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ABSTRACT

This qualitative study examined the challenges faced by four academic departments that had large enrollments of international graduate students. The comparative study of four academic departments in three professional schools at a Midwestern research university examined how faculty members adjusted to their roles as advisors and teachers of international students; whether departments altered curricula to address the students' particular needs; and whether institutions had formal policies regarding enrollment levels of international students. The study found many examples of faculty changing roles to better address international students' needs; respondents also alter their roles as advisors and research supervisors, spending more time explaining tasks, providing extra supervision, and even becoming more personally involved in students' lives. Most departments also have at least some informal policies regarding international students, particularly in regard to English language requirements and funding. The study also discusses environmental factors shaping perceptions and responses, including differences between "technical" and "sociotechnical" disciplines; differences based on departmental organizational and physical structure; how faculty characteristics influence responses; and international students' influence on the responses. (Contains 24 references.) (CH)

Navigating in a Global Learning Community: Academic Departments' Response to Graduate International Students

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Navigating in a Global Learning Community: Academic Departments' Response to Graduate International Students

Abstract

This qualitative study examined the challenges four academic departments faced because they enrolled large number of international graduate students. Results focus on faculty members' response to international students as advisors and instructors, departmental policies established to address their presence, and the unresolved issues that often remained. Departments' responses to these students varied based on the nature of the discipline, the physical structure of the department, the unit's leadership, and its size and ranking. Individual faculty members' responses varied based on whether they had lived overseas, their country of origin, and their age. The study concludes with suggestions regarding how departments might better address the challenges associated with enrolling international students.

Navigating in a Global Learning Community: Academic Departments' Response to Graduate International Students

Introduction

The 450,000 international students in the United States today are an important source of tuition revenue and academic strength for American institutions (Davis, 1999). In fact, they allow many graduate programs to continue at their current enrollment and research levels. Maybe most importantly, international students have the potential to help globalize the learning community by interjecting their varied perspectives and experiences into discussions that take place both inside and outside the classroom. This is an essential component of the educational process for Americans who are being trained to work in the marketplace of the new millennium.

A number of studies have focused on international students' level of satisfaction as they study on American campuses. Unfortunately, many have found that internationals are disappointed with their experiences. While faculty members often believe these students are pleased with the education they receive (Seeger, 1993), results from several studies warn that international students are often unsure about the relevance of course work to their home country's needs, a concern which is frequently confirmed upon their return home (Deressa & Beaver, 1988; Goodwin & Nacht, 1986; Seeger, 1993; Wobbekind & Graves, 1989). In addition, they often feel quite isolated from American students in both academic and social settings (Selvadurai, 1992; Trice, 1999). This has led authors to call for faculty to make more accommodations in the classroom to better integrate international students and to address their unique academic goals and needs (Altbach, 1986; Kaplan, 1987; Weiler, 1984).

However, only a handful of researchers have sought to bring a fuller understanding to the complex issues involved with enrolling foreign students in American universities by

alternatively exploring the perceptions and responses of faculty and entire academic departments to these students' presence. In 1983, Goodwin and Nacht conducted interviews with faculty at 18 diverse institutions in three states. They found that those who had spent time overseas generally had more positive attitudes toward international students than faculty who had never traveled or lived outside the United States. In addition, they found that while many recognized their department's dependence upon international students as both teaching and research assistants, as well as consumers of educational services, "there was no joy in the circumstance . . . Some of these faculty seemed to feel shame at their dependence on foreign students" (p. 9). Others responded with apathy or even hostility.

To better understand faculty members' perceptions of international students, Barber and Morgan conducted surveys of engineering faculty in both 1984 and 1988. Their results showed that 87% of faculty had the same academic expectations for internationals as they did for Americans and 97% used the same grading standards for both groups. A majority of the 943 engineering faculty surveyed in the later study by Barber and Morgan (1988) thought American students designed equipment better, ran experiments better, and wrote better. On the other hand, they generally perceived international students to be better at conducting theoretically sophisticated research. One third of all faculty believed internationals brought fresh perspectives to research problems and one quarter reported that internationals had provided new ideas for future research.

Seeger (1993) pursued the question of faculty members' perceived obligation to respond to international students' needs by surveying one institution's Indonesian graduate students and their mentors. He found that although a majority of the students believed academic programs should have been significantly altered in order for them to be relevant to their home country's needs, their mentors believed it was not the university's responsibility to make academic programs applicable to students' particular circumstances.

Instead, the professors felt internationals should obtain internships or field experiences to help accomplish this goal.

Research Problem and Methodology

Past research shows that faculty members have mixed responses to international students. They recognize their need for these students, but they are not always comfortable working with them. This study seeks to extend and update our knowledge about this topic by asking such questions as, Do faculty members adjust their roles as they advise and teach international students? Do some departments alter the curriculum to address these students' particular needs? Do they establish formal policies regarding international student enrollment levels?

The following pages describe the results of a qualitative study designed to identify the responses of faculty and entire departments when high proportions of international students are enrolled there. Comparative case studies of four academic departments within three professional schools at a top mid-western research university were conducted. A qualitative approach was used because this is an area of only recent research and most previous studies were conducted without any theoretical foundation. Case studies were conducted to gain a more holistic understanding of the departments, the natural context within which they operated, and the process they went through in formulating a response to large numbers of international students.

Issue processing theory guided the research. This theory suggests that people and organizations obtain environmental information about an issue and then attach their own labels to the information in an effort to make sense of the circumstances surrounding them. Based on their interpretation of the environment, a response is then formulated and enacted (Weick & Daft, 1983). What faculty notice about international students, how they characterize this population, and how they and departments have responded to them was

explored through this study. This paper discusses the findings regarding individual and organizational responses, while a forthcoming paper will explore the topic of how faculty members perceive international students.

The study was limited to graduate students because a majority of international students at four-year institutions study at the graduate level (Davis, 1999) and faculty generally spend far more time with these students than with undergraduates as they work with them on research projects and teach them in much smaller classes. Also, at most institutions the departments make admissions and funding decisions for graduate students, but not for undergraduates. They therefore have far more control regarding how many graduate internationals will be enrolled in the department and under what conditions.

The public health, architecture, mechanical engineering, and materials science and engineering departments selected for the study each had at least 10% graduate international student enrollment and were organized in similar ways. In all, 54 people were interviewed, including deans and associate deans (6), department chairs (4), professors (21), departmental staff members (10), student leaders (4), and professionals across the campus who regularly work with international students (9). Documents such as enrollment reports, strategic plans, and program reviews were also incorporated into the case studies.

Initial data analysis involved studying the interview transcripts and case study documents to look for prominent themes. The author coded these by hand and then created a list of the codes. Due to the exploratory nature of this study, there was a hesitancy to begin the analysis by using pre-determined codes and matrices, so this more structured approach became the second stage of the analysis (Miles & Huberman, 1984). By analyzing the coded and organized data, relationships became evident (Creswell, 1994; Eisenhardt, 1989; Lincoln & Guba, 1985). Once a draft was completed which described and analyzed

each of the four cases, a person from each unit reviewed the findings and provided feedback regarding the accuracy of the descriptions. In each case, no significant errors were found.

Limitations exist in this study, although they are primarily characteristics inherent to qualitative studies. First, because data were only collected from four departments at one research university, the findings may not be generalizable to other settings. Second, throughout most of this paper, international students are treated as if they were a homogeneous group and differences among them are only rarely considered. This approach is taken because the four case study departments enroll students from approximately 20 different countries and addressing differences among nationalities of students would have led to overwhelming detail. Also, the vast majority of international students in the cases were Asian and faculty seemed to respond to interview questions with these students in mind (although significant cultural differences certainly exist among Asian countries as well).

Descriptions of the Four Case Sites

Architecture

The architecture department enrolled 397 students in the fall of 1997, over half of whom were studying at the graduate level. Twenty-six percent of these graduate students were international and, as is the case in the other three departments, a majority were from Asian countries. Because the architecture profession is global, today's most sought after graduates are those who have received an education that transcends U.S. borders and who have gained experience working on international projects. In fact, both employers and the architectural accreditation board consistently encourage this department to internationalize. The dean and the chair, as well as many of the faculty, agreed with them and organizational leaders have taken the initiative in recent years to pursue formal ties

with overseas universities, corporations, and governments; to sponsor student and faculty exchanges; and to place a foreign-born individual on their alumni board.

The architecture department's response to international students is best understood within this context. Certainly these students play a very important role in filling enrollment openings with well-qualified candidates and in providing needed tuition. This fact cannot be overlooked nor understated. But beyond this, organizational members believe these students significantly enhance the department's international reputation and enrich the learning environment by bringing different perspectives into the classroom and studio. Leaders therefore have begun to recruit overseas to attract highly qualified students from a larger number of countries than are now represented. They still rarely offer them department funding, but even among domestic students, only 20% receive funding.

Because international students play an important role within this department, faculty members also discuss issues related to them on a fairly regular basis. For example, on several occasions they have considered what an ideal enrollment balance would be between international and domestic students. Similarly, many are concerned about the segregation that exists between these two groups, even though they spend considerable time completing group projects and working together in the studio. In both cases, the discussions did not lead to clear conclusions, so the department has not created action steps or policies.

Some international students' poor English language skills have also led the department to investigate the wisdom of increasing the minimum Test of English as a Foreign Language (TOEFL) score required for admission. The College of Architecture simultaneously approached the problem from a different angle by working with the university's English Language Center to develop "Writing and Speaking for Architecture," a course that focuses on the vocabulary and presentation skills architects need.

Finally, how to meet international students' unique academic needs and how to internationalize the curriculum to benefit both international and American students have been subjects of discussion. As one professor commented, "I guess I can say one of the things I have to do as an instructor is to learn how to make adjustments in the course - the presentation, the material - to take into account and to accommodate different points of view without really changing it." Several have expanded the focus of their courses to include more international projects and the faculty has considered developing a history course that reflects a more Eastern perspective.

The international focus of the dean, the chair, and many members of the faculty, as well as the architecture profession as a whole, helps to explain the relatively proactive stance this unit has taken toward international students. Because so many believe international students, and international activities in general, yield a stronger, richer educational experience for everyone, they have taken the initiative in establishing international ties, recruiting international students, considering policies related to this population, and altering the curriculum to better reflect their presence. The fact that many of these steps enhance their reputation among peer departments and employers has certainly spurred on this activity as well.

Public Health

The public health department included in this study offers only graduate degrees. Of the 239 students enrolled during Fall 1997, 18% were classified as foreign, the lowest proportion of the four cases. Here, the clear mandate to internationalize does not exist as it does in Architecture. However, because the broader role of internationalization also helps to explain this unit's response to international students, this topic is again explored first.

Leaders at the school and department level recognize the role the school could play in helping to address public health issues in other countries. Nevertheless, they have not

developed a clear strategy for doing so because the costs to this department and individual faculty members could be potentially quite high. Funding can be scarce for work in developing countries and it often requires far more applied than pure research, which many in U.S. academic circles consider to be less prestigious. Also, the perception exists that foreign journals are generally of a lower quality than American journals, which keeps many tied to topics that are publishable in the latter. For this department, then, there is no clear path that leads to continued legitimacy and increased prestige within the United States, while simultaneously allowing for the pursuit of projects overseas.

In part because there is no explicit goal to increase the department's international focus, issues related to international students are generally not proactively addressed at the department level. For example, the unit as a whole has not discussed what an ideal enrollment balance between domestic and international students would be in order to optimize the learning environment and recent discussions regarding the adequacy of English language requirements have not occurred. They have also not considered whether they would benefit from conducting overseas recruiting or whether they should adapt the curriculum to better reflect students' backgrounds and future work settings.

While organization-wide concern regarding international student issues is minimal, individual faculty members have taken the initiative in some instances. For example, a few try to recruit students while on overseas research or consulting trips, although funding for international students is very limited within the department. By providing lecture notes, incorporating more visual aids into presentations, and even altering the way they evaluate students, a number are working to better address students' difficulties with the English language. At the same time, a few make an effort to incorporate these students' unique perspectives and experiences into class discussions and group work, because they believe international students enhance the unit's reputation and enrich the learning environment.

Finally, as advisors, some professors noted that their relationships with internationals can be more formal, yet also more personal, than their relationships with American students. According to one, "With international students the relationship goes beyond that with domestic students. I'm a friend, a mentor, someone to listen to their problems, a shoulder for someone to cry on." Those who have made changes, whether as advisors or instructors, believe it is important to do so because the majority of internationals will work overseas after graduation and they want to be sure the program provides adequate preparation for this.

This individualistic response to international students stands out as one of the most salient features of the case and several organizational characteristics help to explain it. Geographically, the department is quite decentralized because the faculty is housed on six floors within two buildings. For this reason, they can be quite isolated in their laboratories and offices, which strains communication across the unit and limits the amount of casual conversation about international student issues that is likely to take place. The different types of research that go on within the department also result in a less unified organization. While some faculty members concentrate largely on policy issues, others are strongly geared toward laboratory-based research. This lack of common focus results in less cohesiveness and less interest in formulating organizational goals and responses to issues. Finally, the fact that the chair did not see a need for the department to address issues related to international students also explains the form this unit's response has taken.

Mechanical Engineering

The mechanical engineering department is unique in several ways from the other three cases. First, it is the largest unit, enrolling 961 students in the fall of 1997. Second, of the 378 graduate students, 59% were international, by far the highest proportion of the four cases. Third, 54% of the faculty are foreign-born, nearly twice as many as in the other

departments, which along with the large international student population, helps to make the unit quite cosmopolitan.

This case description again begins with a look at how the unit's relative emphasis on internationalizing influences its response to international students. Because the United States is the world leader in engineering research and because the curriculum does not have a sociological component, the need to bring in different scholarly or cultural perspectives is certainly less pressing than in the previous two cases. Also, establishing ties with overseas universities and conducting research with foreign faculty, while important activities, are not as high a priority as in the architecture department. Instead, the unit's clearly articulated goal is to become the best and most highly ranked department it can be.

Concentration on this goal provides some explanation for the response to international students that exists here. Because the strategic plan is focused on increasing research funding, improving the domestic applicant pool, and developing stronger ties with alumni and other groups, the department's formal response to international students has been minimal. Nevertheless, a few aspects of the strategic plan have ultimately affected the response to international applicants. The department's extensive domestic recruiting efforts have spilled over into the international arena as they have begun to send some of the newly developed recruiting materials to top overseas universities to attract outstanding international students as well. Also, leaders made another change in the mid 1990s, determining that if they want to improve the caliber of their students, they would be wise to offer funding to the most highly qualified applicants, regardless of their nationality. However, the department has not considered other policies, such as establishing enrollment goals for international and American students or focusing recruitment efforts on specific underrepresented world regions.

Once international students are members of the department, most faculty members do not attend to the unique challenges these students can face. For example, professors generally do not alter the way they advise or teach these students to address their language difficulties or different academic backgrounds. As one explained, "I think that's intentionally so, because the burden is simply on them to catch up and deal with it. Remember, the people we are dealing with are the smartest people in their country. They don't really need a program designed to overcome their handicaps. We just expect them to manage that, just as they have managed everything else up to this point in their career."

Also, although American and international students are not well integrated, most do not perceive this as a problem deserving attention. Instead, "People see a lack of intermingling as a fact. As long as students feel they're having enough support, then that's OK. We let them find their friends."

Overall, many professors perceive these students as no different than Americans when they interact with them, although they generally say they appreciate the diversity these students represent because it is important career preparation for Americans to learn to work beside people from other countries. The comment by another professor captures this. "We really don't think of our graduate students as domestic and international. Once they are here, they are all people we deal with."

It is difficult to overestimate the role that departmental characteristics appear to play in shaping this organization's response to international students. First, it is a large and prestigious unit whose members tend not to look at individual students, but rather at how students as a whole can help them to achieve their goal of improving the department's quality and rank. Second, it is a decentralized unit where issues such as student integration and English language difficulties are largely pushed down to the research group level. Third, it is a technically oriented unit whose curriculum does not have a cultural

component, unlike the architecture and public health cases. Here, faculty members do not believe students learn from fellow students in any significant way, making internationals' presence less valued. Finally, so many nationalities are represented among both the faculty and the students that it is a unit where foreigners are not viewed as unusual or distinct.

Materials Science and Engineering

The second engineering site has in common with the first a technical curriculum and a belief among the faculty that students learn very little about engineering principles from other students. This again makes internationals' perceived contribution to the learning environment much less important than in the architecture and public health cases. Also, establishing ties with foreign universities and corporations, or other activities that would increase the international focus of the unit, are not currently high priorities either.

Beyond these similarities, however, lie many differences between the two engineering cases. To begin with, the materials science and engineering department is much smaller–only 170 students–and more cohesive than Mechanical Engineering. These two factors seem to be significant because, unlike the previous case, faculty members here expressed concern about the welfare of specific students, as well as how this population's presence affects the organizational climate. Second, of the 87 graduate students, rather than a majority, only 35% are international. This lower proportion seems to encourage faculty members to perceive them as a minority group that may have special needs requiring attention. Third, while the department enjoys a Top 10 ranking nationally, it is not as highly ranked vis-à-vis peer departments as is the previous case, a factor that will be explored more shortly. Finally, the chair has taken more action concerning international student issues than has the leader of the other unit.

These organizational characteristics have helped this population to be noticed far more frequently here than in the previous case. For example, many professors are quite

aware of the difficulties some international students face as they try to function in English, so they avoid using colloquialisms in class and utilize visual aids when lecturing to assist these students with comprehension. Faculty members' awareness of many students' poor language skills has led them to discuss on numerous occasions how they might address this frustrating situation, but they have come to no clear resolution. Raising TOEFL test scores is likely not the answer. "Demanding more [English language] expertise, it's bogus. What are they, the TOEFL scores? The TOEFL scores on our incoming students are very high. . . . Are they being prepped for these tests when the actual speaking ability just isn't there?" Some have also altered the way they work with their international advisees to address both cultural differences and the communication difficulties that they realize exist. For example, they may spend extra time with these students whey they first arrive to be sure that expectations are clear and that the students are comfortable with their laboratory's working structure.

Finally, faculty members are cognizant of, and concerned about, the lack of integration between domestic and international students in the department, so they have talked frankly with both groups of students concerning the problem. According to the chair, "International students self-segregate. They don't talk with other nationalities...I tell them frequently, 'Domestic students, you reach out to internationals and international students, don't speak your language in the lab or in class.'"

While many professors are concerned about, and have responded to, some of the challenges international students face, they also feel significant pressure from outside groups to keep international enrollment numbers as low as possible without sacrificing overall student quality. Employers have pushed for more American graduates when soliciting applications from the department and federal funding agencies have repeatedly

voiced their preference for funding American students with research contracts. (All graduate students in this department receive full funding.) Finally, some American applicants have expressed a hesitancy to enroll in the department, fearing that they would feel like a minority because so many internationals were enrolled.

This department's slightly less prestigious ranking compared to Mechanical Engineering seems to have made it more vulnerable to external pressure of this nature. As a result, these various groups have caused many to perceive international students as a threat to the department's reputation, while communication difficulties and segregation have led to concern over their effect on internal functioning. While many faculty members respond thoughtfully to them, they also perceive them as a mixed blessing.

The next sections summarize the four departments' responses to international students and then consider why there are similarities and differences among them.

Summary of Organizational Responses

Examples of faculty roles changing to better address international students' needs are fairly common. A number of respondents consciously alter their roles as advisors and research supervisors when working with this population. They may spend more time explaining tasks and concepts to these students, provide extra supervision in the beginning, or even become more personally involved in their lives as they struggle to adapt to life in the United States. In the classroom, several use overheads, speak more slowly, and/or avoid colloquialisms to assist students with comprehension. These changes have most often been in response to a theme common to each case–communication difficulties–which over half of the faculty interviewed noted as a significant concern.

Most of the departments also have at least some policies in place regarding international students, but these are largely informal and not highly developed. English language requirements and funding policies are the two most common issues departments

have addressed, the first through formal policies, the latter often more informally. Again, Architecture and Materials Science are the only departments to have recently considered altering their language requirements, while Mechanical Engineering is the only unit to recently change its funding policy. Enrollment goals regarding international students do not formally exist in any department and recruitment activities generally reflect an opportunistic approach. Likewise, curricular policies directly related to international students have not been formally established in any units, although the curriculum has been altered somewhat in Architecture and to a lesser extent in Public Health.

It is interesting to note that while problems associated with international teaching assistants have been frequently cited in the literature (Fisher, 1985; Jacobs & Friedman, 1988; Rubin, 1992), none of the four departments struggled with developing formal policies around this issue. Public Health and Architecture do not widely utilize teaching assistants, while the engineering departments have enough students available to serve as teaching assistants that they are generally not forced to place those with poor communication skills (either domestic or international) in the classroom.

Environmental Factors Which Shape Perceptions and Responses

By considering various characteristics of the four cases, one can identify patterns that seem to explain their different responses to international students. The role that disciplinary differences and organizational and faculty characteristics play are considered first. Following this, the influence of the international students themselves is briefly explored.

Differences Between the "Technical" and "Sociotechnical" Disciplines

First, in the four cases studied, the nature of the discipline influences how the department responds to international students. In what will be termed "sociotechnical"

fields, technical knowledge cannot be fully understood apart from the society in which it will be used. In architecture, for example, to design a high-rise apartment building, one must learn about the preferences, habits, and priorities of its potential dwellers. The same is true for the field of public health, especially when services are offered or research is conducted in foreign countries.

Departments in sociotechnical fields thus may try to create a learning environment that includes cultural variation, so students can learn from each other as well as from the faculty. They may also reflect international students' presence in the curriculum because of their belief that this enriches learning for everyone. Here, international students are able to add an important dimension to classroom discussions, may contribute in valuable ways to faculty research projects, and, in addition, may even strengthen a unit's reputation because of their contributions to the organization's culture. This helps to explain why faculty members from Public Health and Architecture responded to international students more proactively than did those from the engineering departments.

In the two engineering departments, on the other hand, international students are believed to enhance the organization less. This is partly because engineering principles are seen as universal, meaning students' cultural backgrounds are far less relevant or valuable to the learning process. The general belief is also that students learn primarily from the faculty rather than from other students. This idea is reflected in many professors' comments that what domestic and international students learn from each other is only the tangential issue of how to function in a diverse work environment. Therefore, group work for courses is not emphasized, and most often, students have their own area of responsibility within the research group, which does not require collaboration with others.

Two other differences exist between the technical and sociotechnical departments studied. First, in the architecture and public health departments, a majority of students

return home to work after graduation, whereas engineering students most often find employment in the United States. This difference, coupled with the fact that only courses in the first two departments include cultural components, helps to explain why discussions regarding curricular relevance for international students have solely taken place within the architecture and public health programs.

A final difference that exists between the technical and sociotechnical departments concerns whether the departments utilize international students as they expand their international work. Public Health and Architecture have found international students to be quite valuable in helping them establish international ties and recruiting applicants from around the world, partly because so many return home after graduation. They also, on occasion, uniquely contribute to faculty research because of the diverse experiences and knowledge that they bring.

The two engineering departments, however, approach international students and internationalizing efforts quite separately. While some international alumni from these units help to recruit students, so many hundreds of applications are received each year from overseas that these departments do not value this assistance as highly as the other two cases. In addition, faculty members' overseas research ties typically grow from contacts with professionally established colleagues rather than through international students' connections and research programs are almost never influenced by international students' unique contributions.

Differences Based on the Organizational and Physical Structures of the Department

Beyond disciplinary differences, the organizational and physical structures of a department also influence its response to international students. First, a unit's size impacts its response. During the interviews, faculty members from Mechanical Engineering, which

enrolls over 900 students in all, tended to focus on graduate students as a whole, rather than on individual students' unique needs or goals. Conversely, respondents in the three smaller units tended to describe interactions with specific students as they spoke about their response to them.

Not surprisingly, leadership also plays a role in shaping the response. In departments where the chair (Materials Science and Engineering) or the chair and the dean (Architecture) are very interested and involved with international student issues and/or with internationalizing the unit, there are frequent discussions about this population among the faculty and some issues, such as integration or curricular changes, are being addressed. Interestingly, these are also the two units where faculty offices and laboratories/studios are located in close proximity to each other, which also encourages discussion, and probably facilitates more active leadership.

In the other two cases, the chair has not taken a strong leadership role (Public Health) or he is leading the department in a direction that does not specifically focus on international issues (Mechanical Engineering). In these units, there have been fewer department-wide discussions regarding international students and little action has been taken to address problems related to such issues as segregation. These are also the two cases where faculty offices and laboratories are located on several floors in more than one building, a second factor that makes addressing issues as a unified organization less likely.

A unit's national ranking is another characteristic that influences response. When a department is very highly ranked, as is the case with Mechanical Engineering, the leadership seems to feel less pressure from institutional or external sources regarding appropriate international student enrollment levels or any other issue. Because the unit is obviously respected by its peers for the research and graduates that it produces, outsiders seem less likely to attempt to change its direction. Likewise, organizational members are

less concerned about outsiders' opinions due to the power and prestige that they enjoy. In the case of Materials Science and Engineering, which is less highly ranked, professors are far more concerned about how American students, employers, funding agencies, and peer institutions perceive them and so discuss enrollment levels and entering class demographics more frequently.

Finally, one cannot underestimate the power of the institutional setting to shape departments' responses to an issue. First, international students enrolled at a top research university represent the very brightest students in the world and many more apply each year than are admitted. This allows departments to be very selective and to remain quite insulated from national and international enrollment trends. Second, for students who are admitted, a research university typically offers an environment where hundreds or even thousands of other internationals are enrolled, making segregation of domestic and international students more likely because subgroups from specific countries naturally form.

Third, faculty members here usually experience more pressure than those at other institutional types to focus their primary efforts on research rather than on teaching or advising. The curriculum may also be more theoretical than practical, as compared to what exists at some other institutional types. Both factors may influence the extent to which professors in this setting alter what they teach or how they advise internationals.

Fifth, the faculty, departments, and entire research universities often enjoy substantial autonomy. Professors and departments specifically may thus experience minimal pressure from institutional administrators and outside groups who want to influence their policies regarding international students. Further research that compares responses across institutional types is needed to understand the role that these factors may play in shaping the response to international students.

Faculty Characteristics as Influences upon Response

Beyond organizational features that influence response, in each department a faculty member's nationality or overseas experience influenced his or her perception of international students, although not in one clearly defined way. During the interviews, foreign-born faculty articulated three different perspectives. One group explained that they had had a positive experience when they were international students, so they in turn felt a responsibility to be sensitive to the needs of today's students to help insure that they too would benefit from their time in the United States. Another group felt that because they did not receive any special attention as students and yet were able to succeed, today's students should be approached in the same way. Still a third group of foreign faculty had no particularly strong opinions concerning how one should relate to these students.

With regard to American-born respondents, those who had lived overseas tended to be sensitive to the challenges international students face, especially as they try to function in a second language. To help them, these faculty members often adapted the way they taught by using less jargon, incorporating more visual aids into lectures, and being especially cognizant of whether international students comprehended class discussions. Among those faculty members who had only lived in the United States, a minority believed it is important not to make special accommodations, while others were quite aware of struggles international students face and they too tried to address these.

Based on these varied responses, it could be surmised that being born or living overseas frequently provides one with a special sensitivity to what international students are faced with as they try to adapt to another culture and educational system. However, especially among foreign-born faculty, this sensitivity may not lead to special accommodations for these students.

A faculty member's age also influenced his or her response to international students. While four-fifths of the interviewed professors reported consciously trying to accommodate international students in the classroom, the five youngest (under 40 years of age) were the least likely to use visual aids or change their vocabulary to assist students. Instead, two of the five only concentrated on explaining concepts in more than one way and using examples in order to help all students. Two other young faculty members made no changes to the way they taught to accommodate internationals' unique needs. One professor in his 60s and one in his 30s believe the current climate of political correctness encourages people to gloss over many differences that exist among groups. This approach may then have influenced the younger faculty the most as they tried to address each student's needs simultaneously rather than being attentive to enduring differences among them.

At the other end of the spectrum, those at least 50 years of age were the most likely to become personally involved with the international students whom they advised. Three of the nine from this oldest group reported developing deeper, more enduring relationships with these students than with domestic students, while none of the younger faculty experienced this. A School of Public Health development officer, as she described faculty members' contact with international alumni, also noted this pattern and believed it represents a significant trend. "To me that's one of the great tragedies. A lot of our older faculty who are retiring now or who have recently retired really had strong connections that they maintained for 20, 30, 40 years. I don't see a lot of our younger faculty doing the same kind of thing."

International Students' Influence Upon the Response

One factor that did not seem to influence department's responses to international students is the international students themselves. Kanter (1977) proposed that as a minority population increases within an organization, its power or influence will increase

and alliances will form to shape the organization. However, although internationals represented between 18% and 59% of the graduate population in each department, the majority of respondents were unable to recall even one instance when one had gone forward with a concern. As a professor from the materials science department commented, "It's my perception that international students tend to stay in the background."

Research regarding cultural differences may explain why this organizational demography theory did not accurately predict the dynamics in these departments, all of which enroll primarily Asian students from China, Korea, and Taiwan. According to Hofstede (1980, 1991), a characteristic of people from these countries is "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (1991, p. 28). For example, students from large "power distance" countries tend to keep a substantial emotional distance between themselves and their teachers and are unlikely to approach or contradict them directly. American students, on the other hand, generally operate with a small power distance. Here, faculty members usually expect students to ask questions when they do not understand something and they encourage student initiatives. This theory then suggests that while American-born faculty may assume that international students would articulate their concerns, students from large power distance countries may believe it is completely inappropriate to approach a professor with a suggestion or a complaint.

A lack of fluency in English may also explain some international students' quiet role, because this lessens their ability to easily articulate their concerns and goals to institutional leaders. Finally, some students might question their rightful role within America's higher education system and so are hesitant to speak out when they perceive they are being treated unfairly. This is a topic that deserves attention in future research.

Discussion

Although this study was conducted 15 years later than Goodwin and Nacht's study (1983), at least two of the findings were similar. First, faculty members continue to respond to international students differently based on whether they have had the opportunity to live in another culture themselves. Even as international travel and sophistication continue to increase, the personal experience of being forced to communicate in a non-native language and adapting to countless cultural differences over an extended period of time continues to play a major role in making a faculty member more sensitive to difficulties international students face when studying in the United States.

Second, the complexity of legitimizing a department's international involvement and specifically international students' presence persists. In 1983 Goodwin and Nacht wrote of faculty members who were ashamed that they had to enroll so many international students in their department. Today, although the questions have broadened somewhat, they still remain. What is an appropriate balance of domestic and international students? How does one remain cutting edge by internationalizing, yet not become so involved that one loses a position of prominence in this country?

The tension within the Public Health department, mentioned previously, is the most obvious. While leaders recognize the role they could play in helping to address various public health issues in other countries, they also know that becoming too involved in overseas projects could lower the department's prestige at home. The mechanical engineering and materials science and engineering departments are shielded from this tension in terms of the types of research the faculty conduct. Their struggle instead entails maintaining a balanced enrollment of domestic and international students to avoid complaints from employers, domestic students, and funding agencies, who would often prefer a clear majority of domestic students. Finally, the architecture department struggles

the least with expanding its international ties, in large part because the profession supports this so strongly. Even here, however, faculty members do not agree upon whether internationalization is a formal priority for the department and the college, because the leadership has actually established few formal policies or goals regarding these initiatives.

One assertion that authors have made was not fully supported by this study -- academic departments typically do not attempt to address international student's unique academic goals and needs (Altbach, 1986; Kaplan, 1987; Weiler, 1984). Although the four departments in this study had not created formal policies, a number of faculty members, particularly those in the sociotechnical fields, had adapted their courses, their advising relationships, or their instructional style because they were aware of and sensitive to these students' needs. Clearly much more could be done to support and benefit from international students' presence, but a picture of professors' disinterest in issues related to this population that some authors have painted was not borne out in this study.

Findings from this study point to the difficulty departments have had in establishing policies and resolving problems that persist for years, in part because they try to make decisions in isolation and without tapping into the resources that are available to them. As the number of international students in the United States continues to increase (Davis, 1999), it is important that more formal studies be conducted to better understand the challenges inherent to academic departments that represent numerous cultures. But if departments are to become more proactive in addressing these challenges, tacit knowledge gained by a variety of organizational members must also be shared more formally.

By working closely with international students for years, foreign-born and senior faculty, colleagues at peer institutions, and international student advisors gain important insights about the issues discussed in this paper. However, this study found that leaders often act without the benefit of their input or the input of international students

themselves. This isolated approach then often leads to only a surface understanding of issues. Evaluating language skills and promoting integration are examples of topics that departments are unsure how to approach. The result in most cases is that faculty members are frustrated with the situation, but few strategies are formulated and relatively few formal policies are established, in part because there is not ample awareness of the options that are available.

To addresses these and other challenges, departments should forge stronger linkages with departments within and outside the institution, with domestic and foreign student representatives, and with an institution's English Language Center, Teaching and Learning Center, and International Student Center where these exist. This approach should help to decrease the confusion and frustration that can exist when people from different cultures work closely together and should also help faculty to value and more thoughtfully incorporate these differences into the learning environment.

References

Altbach, P. G. (1986). The foreign student dilemma. Teachers College Record, 87, 589-609.

Barber, E. G., & Morgan, R. P. (1984). Engineering education and the international student: Policy issues. Engineering Education, 74, 655-659.

Barber, E. G., & Morgan, R. P. (1988). Boon or bane: Foreign graduate students in U.S. engineering programs. IIE Research Report Series No. 15. New York: Institute of International Education. (ERIC Document Reproduction Service No. ED 295 542)

Creswell, J. W. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks, CA: Sage.

Davis, T. M. (Ed.) (1999). Open doors 1998/1999: Report on international educational exchange. New York: Institute of International Education.

Deressa, B., & Beaver, I. (1988). Needs assessment of international students in a College of Home Economics. Educational Research Quarterly, 12, 51-56.

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14, 532-550.

Fisher, M. (1985). Rethinking the 'foreign TA problem'. In J. D. W. Andrews (Ed.) Strengthening the teaching assistant faculty (pp. 63-73). New Directions for Teaching and Learning, no. 22. San Francisco: Jossey-Bass.

Goodwin, C. D., & Nacht, M. (1983). Absence of decision: Foreign students in American colleges and universities. New York: Institute of International Education.

Goodwin, C. D., & Nacht, M. (1986). Decline and renewal: Causes and cures of decay among foreign-trained intellectuals and professionals in the third world. IIE Report No. 9. New York: Institute of International Education.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills: Sage.

Hofstede, G. (1991). Cultures and organizations: Software of the mind. Berkshire, England: McGraw-Hill.

Jacobs, L. C., & Friedman, C. B. (1988). Student achievement under foreign teaching associates compared with native teaching associates. Journal of Higher Education, 5, 551-563.

Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. American Journal of Sociology, 82, 965-990.

Kaplan, R. B. (1987). Foreign students: Developing institutional policy. The College Board Review, No. 143, 7-9, 28-30.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. (2nd Ed.) Thousand Oaks, CA: Sage Publications.

Rubin, D. L. (1992). Nonlanguage factors affecting undergraduates' judgments of nonnative English-speaking teaching assistants. Research in Higher Education, 33, 511-531.

Seeger, J. S. (1993). Contrasting views of U.S. graduate education: Indonesian students and their American mentors. (Doctoral dissertation, The Pennsylvania State University, 1994). Dissertation Abstracts International, 54/07, 2487A.

Selvadurai, R. (1992). Problems faced by international students in American colleges and universities. Community Review, 12(1-2), 27-32.

Trice, A. G. (1999). Graduate education at the University of Michigan: A foreign experience. Report from a survey of graduate international students. Rackham School of Graduate Studies: University of Michigan.

Weick. K. E., & Daft, R. L. (1983). The effectiveness of interpretation systems. In K. S. Cameron & D. A. Whetten (Eds.), Organizational effectiveness: A comparison of multiple models (pp. 71-93). New York: Academic Press.

Weiler, H. N. (1984). The political dilemmas of foreign study. Comparative Education Review, 28(4), 168-179.

Wobbekind, R. L. & Graves, P. E. (1989). International student demand for higher education in the United States. Research in Higher Education, 30, 273-299.

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