properly protected. Additions to or changes in procedures affecting the subjects after the project has been approved will be submitted to the committee for review.

John Greisberger 11/21/83 [Signature]
Typed Name of Principal Investigator Date Signature of Principal Investigator
E. O. Building 294-1120
Campus Address Campus Telephone

3. Signatures of others (if any) Date Relationship to Principal Investigator
[Signature] 11/21/83 Major Professor

4. ATTACH an additional page(s) (A) describing your proposed research and (B) the subjects to be used, (C) indicating any risks or discomforts to the subjects, and (D) covering any topics checked below. CHECK all boxes applicable.

- Medical clearance necessary before subjects can participate SEE ATTACHED
 Samples (blood, tissue, etc.) from subjects
 Administration of substances (foods, drugs, etc.) to subjects
 Physical exercise or conditioning for subjects
 Deception of subjects
 Subjects under 14 years of age and (or) Subjects 14-17 years of age
 Subjects in institutions
 Research must be approved by another institution or agency

5. ATTACH an example of the material to be used to obtain informed consent and CHECK the type will be used.

- Signed informed consent will be obtained. SEE ATTACHED
 Modified informed consent will be obtained.

6. Anticipated date on which subjects will be first contacted:

Month	Day	Year
<u>1</u>	<u>30</u>	<u>84</u>

Anticipated date for last contact with subjects:

<u>2</u>	<u>20</u>	<u>84</u>
----------	-----------	-----------

7. If Applicable: Anticipated date on which audio or visual tapes will be erased and (or) identifiers will be removed from completed survey instruments: N/A

Month	Day	Year

8. Signature of Head or Chairperson Date Department or Administrative Unit
[Signature] 11/23/83 PROF. STUDIES
Office of International Educational Services

9. Decision of the University Committee on the Use of Human Subjects in Research:

- Project Approved Project not approved No action required

George G. Kura
Name of Committee Chairperson Date Signature of Committee Chairperson

INFORMATION ON THE USE OF HUMAN SUBJECTS IN RESEARCH

John Greisberger

4. The purpose of this study is to assess the needs of faculty advisors at Iowa State University (ISU) in advising foreign graduate students from developing nations. A systematic sample of 600 ISU graduate faculty members, out of a total of approximately 1,200, will be surveyed by means of a mail questionnaire to determine the needs of faculty advisors in this area. There will be no risks or discomforts to the subjects. For detailed information on my research, one copy of my research proposal is attached. This proposal was approved by my graduate committee on November 16, 1983.

Also attached is my survey instrument which will be put into booklet form. I will follow up with a short note one week after sending out the questionnaire and cover letter. Two weeks later, I will follow up with another questionnaire and another cover letter.

5.
 - 1) Instructions for completing and returning the questionnaire will be given on the questionnaire.
 - 2) N/A
 - 3) N/A
 - 4) N/A
 - 5) The cover letter will inform the faculty that the results of the research will be made public, and that I would be happy to discuss procedures and results with any of them.
 - 6) N/A
 - 7) The cover letter will state that data obtained from individual faculty members will be kept confidential.