

EFFECTIVE ORGANIZATIONAL CHARACTERISTICS FOR INTERNATIONAL
STUDENT ENROLLMENT SERVICE

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Jichul Kim

Certificate of Approval:

David C. DiRamio
Assistant Professor
Educational Foundations,
Leadership and Technology

Maria M. Witte, Chair
Associate Professor
Educational Foundations,
Leadership and Technology

James V. Wright
Professor and Department Head
Counselor, Leadership
and Special Education

David Shannon
Professor
Educational Foundations,
Leadership and Technology

George T. Flowers
Interim Dean
Graduate School

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STUDENT ENROLLMENT SERVICE

Jichul Kim

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Jichul Kim

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Signature of Author

Date of Graduation

VITA

Jichul Kim, son of Sangwoo Kim and Okgil Lee, was born February 20, 1969, in Haenam, South Korea. He graduated from University of Seoul with a Bachelor of Arts in English Language and Literature in 1993. He served in the Republic of Korea Navy as a Naval Officer for three years. From 1996 to 1998, he worked as an editor at DOOSAN Corporation for publishing educational books. He received a Master of Science in Foundations of Education from Troy University in Troy, Alabama in 2000. From 2000 to 2005, he worked as Director of International Admissions at Troy University. He entered Auburn University in May 2004. He is married to Mikyung Chung.

DISSERTATION ABSTRACT

EFFECTIVE ORGANIZATIONAL CHARACTERISTICS FOR INTERNATIONAL
STUDENT ENROLLMENT SERVICE

Jichul Kim

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Historically the U.S. has attracted international students to its campuses deliberately and enrolling additional international students has become an increasingly important subject (Cravcenco, 2004; Phanchantraurai, 2005). However, international student enrollment services at U.S. colleges and universities have reached a critical impasse. Researchers and administrators in international education are concerned about the many challenges in international student enrollment services (Kim, 2001; Magaya, 2004; Weidman, 2005).

The purpose of this study was to examine the relationships between organizational characteristics and organizational effectiveness for international student enrollment within the various settings, such as size of enrollment, location, supporting

programs, and other environmental factors. The study also investigated the organizational characteristics of each institution and the levels of organizational effectiveness for each institution. One hundred and sixty-three non-profit higher education institutions participated in the study.

A two-way ANOVA was used as a quantitative method. Participants' comments were analyzed and discussed based on the literature review. A survey was created as an assessment to measure organizational effectiveness for international admissions based on research of effective organizations (Birnbaum, 1988; Presser, Rothgeb, Couper, Lessler, Martin, Martin & Singer, 2004). Each participant was requested to complete a background questionnaire, such as location, type, accreditation body of the institution, total enrollment, number of staff in international student admissions, and characteristics of the organizational units.

This research may help to understand the general trends in terms of organizational characteristics and structure. The results may provide a framework to predict future international enrollment rates based on their unique organizational traits such as organizational characteristics and structure, size, location, and marketing effort. The educational professionals who are involved in strategic planning to increase the international student population may use this research to understand the possible relationships among variables.

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CHAPTER I: INTRODUCTION

Overview

“The exchange of students...should be vastly expanded, ... Information and education are powerful forces in support of peace. Just as war begins in the minds of men, so does peace.” --- *Dwight D. Eisenhower*

International student enrollment services at United States (U.S.) colleges and universities have reached a critical impasse. Researchers and administrators in international education are concerned about many challenges in international student enrollment services (Deruisseaux, 1998; Kim, 2001; Magaya, 2004; Weidman, 2005). As shown in *Figure 1*, the challenges may be perceived based on internal and external aspects (Kim, 2001; Magaya, 2004; Weidman, 2005). Institutional problems such as low levels of recruiting effort, staff shortage, increase in tuition, and lack of support programs on campus for international students are internal problems. On the other hand, delayed visa processing, other host countries' recruiting efforts, and political and economic situations around the world are considered as external aspects. However, both internal and external challenges are closely related and it makes the challenges more complicated and demands more effectiveness and collaboration from administrators.

The real challenge is not only at the institutional level, but also at the national and international level. National Association of Foreign Student Advisors (NAFSA), also known as the Association of International Educators, strongly suggested that the U.S. is

losing its competitiveness in recruiting international students and this can be harmful for its national interests:

What is most alarming is that, for the first time, the United States seems to be losing its status as the destination of choice for international students. For a variety of reasons that go beyond education and recruitment policy, the United States has lost the allure it once had. It is no longer seen as being as attractive a country to the rest of the world, and that has profound implications not only for international students, but for U.S. leadership and security... Today, the collapse of U.S. competitiveness is there for all to see, a result of the transformation of the international student market in this century, the implementation of post-9/11 security measures, the shattering of America's image in the world, and the absence of a U.S. strategy for addressing these problems. (NAFSA, 2006, p. 1)

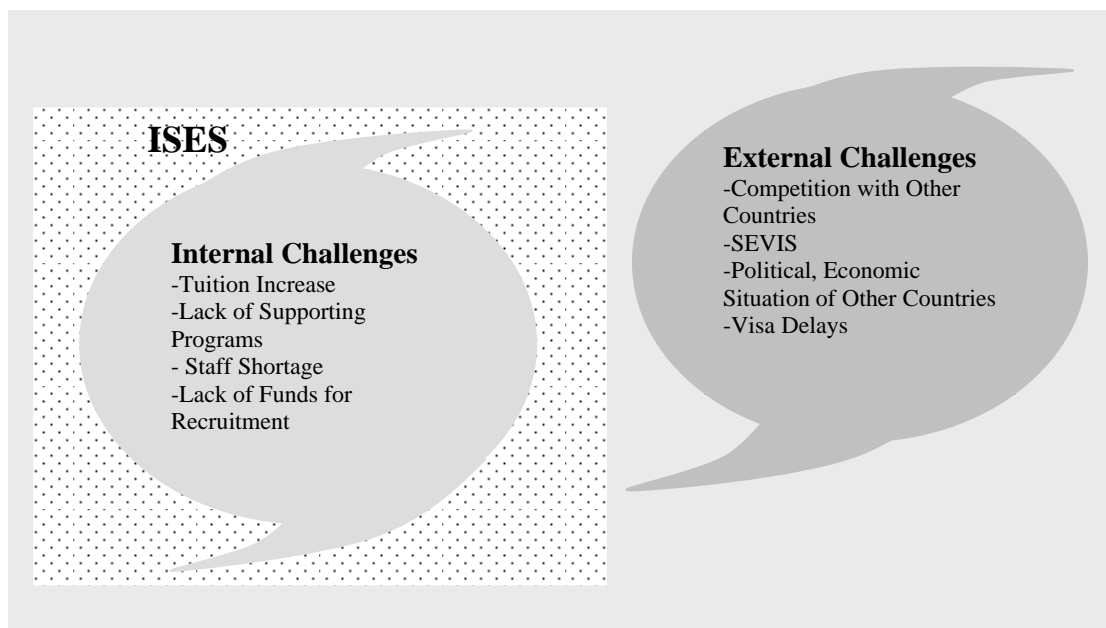


Figure 1. Internal and External Challenges for International Student Enrollment Service (ISES).

Contrary to the trend in the U.S., other advanced countries, such as the United Kingdom, Australia, and Canada, are trying to strategically recruit international students by implementing governmental policies and practices (The Chronicle of Higher

Education, 1998; Wu, 1989). The Republic of Korea (South Korea), even changed its policy and curriculum to attract international students and domestic students (The Korean Ministry of Education and Human Resources Development, 2007). Other countries' efforts cause not only concern, but also burdens to educational administrators who are responsible for international student enrollment in the U.S (NAFSA, 2006). Even though the challenges are perceived seriously at the national and international level, colleges and universities are experiencing international student enrollment challenges directly within the institution. As a result of the September 11th terrorists' attack, a new system called SEVIS (Student and Exchange Visitor Information System) doubled the weight of the burden of international educators in the U.S. who are responsible for international student enrollment services (NAFSA, 2004).

As shown in *Figure 2* (Open Doors, 2006), international student enrollment rates and trends indicate the impacts of the internal and external challenges. Enrollment of all foreign students, in undergraduate, graduate and postdoctoral programs, fell for the first time in three decades in an annual census released in fall 2004. At the same time, university enrollments have been surging in England, Germany and other countries, such as Australia and Canada (Dillon, 2004; NAFSA, 2004; Open Doors, 2006).

Even though the internal and external challenges are understood clearly among researchers and administrators, the dilemma is that in reality most higher education institutions do not have enough staff or funds to deal with the internal and external challenges (Magaya, 2004; Kim, 2001). Universities may need to find a practical breakthrough to maximize their organizational effectiveness for international student enrollment services without increasing their budgets, which is a realistic and possible

approach under budget constraints in most universities. As an innovative perspective, administrators need to think ‘out of the box’ and try to change their organizational characteristics in terms of structure and flow to improve international student enrollment services.

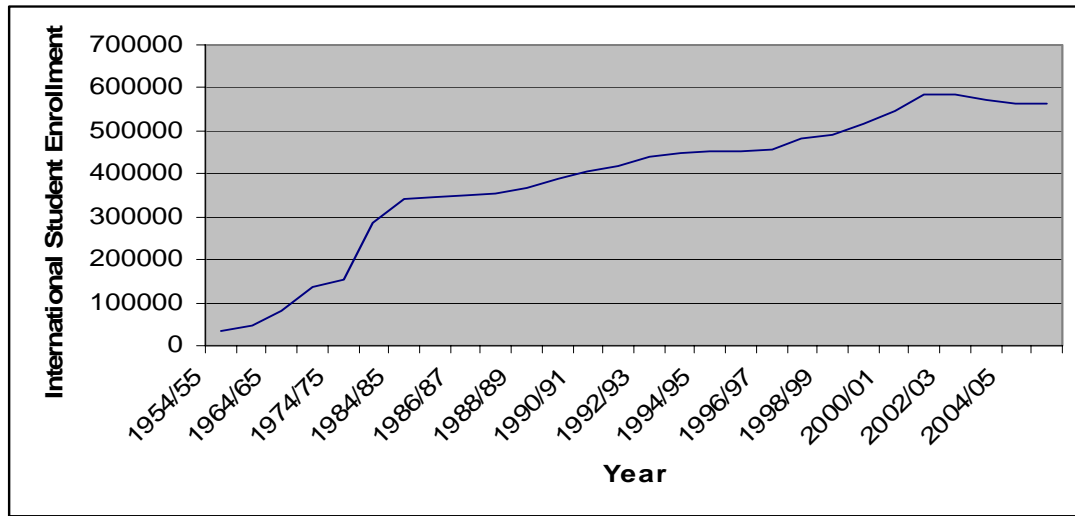


Figure 2. Total International Student Enrollments Trend.

Problem Statement

In the past, higher education institutions had unique and different organizational characteristics compared with profit-seeking business companies (Birnbaum, 1988; Brown & Moberg, 1980). However, now both have the same pressures and demand for improving organizational effectiveness and productivity for the same reason.

International student admissions are at a critical time in the U.S. Many external and internal challenges for international student enrollment services have overwhelmed the workload of administrators and educators (Cravcenco, 2004; Magaya, 2004). The support and feedback from the U.S. government is slow and limited. The most

controllable or practical approach for improving productivity and effectiveness for international student enrollment comes from the institutional level, especially from the organizational unit which is responsible for the service. There is a lack of research and literature in the area of international student enrollment services and the organizational characteristics that promote effectiveness. Due to minimal previous research, it limited the literature review and comparison in the analysis of the findings.

Purpose of the Research

The purpose of this study was to examine the relationships between organizational characteristics and organizational effectiveness for international student enrollment within the various settings, such as size of enrollment, location, supporting programs, and other environmental factors. The study also investigated the organizational characteristics of each institution and the levels of organizational effectiveness for each institution. The organizational effectiveness was studied in terms of organizational intelligence and productivity.

Theoretical Framework

The theoretical framework of this study is grounded in organization theory which also covers organizational intelligence and organizational effectiveness research. The framework was used to create a model to describe the characteristics of the organization and to measure organizational effectiveness for international student enrollment. The model defines the hypothesis that there is a relationship between organizational characteristics and organizational effectiveness and it was investigated throughout the

different organizational environments (Burton, DeSanctis, & Obel, 2006; Fink, Jenks, & Wilits, 1983).

Higher Education Institutions as Organizations

Bolman and Deal (1991) used four organizational typologies from the perspective of leadership. They suggested that multiple frames should be used for effective leadership. The structural frame views organizations as mechanistic hierarchies and the human relations frame regards organizations as collectivities with organizational members. The political frame interprets organizations which are formed by formal and informal groups for controlling power. From the view of the symbolic frame, organizations are loosely coupled and symbolism is critical for communication between leaders and members (Bolman & Deal, 1991).

Based on the lenses of the four organizational frames (Bolman & Deal, 1991), many scholars not only have tried to identify higher education institutions as organizations but also to examine leadership by integrating two or more of the organizational frames. (Bensimon, Neumann, & Birnbaum, 1989). At the same time, they pointed out the unique characteristics of higher education institutions. Birnbaum (1988) indicated that higher education institutions are different with other types of organizations especially in terms of governance. Issues of governance are ambiguous at higher education institutions because there is no center of authority. For example, many college and university leaders do not manage directly over the fundamental areas, such as the curriculum, faculty recruitment or promotion, or the methods of teaching, major processes of production as business leaders do in their firms (Birnbaum, 1988).

There are other striking differences between business firms and higher education institutions (Birnbaum, 1988). Baldrige, Curtis, Ecker, and Riley (1978) concluded that traditional management theories are not applicable to academic institutions because of following reasons:

Their goals are more ambiguous and diverse. They serve clients instead of processing materials. Their key employees are highly professionalized. They have unclear technologies based more on professional skills than on standard operating procedures. They have fluid participation with amateur decision makers who wander in and out of the decision process. (p. 9)

Interdependent Nature of Campus Functions

The unique dual system of control in colleges not only causes governing problems but also interdependence between two control systems. Unlike business organizations, the leading administrators in higher education institutions do not involve directly in the primary goal activities and the staff professionals role as secondary supporters for activities and knowledge (Birnbaum, 1988; Scott, 1981). One of the main reasons is that the professionals at universities or colleges are responsible dominantly for producing, applying, preserving, or communicating knowledge as well as setting goals and maintaining standards for organizations (Birnbaum, 1988; Scott, 1961).

Systems and Symbols in Higher Education Institutions

For applying traditional organization theories carefully in the unique academic setting at colleges, some factors such as systems and symbols need to be understood properly (Birnbaum, 1988). He introduced the basic idea of colleges and universities as open systems that are engaged in a number of continuing exchange processes with their

environments. Tight or loose coupling were also conceptualized by Birnbaum (1988) for illustrating how the various subsystems and elements within a system interact with each other. If subsystems were tightly connected each other, a change in one would directly affect them all. Organizations consisting of loosely coupled systems such as institutions of higher education cause problems for administrators who wish to correct institutional problems or to promote change. However, it also serves important functions in both preserving institutions and making them adaptable and responsive (Birnbaum, 1988).

Birnbaum (1988) also discussed systems in terms of linear and non-linear mode as follows:

Administrators who see the world as linear believe that their institutions should function in a regular and steady manner. Fluctuations and exceptions are indications of problems that they should attend to and correct. Administrators who appreciate nonlinearity recognize that systems will often exhibit what may appear to be random behavior. They realize that erratic and even bizarre outcomes in the short term may not be an indication of long-term problems, but rather are expected in complex systems. Interventions may make them worse; if allowed to run their course, they will often disappear. (p. 55)

Deal and Kennedy (1982) suggested that symbolic administrative action may be important in “process cultures.” In the cultures, it takes time, sometimes for years, to receive feedback on the effect of decisions (Birnbaum, 1988). Therefore, creating shared symbols, myths, and perceptions of reality are important in colleges because they allow participants to make sense of an equivocal world and to establish a consensus on appropriate behavior (Birnbaum, 1988). In other words, followers believe that leaders have caused events (Birnbaum, 1988).

Organizational Intelligence

The concept of three tiers of organizational intelligences concepts was used for creating a dependent variable and designing the survey questions (see *Figure 3*).

Terenzini (1997) defined and categorized the three different kinds of organizational intelligence as follows:

Three different but equally important and interdependent kinds of organizational intelligence are identifiable: technical/analytical intelligence, issues intelligence, and contextual intelligence. The ability to apply one's intelligence in a higher tier implies possession of the intelligence characteristic of lower tiers... The factual knowledge characteristic of technical/analytical intelligence consists of familiarity with the counting units for the basic building blocks of institutional research. Intelligence at this level requires familiarity with the standard categories and definitions of basic terms... Technical/ analytical intelligence also refers to a broad array of methodological skills. Substantive Tier 2 intelligence comprises knowledge of the major issues or decision areas that face institutions and the people who manage them... Issue intelligence also involves an understanding of how institutions function and how decisions are made... Contextual intelligence involves understanding the culture both of higher education in general and of the particular campus where the institutional researcher works. It includes an understanding of the institution's historical and philosophical evolution, faculty and organizational cultures, informal as well as formal campus political structures and codes, governance, decision-making processes, and customs. (p. 24)

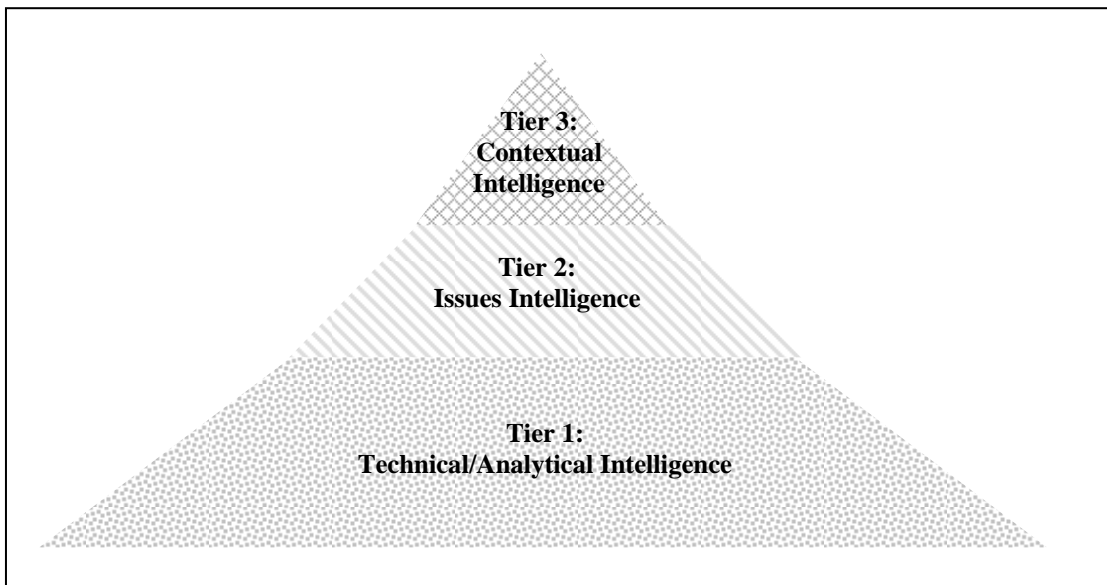


Figure 3. Terenzini's Three Tiers of Organizational Intelligence.

Mechanistic vs. Organic Organizational Characteristics

Burns and Stalker (1961) defined mechanistic and organic organizational characteristics after observing twenty industrial companies in England. According to their findings, external environment was closely related to companies' organizational characteristics: When the external environment was stable, the organizational characteristic was mechanistic. On the other hand, an organic organizational characteristic was dominant in the rapid changing environment (Burns & Stalker, 1961; Daft, 1992). Zaltman, Duncan, and Holbek (1973) contrasted the differences between mechanistic and organic organizational characteristics as depicted in Table 1.

Table 1

Mechanistic and Organic Organizational Characteristics

Mechanistic	Organic
Tasks are broken down into specialized parts.	Employees contribute to the common task of the unit.
Tasks are rigidly defined.	Tasks are redefined through employee teamwork.
There is a strict hierarchy of authority.	There is less hierarchy of authority.
There is a strict hierarchy of control.	There is less hierarchy of control.
There are many rules.	There are few rules.
Knowledge and control of tasks are centralized at the top of organization.	Knowledge and control of tasks are located anywhere in the organization.
Communication is vertical.	Communication is horizontal.

A Theoretical Concept

As shown in *Figure 4*, the theoretical concept for this study was constructed based on organization theory (Burns & Stalker, 1961; Terenzini, 1997). Terenzini's (1997) organizational Intelligences, which are technical and analytical intelligence, issues intelligence, and contextual intelligence, and Burns and Stalker's (1961) organizational characteristics, which are mechanistic and organic characteristics, were used as core concepts. For the purpose of this study, it was presumed that there were two different kinds of organizational characteristics as identified by Burns and Stalker and each organizational unit has three organizational intelligences as identified by Terenzini.

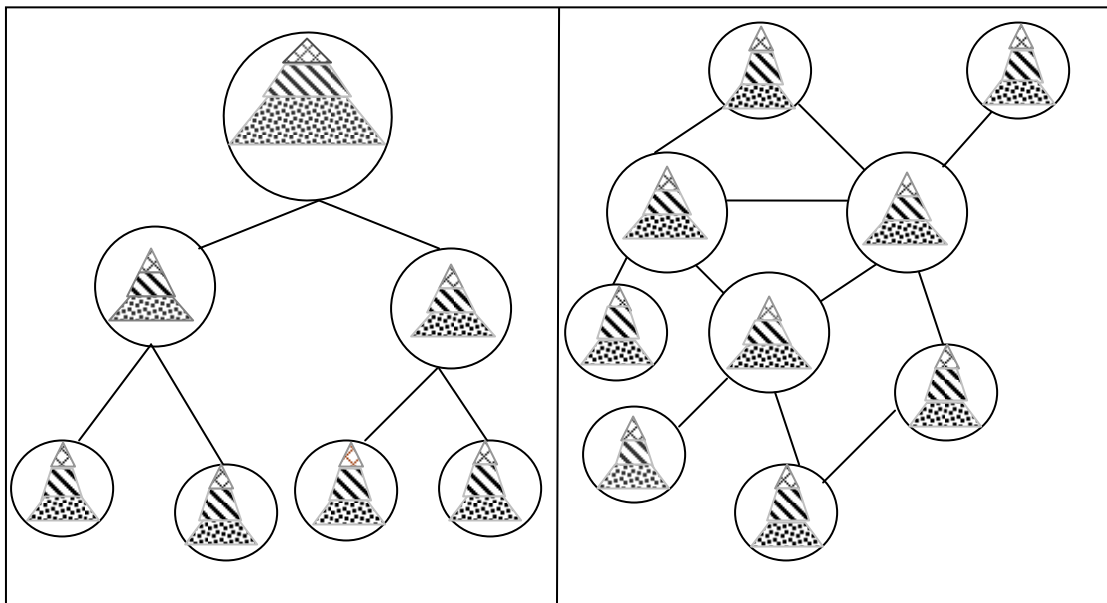


Figure 4. The Theoretical Concept for the Study: Organizational Characteristics with Three Tiers of Organizational Intelligence.

Overview of Methods

The predominant sources of data for the research were surveys and document analysis. Based on the literature review, document analysis and theoretical frameworks, a survey questionnaire was designed to investigate characteristics of organizational units for international student enrollment services and to build validity and reliability for measuring organizational effectiveness.

The criterion for participant inclusion and participation was based on the Carnegie Classifications and from information on official university or college web-pages. Ethical considerations were made and voluntary participation was allowed to promote validity, reliability, and random sampling for the study.

Research Questions

This study investigated the following questions:

1. What are the organizational characteristics of each institution?
2. What are the levels of organizational effectiveness for each institution?
3. What is the relationship between organizational characteristics and organizational effectiveness in international student enrollment services?

Significance of the Study

Growing environmental complexity demands that international educators seek more sophisticated approaches for improved strategic decision-making (Cravenceno, 2004). This research may help to understand not only the general trends in terms of organizational characteristics and structure, but also other factors which influence

international student enrollment in U.S. higher education institutions. The result may provide a framework to predict future international enrollment rates based on their unique organizational traits such as organizational characteristics and structure, size, location, and marketing effort. The educational professionals who are involved in strategic planning for increasing the international student population may use this research to understand the possible relationships among variables.

This study, which is based on organization theory, can provide not only fundamental guidance to college administrators but also insights for effective leadership and services for student learning. History of organization theory or ideas on organizations reveals that they are the products of the environment (Daft, 1992; Dessler, 1980). Changing or changed environments cause different approaches to maintain and manage organizations effectively.

The findings of this study may help educators to be more sensitive about the organization in two aspects. First, this research may help international educators to see organizational challenges and to overcome them by using a paradigm based on organization theory. Organization theory could assist administrators to develop a more sophisticated paradigm to see through the function and interaction in the learning organization as a system. By understanding colleges as a dual system and loose-coupling system as identified by Birnbaum (1988), university administrators may not jump to conclusions about the effect of policy or services. They may spend more energy to rebuild the current structure rather than create a new one and they may prefer to use multiple frames rather than a fixed frame. They also may have evolving ideas and strategy to adjust to new environments. The current environment could make

administrators at colleges or universities think more globally as was accomplished when higher education institutions started to compete with other countries for international student enrollment after the Second World War (James, 1992; Schulken, 1968).

Assumptions of the Study

The study has been based on the following assumptions:

1. Each higher education institution in the U.S. has unique organizational characteristics because of many influencing factors such as structure, size of enrollment, location, and other environmental factors.
2. The international educator will understand the survey instrument about the organizational effectiveness index and their responses will be honest.
3. The international educators' responses to survey questions reflect their perceptions regarding their organizational characteristics and effectiveness.
4. It was assumed that all the international educators who participated in this study would have adequate computer skills necessary to complete the online survey.
5. Regardless of organizational characteristics, it was assumed that Terenzini's (1997) three tiers of organizational exist intelligence in each unit, which were technical and analytical intelligence, issues intelligence, and contextual intelligence.

Limitations of the Study

This study was limited to four-year higher education institutions in the U.S. The study solely focused on the organizational effectiveness for international student enrollment services, based on administrators' perceptions. Therefore, students and faculty members' perceptions were not reflected in the data. Information obtained from survey data was grounded in the perceptions of participants; therefore, it may be skewed or misrepresented for the interest of favoring their institutions (Borg & Gall, 1983; Kim, 2001). Quantitative research using two-way Analysis of Variance (ANOVA) was used for descriptive and inferential statistics and it may cause some limitation in the analysis of findings.

Definitions of Terms

International student: A student who is a citizen of another country and enrolled in an institution of higher education in the United States (Kim, 2001).

International educator: Any administrator, staff, or faculty members of an institution of higher education who deal with programs and services connected to international topics that affect students (Perkins, 2004).

Internationalization: A process of integrating an international perspective into a college or university system (Cravencio, 2004).

I-20: Federal document issued by universities to international students indicating that they are eligible to attend the university (Weidman, 2005).

ICE: Acronym for the U.S. Immigration and Customs Enforcement.

IIE: Acronym for The Institute of International Education

SEVIS: Acronym for Student and Exchange Visitor Information System.

NAFSA: Acronym for National Association of Foreign Student Advisors. Also known as Association of International Educators.

Organizational Intelligences: Means and includes technical/analytical intelligence, issues intelligence, and contextual intelligence (Terenzini, 1999).

Organizational Characteristics: Means and includes mechanistic and organic characteristics (Burns & Stalker, 1961).

Organization of the Study

This study consists of five chapters. Chapter I contains the background of study, problem statement, purpose of the research, theoretical framework, overview of methodology, research questions, significance of the study, assumptions of the study, limitations of the study, and definitions of terms. Chapter II reviews the literature on international student enrollment from historical aspects and current issues, and then a review of the internal and external factors which influenced on international student enrollment is discussed. Additionally, organizational theories were reviewed for theoretical framework. Chapter III illustrates the research methods and the procedures used to perform this research; the chapter discusses logic of research, instrumentation, reliability and validity, the pilot study, survey questionnaire, data collection, and data analysis. In Chapter IV, the research findings are indicated. Chapter V presents the summary of the study, conclusions and recommendations derived from the findings of the study.

CHAPTER II: LITERATURE REVIEW

Introduction

The purpose of this study was to examine relationships between organizational characteristics and organizational effectiveness for international student enrollment within the various settings and to investigate the organizational characteristics of each institution and the levels of organizational effectiveness for each institution. This study investigated the following questions:

1. What are the organizational characteristics of each institution?
2. What are the levels of organizational effectiveness for each institution?
3. What is the relationship between organizational characteristics and organizational effectiveness in international student enrollment services?

In past years, some studies investigated factors which influenced international student recruitment or international students' college-selection decisions (Chapman, 1981; Hossler & Gallagher, 1987; Litten, 1982; Magaya, 2004; Manski & Wise, 1983). However, minimal research has been conducted about organizational effectiveness for international student enrollment services (ISES) from educational administrators' perspectives.

Four related areas of research were reviewed in this chapter for supporting the theoretical background of dissertation and building a conceptual framework in developing answers to the research questions. The historic background of ISES, the significance of ISES, influencing factors on ISES, and organization theory for ISES were reviewed.

The Historic Background of ISES

The higher education institutions in the U.S. have been developed uniquely based on their environmental needs and shaped their organizational characteristics. Cohen (1998) mentioned that each era reflects the evolution of the trends:

The five eras reflect the evolution of the trends. In the Colonial Era, 1636-1789, the college form was established on Old World models. The Emergent Nation Era saw hundreds of small colleges established and the beginnings of access for different types of students. In the University Transformation Era, 1870-1944, the research university made its appearance, faculty professionalization took a leap forward, and the role of the state expanded. The Mass Higher Education Era, 1945-1975, was marked by greater size and number of institutions, augmented student access, and an increasing reliance on federal funding. The era since 1976 has seen a flattening of the growth in faculty professionalization, in new institutional openings, and in public per capita funding, while state-level governance and reliance on tuition has grown. (p. 5)

Because of the positive impact of international student enrollment, the U.S. has historically attracted international students to its campuses and enrolling international students has become an increasingly important issue (Agarwa & Winkler, 1985; Cieslak, 1955; Phanchantraurai, 2005). According to Schulken (1968), the founders of Harvard University included a vision of including men from overseas among student population as one of the basic visions. However, international student recruitment does not have a

history as an organized program in many colleges or universities in the U.S. and before the 1970s higher education officials in the U.S. did little or low-scale international student recruiting (Furnham & Bochner, 1986; Magaya, 2004).

Among the existing studies about international students in the U.S., Schulken's study (1968) provided the most comprehensive historic perspective on the international students in the U.S. Schulken (1968) divided the history of international students in the U.S. into three periods: the domination by the foreign missionary movement, beginning shortly after foundation of the Republic; the domination by private philanthropy, from the period of the Spanish-American War (1898) to the early 1930s; and the period of government involvement, from the 1930s to the 1960s. Each period was divided by the researcher based on its historic elements, such as stages of economic growth, levels of technological development, global circumstances, and America's role in world affairs.

Schulken (1968) found records that students from the British West Indies, Canada and Mexico studied in the U.S. as early as the 1780s. Duerto (2000) also identified Francisco de Miranda as the first international student who studied in the U.S. higher education institution. The student enrolled at Yale University in 1784. "Messianic zeal" was identified as a chief motive of educational exchange during colonial America (Schulken, 1968):

Let them to view the purpose of American Education in national and universal, as opposed to local or regional, terms. For this reason, as well as for more pragmatic ones, they appear to have solicited the admission of students from England and the British West Indies, as well as from other parts of the world. Then, as now, there seemed to be a motivation behind their concern for these "foreign students" which was deeper than that of simply providing an education. (p. 13)

During the 19th century, The American Board of Commissioners for Foreign Missions, through its activities in Asia, encouraged numbers of student to go to the U.S. for higher education. After the Meiji restoration of 1868, the Japanese government sent many students for study in the U.S. (James, 1992). China sent forty students to the U.S. and Europe to learn Western science before the Tai-Ping Rebellion (1853-1864). By the early 1930s, China had become one of the leading countries which sent international students for doctoral programs in the U.S. (Yun, 1931). After a study of foreign student problems in 1910, the World's Student Christian Federation created the Committee for Work among Foreign Students in America and international student was beginning to be considered as a source of good will and international understanding (James, 1992).

At the turn of the century, the number of students from Latin America increased in the wake of the 1903 revolution in Colombia. James (1992) summarized the second phase of international student influx:

In 1919 as a post-war gesture in the spirit of world peace, the Carnegie Corporation established the institute of International Education in New York, encouraging your people from all over the world to come to the U.S. to study. Another of the major sources of fellowships for overseas study during the 1920s and 1930s was the International Education Board of the Rockefeller Foundation, which established International Houses for students in New York, California and Illinois. (p. 2)

Based on data by the U.S. Bureau of Education, by 1904, 2,673 international students from 74 countries were enrolled in U.S. institutions of higher education and, in 1912, the enrollment number jumped up to 5,000 (see Table 2) (King, 1925).

Table 2

The U.S. Bureau of Education Statistics (1925)

Year	Total	Country representation	Numbers
1904	2,673	British North Americans	614
		Mexicans	308
		Cubans	236
		Japanese	105
		Chinese	93
		South and Central America and the Philippine Islands	46
1911-1912	4,856	Canada	898
		West Indies	698
		China	549
		Japan	415
		Mexico	298
		The United Kingdom	251
		India and Ceylon	148
		Germany	143
		Russia and Finland	120
		Brazil	76
		Argentina	51
		Peru	28
		Columbia	28
		Chile	19
		Other South American countries	72
1920-1921	8,357	N/A	N/A

The third period, from the 1930s to the 1960s, was characterized by American government involvement (Barber, 1985; Schulken, 1968). James (1992) pointed out the major events as follows:

The Fulbright Commission Scholarships funded in U.S. dollars by congressional appropriation, provided the impetus for increased government assistance to international education, the commitment to which was assured by Point Four of President Truman's foreign policy program outlined in his 1949 inaugural address...Other legislation offering aid via education to specific countries included the Philippines Rehabilitation Act, 1946; the Joint Resolution on the Finnish War Debt, 1949; and the Iranian Trust Fund Act, 1950. (p. 4)

Butts (1969) indicates that a series of reports by The Ford Foundation and The Carnegie Foundation in 1960, led to a number of legislative instruments which further promoted international education exchange. The Fulbright-Hays Act of 1963 recognized a responsibility not only for the roughly ten percent of foreign students sponsored by the government, but also for all foreign students in the U.S. (Schulken, 1968). Cravencco (2004) pointed out that "this period of outreach in the area of international education gradually came to a close with the sending of U.S. troops to Vietnam, in 1965, and failure to fund the International Education Act, in 1966" (p. 32). The enrollment number of international students in the U.S. reached 134,959 in 1970 (Open Doors, 2006).

According to The Institute of International Education's (IIE) census, during the period of the 1970s and 1980s, international student population in the U.S. doubled in the historic turmoil from the cold war, severe economic recession, the close of the war in Vietnam, and the rise of new oil-rich countries (Cravencco, 2004). During the 1970s, the U.S. higher education institutions started to recruit international students intentionally: The use of agents, or third party recruiters emerged during this era (Magaya, 2004).

After World War II, many higher education institutions in the U.S. established international student advisors.

However, in the 1960s to 1970s, international student programs were simply extensions of domestic admissions offices or international education offices, both of which were normally a function of Academic Affairs (Brubacher & Rudy, 1976; Magaya, 2004; Vansant, 1985). Offices of international student programs were established more independently in many campuses of U.S. higher education institutions by the 1980s and early 1990s (Vansant, 1985). The United States government also started to record international student enrollment officially beginning in 1975 (Mascoop, 1993).

Cravcenco (2004) outlined the phenomenon of international students in the 1970s and 1980s as follows:

Overall, the 1970s and 1980s were characterized by a massive flow of international students into the United States. This was also a period in which U.S. institutions of higher learning recognized that hosting foreign students would yield certain economic benefits. This realization, sharpened by severe financial constraints and budget cuts, contributed to the rise of a new entrepreneurial spirit in the area of international education, particularly in the area of recruitment. (p. 39)

International students pursued degrees in the U.S. during the 1980s mainly due to the high quality and values of the U.S. higher education (Haigh, 1994).

Many of the international students were hired by international organizations, such as the United Nations (Goodman, 1999).

Association of International Educators

NAFSA, also known as Association of International Educators, has been a leading organization in the history of international student enrollment services. NAFSA was founded in 1948 as the National Association of Foreign Student Advisers (NAFSA). It was renamed as NAFSA: Association of International Educators in May 1990 and the acronym was retained for broad name recognition and reflecting the past of the organization (NAFSA, 2007). Initially NAFSA was organized to promote the professional development of American college and university officials who were responsible for advising and assisting international students who had come to the U.S. after the World War II.

NAFSA provides professional networks in the areas of study abroad, international education leadership, international student and scholar services, recruitment, admissions, and preparation, and teaching, learning, and scholarship. As of 2007, nearly 10,000 NAFSA members represent all 50 states and over 150 countries. The majority of members work as international student advisers and admissions officers, study abroad advisers, directors of international programs, teachers of English as a second language, community volunteers, and administrators of sponsored exchange programs. NAFSA's leadership focuses on three main areas, which are influencing public policy, creating and disseminating knowledge, and maintaining a strong organization (NAFSA, 2007). The mission is presented as follows (NAFSA, 2007):

NAFSA is an association of individuals worldwide advancing international education and exchange. NAFSA serves its members, their institutions and organizations, and others engaged in international education and exchange and

global workforce development. NAFSA sets and upholds standards of good practice; provides training, professional development, and networking opportunities; and advocates for international education. (p. 1)

Significance of International Student Enrollment in the U.S.

Based on the historic background from the period of Colonial America to the 1980s in the literature review, studies regarding significance of international student enrollment were reviewed from 1990s to current contexts with historical aspects. Most of the literature emphasized the significance or benefits of international students in the U.S., because of the following their impacts on educational and economic benefits.

Educational Impact of International Students

The educational impacts of international student in the U.S. were addressed more specifically in terms of academic, cultural, and social impacts in the literature. Past research indicated that international students contributed academically, because they bring different and unique perspectives in the learning communities in the U.S. Some recognized international students as linguistic resources and pointed out their academic importance on campuses (Altbach & Wang 1989; Barger, 1995; Funk, 2001; Hornberger, 1991; Magaya, 2004; Moe, 1997; Phanchantraurai, 2005; Rogers, 1984).

Smith (1989) suggested that the community around the university may benefit from accessing to international student activities and contacting international students' alumni as educational resources for international understanding in classrooms.

Zimmermann (1995) addressed that the recruitment and admission of international

student are crucial for enhancing students' experiences on campus and to prepare them to function in their careers in the larger global society. Sharma and Mulka (1993) implied that cross-cultural experience through international students can deepen domestic students' understanding about their own culture. They also suggested that domestic students and local community members can gain a global frame of mind from international students without going abroad. Rogers (1984) emphasized the importance of international students on campus because of their contributions to the enrichment of curricular programs and extracurricular activities and urged faculty and administrators to develop curriculum using international students as resources. Keith (1992) also recommended faculty and administrators to develop programs for interaction or participation of international students with domestic students for maximum mutual intellectual benefits.

International students were identified as vital dominant sources in graduate programs especially in engineering programs for maintaining their quality and competitiveness of their programs (Goodwin & Nacht, 1983; McIntire & Willer, 1992; Solomon & Young, 1987). Orleans (1988) pointed out Chinese students' academic contributions in science and engineering programs. Ewing (1992) suggested that intercultural awareness can be facilitated on campus by international students. The positive academic impacts of international students in the U.S. higher education institutions were also considered as related to political and economic impacts in the bigger frame, because almost 20 percent of the distinguished scientists and engineers who are members of the National Academy of Sciences, and more than a third of U.S. Nobel laureates, are foreign-born (Higdon, 2005).

Previous research has emphasized the importance of internationalization of campus' or international students' presence in the U.S. because of educational benefits from international students (Barger, 1995; Jones, 2002; Yang; 2004). Barger (1995) studied the educational, social, and cultural impact of a large international student population on domestic students through quantitative and qualitative analysis. A theoretical model of cross-cultural interaction consistent with existing literature was proposed in the article. The findings in Barger's study supported the hypothesis that the presence of international students has a positive impact on domestic students, and provide a pedagogical basis for increasing international enrollment at U.S. institutions of higher education.

Jones (2002) also suggested the positive impacts of internationalization by international students and organizational strategies for internationalization. The study showed that leadership support and commitment for internationalization, academics' interest and expertise in international activities, and a central office that coordinated international activities are three most important factors influencing the internationalization process. Yang's (2004) study in Canada showed similar emphasis on the positive impact of internationalization and international students' presence. The research findings revealed that in Alberta's public colleges, international students were recruited to enrich campus culture, generate revenue, and internationalize the curricula. Bier and Rota (1997) also pointed out that international students are vital sources for creating global environment on campus.

Economic and Financial Impact of International Students

The positive impact of international student enrollment on the U.S. national and local economy as well as finance on higher education institutions were addressed by several researchers and professional organizations (Dresch, 1987; Herbert, 1981; Rogers, 1984; Zikopoulos & Barber, 1986). Smith (1989) suggested that universities can get positive impacts from increased prestige abroad through alumni, because they can promote the image of the higher education institutions among their friends, relatives, and colleagues. According to Smith (1989) the business communities around the higher education institutions may be influenced positively from assistance of international alumni for international business opportunities, consulting, employment, and increased trade. Bier and Rota (1997) found that international student made contribution to the local economy of Ohio State by providing excellent contacts for state businesses, generating goodwill towards the state, and facilitating contacts for the state industry and businesses after they returned to their home countries.

Kotkin (1993) claimed that international students are critical to America's economic future because of their strong contributions to fields such as computer science, telecommunications, and the development of medical instruments. According to Rogers (1984), international students' expenditures have created many jobs. For examples, 14,381 jobs were created in California and 308 jobs were created in South Dakota between 1993 and 1994.

Economic benefits of international students have been calculated specifically. International students comprise the United States' fifth largest service-sector export. Evans (1995) claimed that U.S. higher education institutions generated a service trade

surplus that represents about 19 percent of the total U.S. services trade surplus in 1993. NAFSA, also known as the Association of International Educators, estimates that international students and their dependents contributed more than 12.87 billion U.S. dollars to the U.S. economy during the 2003-2004 academic year. Clark (2003) mentioned the economic impact of international students in the following states:

After California, New York and Texas, Massachusetts had the fourth highest population of international students in the United States and these students contributed a total of 801,111,000 U.S. dollars to Massachusetts' economy, an economy that faced severe budget and personnel cuts in its education budget during that same year. (p. 3).

As examples on the institutional level, Boston University and Harvard University were able to generate \$131,247 and \$87,618 U.S. dollars respectively as financial income from international student enrollment between 2001 and 2002 (NAFSA, 2006). Even small colleges need to recruit international students for their financial impact (Byrd, 1991; Zimmermann, 1995). As shown in Table 3, the report of 2005 NAFSA indicated that \$13,491,000,000 were contributed to the U.S. economy due to international students and their families (NAFSA Economic Impact Statement, 2006). Evans (1995) suggested that the knowledge about foreign cultures, languages, and lifestyles from international students enables Americans to compete aggressively in a global market economy. Byrd (1991) stated the importance of international students for the national economy of the United States as follows:

The basic motivation for this effort lies in the realization that the U.S. cannot be economically or politically successful in the 21st century if our citizens cannot see how their lives and work are influenced by forces from outside the U.S. (p. 3).

Table 3

Contribution by International Students and their Families between 2005-2006

Total Number of Foreign Students	564,766
Contribution from Living Expenses	\$10,079,000,000
Contribution from Tuition and Fees to U.S. Economy	\$9,444,000,000
Total Contribution by Foreign Students	\$19,522,000,000
Less U.S. Support of 33.1%	-\$6,463,000,000
Plus Dependents' Living Expenses	+ \$432,000,000
Net Contribution to U.S. Economy by Foreign Students and their Families	\$13,491,000,000

International Student Recruitment

Some research has dealt with the international students' recruitment specifically focusing on the problems and suggestions of institutional marketing strategies and federal regulations including visa policy. Cravenco (2004) used a macro-perspective on this topic and mentioned about the internationalization of American universities and the changing ideology of international student recruitment. The study examined the phenomenon of international student recruitment as a complex pattern of response evoked by a university's drive toward internationalization and entrepreneurship. The outcome of the study revealed patterns, which include contemporary forces influencing internationalization, the importance of international student recruitment to institutional internationalization, the extent to which the need for international intellectual community or entrepreneurialism is the ideological force behind the drive for international recruitment, and the difference between the exposed ideological stance and strategies in operation.

Magaya (2005) investigated recruitment strategies of international students specifically in public universities in the state of Illinois by focusing on trends and patterns. The results indicated that most universities were not actively involved in recruiting international students. Most universities did not have a written strategic plan or budget to recruit or market themselves to the international community. Universities relied on haphazard and informal recruiting activities. Word-of-mouth and academic reputations were the most commonly used tools to recruit. Administrators further reported that had significantly increased the use of technology (websites, on-line application forms, and email address for students to respond to) to recruit international students.

Influencing Factors

International student enrollment services at U.S. colleges and universities have reached a critical impasse. Researchers and administrators in international education are concerned about many challenges in international student enrollment services (Kim, 2001; Magaya, 2004; Weidman, 2005). The challenges may be perceived based on internal and external aspects: Institutional problems such as low level of recruiting effort, staff shortage, increase in tuition, and lack of support programs on campus for international students are internal problems. In addition, delayed visa processing, other host countries' recruiting efforts, and political and economic situations around the world are considered as external aspects (see Figure 1). However, both internal and external challenges are closely related and it makes the challenges more complicated and demands more effectiveness and collaboration from the administration.

External Factors

One of the great external challenges is other host countries' competing to recruit international students (The Chronicle of Higher Education, 1998; Wu, 1989). Many advanced countries like the U.K and Australia have tried to attract international students for their national interests. The U.K. government has made efforts to increase international students' enrollment by making visa process easier and providing scholarships. From those commitments, higher education institutions in Britain increased six percent in the Fall of 2000 from the previous enrollment of international students. Using a market-driven approach, the British Prime Minister announced a plan in 2006 for recruiting 100,000 international students within five years. Currently about 300,000 foreign students study in the U.K. and they predict the number could triple by 2020. Australian government has also actively involved in recruiting international students on the government level by providing marketing its higher institutions (Maslen, 1999). From these efforts, international student enrollment rose 73 percent in 2001 from the 1994 figure. Using one user-friendly website, Australia provides all necessary information to international students such as higher education lists, applications, and visa procedures as well as immigration and cultural services. Other countries such as Canada, German, Japan and China also have their national-level coordination for attracting international students. Bologna Declaration of 1999, which is a European educational policy for collaboration in the region, is a new environmental factor which affects international students' mobility.

SEVIS & Government Regulations

In addition to institutions' lack of strategies, some researchers draw concerns about the negative impact from federal policy regulations (Babara, 2006; Bagnato, 2005; National On-Campus Report, 2004; Recruitment & Retention in Higher Education, 2004; Urias, 2004). Duverneuil (2004) examined immigration policy in the United States, specifically, nonimmigrant student visa policy and the impact of the September 11, 2001, terrorist attacks. Urias (2004) studied federal policy regulations and their impact on foreign student enrollment. This study provided an analysis of the impact of federal policy regulations on foreign student (F-1) enrollment at three distinct U.S. higher education institutions: (1) Yale University, (2) The University of Virginia, and (3) Northern Virginia Community College - Annandale Campus.

There were similarities between American higher institutions and Canadian counterparts in their lack of marketing efforts and strategies, even though both of them emphasized the importance of internationalization on their campuses. Yang (2004) found that only a few colleges had strategic recruitment planning. The most often used recruitment strategies included web publications, brochures, project partners, agents, and alumni. Alberta Centre for International Education (ACIE) provided valuable promotion assistance in recruiting international students. Public policies at the institutional, provincial, and federal levels were poorly coordinated. It was found that international student recruitment was an independent college activity and was mostly self-funded through revenue generation. The lack of funding limited the scope of recruitment strategies and resources.

After September 11, 2001, new visa procedures and the tracking of international students by the federal government (Student and Exchange Visitor information System or SEVIS) have imposed a great burden not only on international students but also on administrators who are in charge of university international admissions (Magaya, 2004; National On-Campus Report, 2004). SEVIS is a national database that tracks international students and scholars during their stay in the United States and it made each institution a part of the Department of Homeland Security's data collection infrastructure (Duverneuil, 2004; NAFSA, 2006). From the beginning of the SEVIS planning process, administrators of international programs or offices at each school were left out despite NAFSA or Association of International Educators' effort (Hartle & Burns, 2002; Rowe, 2002). According to Rosser's research (2003), which was sponsored in part by NAFSA, SEVIS is having a profound effect on international student administrators especially concerning their morale, job satisfaction, and likelihood to leave the field.

In addition to competition from other countries, many higher education institutions in the U.S. experience external challenges from the Student and Exchange Visitor Information System (SEVIS). It is an Internet-based system that allows DHS to collect, maintain and use information on nonimmigrant students, their dependents and designated sponsors in the U.S. By using SEVIS, schools can transmit required information such as registration, employment notifications, program extensions, changes of address, and changes in program of study to DHS and to the U.S. Department of State. However, it has caused visa delays and a huge burden to international students (Magaya, 2004; Rosser, 2003).

Enrollment of all foreign students, in undergraduate, graduate and postdoctoral programs, fell for the first time in three decades in an annual census released in the Fall of 2004. In the mean time, university enrollments have been surging in England, Germany, Australia, and Canada because their governmental efforts (Open Doors, 2006). Political and economic situations in some regions cause difficulties in international student admissions. For example, the unrest in the Middle East makes it difficult for U.S. institutions to recruit students from that region. When Asian countries experienced economic depression during the 1990s, enrollments from the region dropped drastically. The state or governments' budget cuts for higher education institutions also negatively influence international student admissions. Because of these reasons, funds for recruitment and campus internationalization have decreased and have been limited.

International Students Recruitment and Global Competition

As James (1992) indicated, the U.S. has a long history of deliberately attracting students from overseas to its campuses and it has been quite successful without strong competitions from other countries. The United States has passively maintained a majority share of the global market for international education since the end of World War II, and is generally doing little to promote and exploit the market's potential. Several major competitors have entered the market aggressively (Clark, 2003). Rather than competing in order to maintain or increase its market shares, the U. S. continues to contribute to its own losses by neglecting to promote itself (Clark, 2003). According to Institute of International Education (Open Doors, 2006), the number of international students enrolled in U.S. higher education institutions decreased by 2.5 percent in 2003-2004

(Higdon, 2005). It causes many concerns to educators who value and cherish international students in U.S. higher institutions. When Princeton University President Shirley Tilghman testified to a U.S. House committee, she indicated that almost 20 percent of the distinguished scientists and engineers are members of the National Academy of Sciences, and more than a third of U.S. Nobel laureates, are foreign-born (Higdon, 2005).

Contrary to the United States, other countries' governments have actively sought to increase their market shares (McMurtrie, 2001). Britain has traditionally maintained about half as many international students as the United States. Recognizing the profitability of this market, the British Prime Minister committed eight million dollars to an effort aimed at attracting 75,000 additional international students. This effort includes scholarships and easier visa procedures. After conducting marketing surveys, the government decided to actively promote British universities with a marketing drive aimed at improving the stodgy image of British universities. As a result of this effort, Britain realized a six percent increase in enrollments from outside of the European Union in the Fall of 2000. The British Council's director of education for its United States' office, reported that the government made the visa process easier for countries that are significant to the market such as China, India, and Pakistan.

Chinese enrollments reached 70 % in the fall of 2000 while the number from India increased 17 % (McMurtrie, 2001). In Australia, 39 universities operate a nonprofit organization that provides centralized information and logistical support for prospective international students. Australian universities are actively marketing abroad (Njumbwa, 2001). Marketing efforts have capitalized on Australia's hardy out-of-doors

reputation while playing up the excellence of its universities. The number of international students in Australia has risen 73 % since 1994, while the number in America has increased only 21 percent (McMurtrie, 2001).

Internal Factors

There are many internal influencing factors in the practice of international student admissions (Waters, 1992). SEVIS is not only an external challenge, but also has created some internal challenges. This system doubled the workload of administrators of International programs which provide services for international applicants as well as advising. Contrary to the demanding situation, in reality most of higher education institutions do not have enough staff to deal with these drastic changing external challenges. A NAFSA 2004 survey even showed that 25% of international office staff leave their positions after 3-4 years because of job-related stress. The level of campus internationalization is also critical internal factor which influences international admissions. Currents students are a good source of international student recruitment (Kim, 2001). Therefore, the more internationalized campus environment will have a more positive impact on international student admissions.

Tuition increases are also an internal factor, even though it is affected by state budget cuts. According to Kim (2001), most of higher education institutions face grave challenges in maintaining international student enrollment mainly because of dramatic increases in tuition. The Institute of International Institute (IIE) (Open Doors, 2006) found that many international students were discouraged to come to the U.S. because of increased tuition fees.

Budgetary Limitation

In spite of a more demanding and increased workload for international student admissions, there are few positive signs in terms of budgets (Joo, 2003). Higher education institutions in the U.S. have been affected severely by large budget cuts and low domestic undergraduate enrollment (Magaya, 2004). Kim (2001) suggested that the dramatic increase in tuition, budget deficits in state and federal governments, and intense competition among institutions caused most universities to face challenges in maintaining both domestic and international enrolments. Based on these negative indications, it is hard to expect to see an increase in the number of international admissions staff members at U.S. higher education institutions. In addition, there has been an increased workload due to external changes, such as SEVIS, and intense competitions from other countries.

Recruitment Efforts

Level of recruiting effort is also one of internal factors. Some research studies about the impact of recruiting efforts (Dosa, 1993; Jenkins, 1975; Moe, 1997; Morimere, 1997; Pagano & Terkla, 1991). Dosa (1993) stated international students recruitment from marketing perspective:

A targeted mode of marketing educational programs, the recruiting of international students is an information exchange process between the university and the potential consumer for mutual satisfaction. Marketing, both for products and services, includes research on the customer's environment and preferences, strategic planning, a communication and public relations plan, the transactions of information, and evaluation. The focus is on satisfying customer needs and identifying the needs of non-customers (p. 103).

The American Association of Collegiate Registrars and Admissions Officers and the College Board (1980) concluded that recruiting efforts such as direct mail, college night or similar events, and advertising in newspapers or on television. NAFSA also suggested that those marketing efforts could be effective for international student recruitment (Jenkins, 1975). Pagano and Terkla (1991) supported that personalized institutional contacts by faculty or staff could be effective on influencing students' impressions of the institution. Their study also showed that catalog as being the most useful source of information to applicants. Using promotional publications and other admission materials were found to be effective recruiting methods to international student recruitment (Dunnett, 2000). However, ethical concerns regarding the accuracy of the information has been raised by NAFSA and other researchers (Jenkins, 1980; NAFSA, 2007; Silny, 1988).

Some research studies indicated that international enrollment can be influenced by financial aid (Moe, 1997; Solomon & Young, 1987). According to Moe (1997), international student enrollment are directly related to institutional financial polices. Solomon and Young's (1987) finding indicated that international students considered financial aid more seriously than domestic students for applications. Sevier (1987) asserted that campus visit is an effective tool for recruiting students. Wu (1989) also stated that international students who are in the U.S. liked to the idea of a campus visit.

Kim (2001) studied the impact of institutional marketing and recruiting activities on international undergraduate student college choice. This study investigated the effectiveness of institutional marketing and recruiting activities aimed at attracting international undergraduate students, as well as the impact these have on the college

choice of such students at three major universities of the State University of New York system (SUNY). Results indicated that academic reputation and costs (tuition and living costs) were the most influential factors in choosing to apply and enroll in a school, whereas service-related factors (e.g., availability of international student services, helpfulness of staff) and other school characteristics (e.g., campus location, community size) were rated relatively low in importance. Recommendations from this study indicated that institutions should first concentrate in upgrading their academic standing and infrastructure (e.g., availability of on-campus housing, financial aid, etc.) before solely focusing on recruiting activities.

Support Programs for International Student

Huddleston and Rumbough (1997) stressed that enrollment service is a comprehensive management and process. According to their research, this comprehensive management process can include institutional research and planning, marketing, admissions, registrar, retention and supporting programs such as advising. Some research has been accomplished on international student support programs. These studies focused on psychological or sociological perspectives. Mackeben (1999) expanded on international student reflections on issues of discrimination at United States colleges and universities. A conclusion from this research was that the transition to campus life is often exceedingly difficult for international students. Conclusions regarding the role that prejudice and bias play in shaping international student experiences were not as clear. However, this research concluded that prejudice and bias can have a considerable influence on the quality of a student's experience for some

international students. The study also concluded that the intensity of an international student's experiences was directly influenced by the differences between the student's background and mainstream American culture. Coleman and Carsky (1995) also pointed out the issues regarding cultural issues and suggested the need for measuring international student satisfaction.

Guinane (2005) found that international students use a separation acculturation strategy, which allows them to meet their satisfaction, well being, and social belonging needs within their own student community. This strategy appears to buffer individuals from the potentially negative stressful impact of prejudice. Perkins' (2004) qualitative study examined qualities of friendships between American and international students at The University of Alabama. The study found that students' definitions of friendship were quite similar, and the cultural or linguistic difficulties that may have existed at the beginning of the friendships often faded with time. Both American and international students believed that they learned a great deal from each other because of the tremendous depth of their friendships. The research's conclusion was that a positive international-oriented social atmosphere could be fostered with proper coordination of the institution's formal and informal social support networks.

Joo's (2003) study implies that there are many things to have supportive international students services for retaining good international students. This study found the most frequently encountered problems for international students focused on English language, financial aid, placement services, and social-personal difficulties. The most striking finding was the lack of awareness of existing services among international students. There were no significant differences in the utilization of the Office for

international Students and Scholars by cultural group, age, marital status, or length of stay. However, there were significant differences by gender, grade levels, and financial support.

Whitfield's (1995) research is unique because the study was focused on undergraduate student retention at the University of Southern California by a comparative study of domestic and international students. This study compared international students and domestic student integration and retention at a large, private university in Los Angeles. The participants were 2,115 domestic students and 305 international students. Results of the study found that the last chosen major was the most significant background characteristic related to dropout behavior. While GPA was the strongest discriminator between staying and leaving for both groups, it was a less important factor for international students. Use of campus services was the second largest discriminating factor for international students. The study suggested that academic ability is more closely associated with long-term retention, and that faculty play a significant role, particularly early on in a student's program.

Organization Theory

Because of increased internal and external competition and other challenges, higher education institutions have started to approach those challenges based on adapted theories such as organization theory. For example, Vansant (1985) suggested that administrators in higher education institutions were beginning to realize that business-marketing approaches are applicable to domestic and international student recruitment as well as maintaining an adequate student population. According to Weinberg (2001),

system thinking, which is a popular business approach, can help higher education institutions meet students' changing needs, provide quality education, and ensure financial sustainability.

Organization theory is not a collection of facts but a way of thinking about organizations (Daft, 1992) and there are no right or wrong ways exist to view organizations. (Bensimon, Neumann, & Birnabum, 1989) However, it is challenging to understand the U.S. higher institutions as an organization. It requires a holistic approach based on historical aspects of organization theory and their own characteristics as organizations.

Classical Management Theory

As Toffler (1971) mentioned, a unique form of organization has been created at each age based on the necessity of the time. Shafritz and Whitbeck (1978) mentioned that organization theory has a long history:

It is no exaggeration to say that the world is ruled by the underlying premises of organization theory, and it has been ever since humankind first organized itself for hunting, war, and even family life. It seems fair to say that the newest thing about organization theory is the study of it. (p. ix)

Historically, the origin of organization theory can be traced back to pre-industrial period as described by Dessler (1980). Egypt needed a function of bureaucracy for forecasting and utilizing the Nile River and the Romans had highly specialized divisions of work among the various military and governmental agencies and maintained a rigid,

hierarchical, centralized structure in carrying out the functions. After and during The Industrial Revolution such ideas were implemented further because of more predictable results and the necessity of the time (Dessler, 1980).

Scott (1961) pointed out four key pillars of classical organization theory:

Classical organization theory is built around four key pillars. They are the division of labor, the scalar and functional processes, structure, and span of control. Given these major elements just about all of classical organization theory can be derived...The division of labor is without doubt the cornerstone among the four elements. From it the other elements flow as corollaries...The scalar and functional processes deal with the vertical and horizontal growth for the organization, respectively. The scalar process refers to the growth of the chain of command, the delegation of authority and responsibility, unity of command, and the obligation to report...Structure is the logical relationships of function in an organization, arranged to accomplish the objectives of the company efficiently...The span of control concept relates to the number of subordinates a manager can effectively supervise. (p. 11)

In the early 1900s, scientific management was pioneered by Fredrick Taylor (1967). According to Dessler (1980), Taylor researched both the structure and compliance questions of organization theory. In the meantime the administrative theorists such as Henri Fayol studied the total organization and the insights of practitioners (Daft, 1992). Unlike Taylor and Fayol, Weber wrote from the perspective of an intellectual instead of a manager (Dessler, 1980). Even though Weber focused on the question of organization structure, he newly explained the idea of an ideal or pure form of organization, which he called bureaucracy (Dessler, 1980; Burack, 1975).

Scott (1961) described the limitation of classical theory as follows:

It would not be fair to say that the classical school is unaware of the day-to-day administrative problems of the organization...But the interplay of individual personality, informal groups, interorganizational conflict, and the decision-making processes in the formal structure appears largely to be neglected by

classical organization theory. Additionally, the classical theory overlooks the contributions of the behavioral sciences by failing to incorporate them in its doctrine in any systematic way. (p. 13)

Different Approaches in Organization Theory

Following the classical organization theorists, many different models have been suggested such as, human relations models, neo-Weberian models emphasizing decision making and conflict, the institutional school focusing on the structure, history, and values of organizations, and contingency models emphasizing either technology or the environment (Bensimon, Neumann, & Birnabum, 1989).

Bolman and Deal (1991) used four organizational typologies from the perspective of leadership. They suggested that multiple frames should be used for effective leadership. The structural frame views organizations as mechanistic hierarchies and the human relations frame regards organizations as collectivities with organizational members. The political frame interprets organizations which are formed by formal and informal groups for controlling power. From the view of the symbolic frame, organizations are loosely coupled and symbolism is critical for communication between leaders and members (Bolman & Deal, 1991).

Even though the origin of classical organization theories can be traced back to the state monopolies of Egypt and the military empire of Rome (Dessler, 1980), contemporary organization theory originated in the study of scientific management pioneered by Frederick Taylor and other academic approaches by Hawthorne and Weber (Daft, 1992). Mainly in the business field, a mechanistic approach, which is associated with a tight, highly structured management was dominated during the 1960s and 1970s.

An organic approach, characterized as a loose, flexible and free-flowing management, was a mainstream approach during the 1980s and 1990s (Daft, 1992). Finally contingency theory became a dominant organization theory which describes an organization characteristic depending on the total situation (Daft, 1992). However, as Palestini (1999) pointed out, it is a conceptual tool and it does not possess the holistic characteristic as an organization theory. Therefore, organic versus mechanistic approaches still remain core concepts in organization theory. Alfred and Rosevear (2000) explained about these two core approaches when they addressed problems in the academic organization:

The pace of global competition and technological change now threatens to render organizational structures and management obsolete. As external markets move faster and faster, college leaders are finding that the academic organization-departments, administrative unit, and staff-is static and slow. Management and leadership have also become problematic at the institutional level. Since the end of the higher education growth era in the early 1980s, it has become apparent that colleges and universities have diminished their competitive position by centralizing decision making in larger and more complex structures. As new, less hierarchical competitors have begun to emerge, colleges are faced with the potential for powerful setbacks in market share and operating resources. (p. 1)

Higher Education Institutions as Organizations

Based on the lenses of the four organizational frames (Bolman & Deal, 1991), many scholars have tried to see higher education institutions as organizations but also they have attempted to examine leadership by integrating two or more of the organizational frames (Bensimon, Neumann, & Birnabum, 1989). They pointed out the unique characteristics of higher education institutions. Birnbaum (1988) indicated that the concept that best reflects the ways in which institutions of higher education differ from other organizations is governance. Issues of governance are ambiguous at higher

education institutions because there is no center of authority. For example, administrative leaders at colleges and universities do not manage directly over “many college and university managers do not exercise primary control over the curriculum, faculty recruitment or promotion, or the methods of teaching as managers in business firms do in major processes of production (Birnbaum, 1988).

There are other differences between business firms and higher education institutions. Baldrige, Curtis, Ecker, and Riley (1978) concluded that the organizational characteristics of academic institutions are so different from other institutions that traditional management theories do not apply to them because of following reasons:

Their goals are more ambiguous and diverse. They serve clients instead of processing materials. Their key employees are highly professionalized. They have unclear technologies based more on professional skills than on standard operating procedures. They have fluid participation with amateur decision makers who wander in and out of the decision process. (p. 9)

The Interdependent Nature of Campus Functions

The unique dual system of control in colleges not only causes governing problems but also interdependence between two control systems. The administrative line officers do not direct the primary goal activities of the institution as business managers do in business organization and the staff professionals deal with secondary support activities and knowledge (Birnbaum, 1988). One of the main reasons is that universities and colleges have two different kinds of staffs. They have staffs composed predominantly of professionals who manage knowledge by producing, applying, preserving, or communicating and other staffs who set organizational goals and maintain standards of performance (Birnbaum, 1988).

Systems and Symbols in Higher Education Institutions

For applying traditional organization theories in the unique academic settings, some factors such as systems and symbols need to be understood properly. Birnbaum (1988) introduced the basic idea of colleges and universities as open systems that are engaged in a number of continuing exchange processes with their environments.

Tight or loose coupling were also conceptualized by Birnbaum (1988) in order to understand how the various subsystems and elements within a system interact with each other. For example, if subsystems were tightly connected each other, a change in one would directly affect them all (Birnbaum, 1988). Organizations normally consisting of loosely coupled systems such as institutions of higher education cause problems for administrators who wish to correct institutional problems or to promote change. However, a loosely coupled system also serves important functions in both preserving institutions and making them adaptable and responsive (Birnbaum, 1988).

Birnbaum (1988) also discussed systems in terms of linear and non-linear mode as follows:

Administrators who see the world as linear believe that their institutions should function in a regular and steady manner. Fluctuations and exceptions are indications of problems that they should attend to and correct. Administrators who appreciate nonlinearity recognize that systems will often exhibit what may appear to be random behavior. They realize that erratic and even bizarre outcomes in the short term may not be an indication of long-term problems, but rather are expected in complex systems. Interventions may make them worse; if allowed to run their course, they will often disappear. (p. 55)

Deal and Kennedy (1982) suggested that symbolic administrative action may be important in process cultures. In the process culture, it is common that feedback on the effect of decisions is delayed for months or years (Birnbaum, 1988). Therefore, creating

shared symbols, myths, and perceptions of reality are important in colleges because they allow participants to make sense of an equivocal world and to establish a consensus on appropriate behavior (Birnbaum, 1988).

Organizational Characteristics

As Birnbaum (1988) indicated, higher education institutions normally consist of loosely coupled systems. However, their subsystems or units can be identified by organizational characteristics. Brafman and Beckstrom (2006) used symbolic examples in two categories (see *Figure 5*): Traditional spiders, which have a rigid hierarchy and top-down leadership: and, revolutionary starfish, which rely on the power of peer relationships.

If you cut off a spider’s head, it dies; but if you cut off a starfish’s leg, it grows a new one, and that leg can grow into an entirely new starfish. Traditional top down organizations are like spiders, but now starfish organizations are changing the face of business and the world. (p. 187)

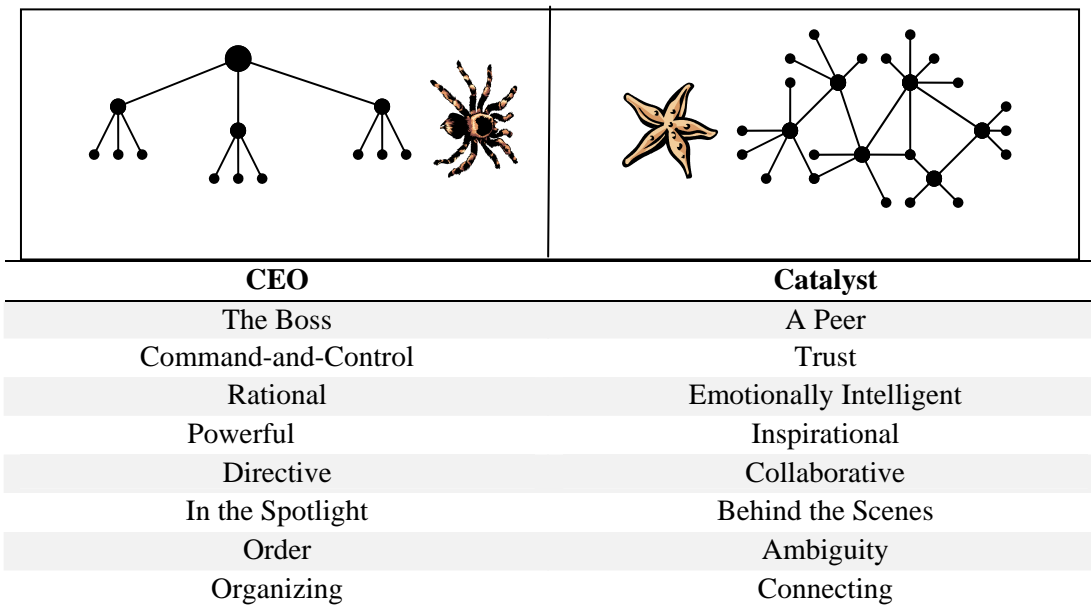


Figure5. The Starfish and the Spider.

In profit organizations, there have been many efforts to maximize organizational effectiveness to compete or survive in the global market place (Burack, 1975; Daft, 1992; Dessler, 1980). Brafman and Beckstrom (2006) compared General Motors and Toyota in explaining the need for change due to the steep competition:

Over the years, the Japanese continued to innovate, while companies like GM stuck with more traditional command-and-control management. The decision to remain stationary would end up costing GM...The differences had nothing to do with unions, cultures, or Confucian and Zen philosophy. To prove its point, Toyota asserted that, with its help, GM could achieve the same levels of quality ... GM proposed that the Japanese take over management of its Fremont, California auto plant, one of the company's lowest-producing plants ... The two companies reopened the Fremont plant, renaming it New United Motors Manufacturing, Inc. (NUMMI)...The results were staggering. Within three years, the new plant had become one of GM's most efficient. NUMMI's productivity, in fact, was 60 percent higher than at comparable GM plants. Along with productivity, quality dramatically improved. (p. 187)
Historically, Burns and Stalker (1961) defined mechanistic and organic

organizational characteristics first after observing twenty industrial companies in England. According to their findings, the external environment was closely related to companies' organizational characteristics. When the external environment was stable, the organizational characteristic was mechanistic. Organic organizational characteristic was dominant in the rapid changing environment (Burns & Stalker, 1961; Daft, 1992). According to Zaltman, Duncan, and Holbek (1973), tasks are broken down into specialized parts and they are rigidly defined in mechanistic characteristic organization. On the contrary, employees contribute to the common task of the unit and tasks are redefined through employee teamwork in organic characteristic organization. There is a strict hierarchy of authority and control and there are many rules in mechanistic organization. In organic organization, there is less hierarchy of authority and control and there are few rules. Knowledge and control of tasks are centralized at the top of

organization in mechanistic organization. On the other hand, knowledge and control of tasks are located anywhere in the organic organization. In terms of communication, mechanistic organization has a vertical communication line and organic organization has horizontal communication line.

Summary

The purpose of this study was to examine the relationships between organizational characteristics and organizational effectiveness for international student enrollment. Four related areas of research were reviewed in this chapter for supporting the theoretical background of dissertation and building a conceptual framework in developing answers to the research questions. The historic background of ISES, the significance of ISES, influencing factors on ISES, and organization theory for ISES were reviewed.

The historic background from Colonial America to the 1980s was overviewed in the literature review. In addition, studies regarding significance of international student enrollment were also reviewed from the 1990s. Most of the literature emphasized the significance or benefits of international students in the U.S., because of their educational and economic impacts. The educational impacts of international students in the U.S. were addressed more specifically in terms of academic, cultural, and social impacts in the literature (Altbach & Wang, 1989; Hornberger, 1991; Moe, 1997; Phanchantraurai, 2005; Rogers, 1984). The economic and financial impact of international students was addressed by several researchers and professional organizations for their contribution to U.S. economy. Because of the beneficial impacts of international students, some

researchers studied the recruitment of international students specifically focusing on the problems and suggestions related to institutional marketing strategies and federal regulations including visa policy. Various organizational studies were reviewed in this chapter to understand the U.S. higher institutions as an organization based on historical aspects of organization theory. To highlight the uniqueness of the higher institutions as an organization, similarities and differences between business organizations and the higher institutions were reviewed.

CHAPTER III: METHODS

Introduction

The primary purpose of this study was to examine the relationships between organizational characteristics and organizational effectiveness for international student enrollment within the various settings, such as size of enrollment, location, supporting programs, and other environmental factors. The study also investigated the organizational characteristics of each institution and the levels of organizational effectiveness for each institution. The organizational effectiveness was studied in terms of organizational intelligence and productivity.

This chapter presents the methods of the dissertation and includes the design of the study, population sample, logic of research, instrumentation, reliability and validity, data collection and procedure, and data analysis that was used to answer the research questions. This study was guided by the following research questions:

1. What are the organizational characteristics of each institution?
2. What are the levels of organizational effectiveness for each institution?
3. What is the relationship between organizational characteristics and organizational effectiveness in international student enrollment services?

Design of the Study

Some researchers suggest a mixed-methods approach, which combines qualitative and quantitative methods, as desirable because it strengthens the weakness from each approach (Creswell, 2003; Brannen, 1992; Brewer & Hunter, 1989; Mathison, 1988; Tashakkori & Teddlie, 2003). For the reason, open-ended questions were included in the survey to expand on limited answers (Bryman, 2004; Cohen, Manion, & Morrison, 2000; Gall, Gall, & Borg, 2007).

According to Fraenkel and Wallen (1966), many areas of questions can be explored through various questions by survey methods. For its strength, a survey was used to provide data on general demographics of each participated institution and perspectives of each participant about its organizational effectiveness in its organizational units (Thomas, 2004).

Population Sample

Based on the Carnegie Foundation Classification, 1316 higher education institutions were identified as the population of non-profit four-year accredited colleges or universities in the U.S. In the classification description, enrollment profile description was considered specifically for this population. Universities or colleges were classified into seven groups:

1. Exclusively undergraduate two-year: This category means that fall enrollment data from 2003 and 2004 show only undergraduates enrolled, and at these associate's degree granting institutions.
2. Exclusively undergraduate four-year: Fall enrollment data show only

undergraduates enrolled, at these bachelor's granting institutions.

3. Very high undergraduate: Fall enrollment data show both undergraduate and graduate/professional students, with the latter group accounting for less than 10 percent of full-time equivalent enrollment (FTE), which was calculated as full-time plus one-third part-time.
4. High undergraduate: Fall enrollment data show both undergraduate and graduate/professional students, with the latter group accounting for 10–24 percent of FTE enrollment.
5. Majority undergraduate: Fall enrollment data show both undergraduate and graduate/professional students, with the latter group accounting for 25–49 percent of FTE enrollment.
6. Majority graduate/professional: Fall enrollment data show both undergraduate and graduate/professional students, with the latter group accounting for at least half of FTE enrollment.
7. Exclusively graduate/ professional: Fall enrollment data show only graduate/professional students enrolled.

There were 363 institutions excluded to ensure validity of the study, because they were not located on the mainland of the U.S. (such as Puerto Rico, Guam, and the U.S. Virgin Islands) and some are exclusive institutions for certain programs (such as medical programs, art program and seminary schools) or racial group (such as American Indian, Hispanic and Jewish).

Instrumentation

A survey was created to measure organizational effectiveness for international admissions based on research of effective organizations (Presser, Rothgeb, Couper, Lessler, Martin, Martin & Singer, 2004). Each participant was requested to complete a background questionnaire, such as location, type, accreditation body of the institution, total enrollment, number of staffs for international student admission, and current characteristics of its organizational unit (see Appendix B). The survey was designed to gather not only general demographics about each institution but also perspectives of each participant on organizational effectiveness about their institution. The survey questions were constructed to maintain confidentiality and anonymity.

The survey consisted of five sections. Section one provided general information and guidance about the survey and section two specified the guidance and provided official agreement on the participation of the survey with IRB approval notice at Auburn University. Section three asked about institutional demographic information including: Location, accreditation body, Carnegie classification, type (private or public), total enrollment, international student numbers in Spring 2007, Fall 2004, Fall 2003, Fall 2002, and Fall 2001, level of internationalization, the average cost for tuition and living per academic year for international undergraduate, organizational characteristics, and any recent organizational change. Section four asked about the participant's preferences about organizational characteristics for international student admissions as well as the number of years at the current institution, profession, and levels of stress. Section five consisted of 40 likert scale questions about organizational effectiveness and international enrollment.

The content of 40 questions was adopted from NAFSA's code of ethics and each question was analyzed based on three tiers of organizational intelligence. The assumption was that the higher organizational intelligence, the more effective in performance. The 40 likert scale items were assigned a numerical value to each response (see Table 4). The responses were (1) not at all, (2) below average, (3) average, (4) above average, and (5) a great extent.

Reliability and Validity

The survey instrument was designed by the researcher after extensive literature review and consultation with research professionals (Behling & Law, 2000; Shannon & Bradshaw, 2002). The validity of this survey was demonstrated through a pilot study which was conducted on a group of 15 institutions during Fall 2006. The participants of the pilot study were encouraged to comment on the survey design and contents.

Cronbach alpha reliability coefficients were used to obtain the valid results. As recommended by Ary, Jacobs & Razavieh (2000) it is a useful measure for internal consistency of likert scales. The Cronbach's alpha reliability coefficient for the 40 Likert type scale items were .972 which reflects homogeneity of items or internal consistency.

Reliability Test

The survey instrument was designed by the researcher after extensive literature review (Fowler, 1995). NAFSA's Code of Ethics and Professional Competencies were used to create 40 survey questions in section 5 of the survey. As shown in Table 4, the 40 questions also were analyzed and categorized based on organizational theories

(Birbaum, 1988; Terenzini, 1997).

The validity of this research was also obtained through a pilot study which was conducted with a group of 15 institutions during Fall 2006. The participants of the pilot study were encouraged to comment on the survey design and contents for including perspectives of professionals in international student enrollment services.

Table 4

Sources of 40 Survey Questions (Section 5)

Related	Related Questions	
Organizational Theory		
Terenzini's Forms of Organizational Intelligence (1999)	Tier 1: Technical/ Analytical Intelligence	Questions: 1, 2, 3, 4, 6, 11, 16, 17, 18, 19, 24, 25, 30, 31, & 40
	Tier 2: Issues Intelligence	Questions: 3, 4, 7, 8, 10, 11, 18, 21, 23, 24, 26, 31, 32, 36, 37 & 40
	Tier 3: Contextual Intelligence	Questions: 3, 4, 5, 7, 8, 10, 11, 13, 14, 15, 18, 20, 21, 22, 23, 27, 28, 29, 30, 31, 32 & 36
Other Organization Theories (Birbaum, 1988; Deal & Kennedy, 1982; Scott, 1981)	Questions: 3, 5, 7, 8, 11, 12, 13, 15, 18, 32 & 40	

Data Collection and Procedure

A Web-based survey instrument was employed for data collection because of its effectiveness in terms of cost, response rate and convenience (Dillman, 2000; Shannon & Bradshaw, 2002). According to Cook, Heath, and Thomson's (2000) meta-analysis of electronic survey studies, higher response rates were highly associated with the number of contacts, personalized contacts, and pre-contacts. Thorough investigation was conducted through official web-site of each institution and provided personalized contact by communicating with a specific person who was responsible for international student admissions. The entire population of four-year non-profit higher education institutions in the U.S. was used to maximize the number of responses.

The survey instrument was designed and posted to the website of SurveyMonkey which is a company providing on-line survey software and web-hosting. Participants were guided to the website by email which contained a hyperlink to the uniform resource locator (URL). Respondents were able to submit their surveys from their browsers electronically and they were restricted to submit only one response. Results of each survey were kept confidentially in the database of the researcher's account on the Website of SurveyMonkey. The following steps were used to administer the survey:

1. The researcher received permission from Institutional Review Board (IRB) at the researcher's institution (Appendix A).
2. The researcher investigated each institution's web-site to locate a staff who is responsible for international admissions.
3. The researcher sent a cover letter by email which explained the purpose of study and potential benefits to the field.

4. The respondents were guided to the web-based survey and were able to follow the directions on how to complete the survey.
5. The researcher sent out a follow-up email to all the participants after two to three weeks.
6. The survey results were kept in the researcher's web-account and downloaded onto researcher's computer for analysis.

Data Analysis

The independent variables for this study were characteristics and structure of the organizational unit for international student enrollment, size of enrollment. The dependent variable was the ratings of 40 questions regarding organizational effectiveness about international student enrollment. The data was analyzed by Statistical Package for the Social Sciences (SPSS) which is the computer software program for statistical analysis. Data analysis began with descriptive statistics about demographic information in sections three and four of the survey. Frequency distribution and percentage were calculated for all the variables. The organizational effectiveness ratings given in section five served as a dependent variable. A Two-way ANOVA was used as a quantitative method. Participants' comments were analyzed and discussed with quantitative findings in chapter five based on the literature review.

Summary

This study was conducted to examine the relationships between organizational characteristics and organizational effectiveness for international student enrollment. The study used a Web-based survey instrument for collecting data from international educators who were responsible for international student enrollment at higher education institutions in the United States. An extensive literature review, pilot study and consultation with research professionals were used for obtaining validity. A Cronbach alpha reliability coefficient was calculated to ensure consistent results. The final survey was designed and hosted through the internet using a commercial survey company. After the permission of IRB, the researcher investigated each institution's web-site to locate a responsible staff members for international student enrollment. Participants were guided to the website by email which contained a hyperlink to the uniform resource locator (URL). Respondents were able to submit their surveys from their browsers electronically and they were restricted to submit only one response.

The data was analyzed using Statistical Package for the Social Sciences (SPSS) which is the computer software program for statistical analysis. A Two-way ANOVA was used as a quantitative method. Participants' comments were analyzed and discussed with quantitative findings in chapter five based on literature review. The independent variables for this study were characteristics and structure of organizational unit for international student enrollment, size of enrollment. The dependent variable was the ratings of 40 questions regarding organizational effectiveness about international student enrollment.

CHAPTER IV: RESULTS

Overview of Methods

The purpose of this study was to examine the relationships between organizational characteristics, organizational effectiveness, and international student enrollment. Chapter I explained the background of study, problem statement, purpose of the research, theoretical framework, overview of methodology, research questions, significance of the study, assumptions of the study, limitations of the study, and definitions of terms. Chapter II provided the review of the literature, which discussed the historical aspects and current issues of international student enrollment, the internal and external factors which influenced on international student enrollment and organizational theories. Chapter III identified the research methods and the procedures used to perform this research. The chapter also discussed the instrumentation, reliability and validity, pilot study, survey questionnaire, data collection, and data analysis. The results of this study should provide higher education institutions in the U.S. with insights into how organizing office units may be reformed to maximize effectiveness for international student enrollment.

The following research questions were used in this study:

1. What are the organizational characteristics of each institution?
2. What are the levels of organizational effectiveness for each institution?

3. What is the relationship between organizational characteristics (mechanistic versus organic characteristic and same versus different office unit) and organizational effectiveness in international student enrollment services?

This chapter presents an analysis of data regarding organizational effectiveness for international student enrollment. The data analysis is presented in two sections. The first section covers the general characteristics of participating institutions and their participants. The second section reveals the respondents' scores on the organizational effectiveness questionnaire of the survey. The data for this section were gathered from 40 likert-type questions (Burns & Stalker, 1961; Daft, 1992; Terenzini, 1997). The likert-type scale items were scored on a five-point rating scale: 1 = not at all, 2 = below average, 3 = average, 4 = above average, and 5 = a great extent. These items were considered to yield a realistic scores (Cronbach Alpha = .70). The alpha level of .05 was used to judge statistical significance.

The Statistical Package for the Social Sciences was used for data analysis as the computer software program. For sample description, location of institutions, accreditation body of institutions, Carnegie classification, type of institution, total enrollment, international student data, level of campus internationalization, the average cost, supporting system for international student, and organizational characteristics (mechanistic versus organic characteristic and same versus different office unit) were analyzed for institutional sample description and the number of years in the current profession and institution, and the stress level were analyzed for individual sample description. A two-way Analysis of Variance (ANOVA) was used for inferential statistics (Cohen & Lea, 2004; George & Mallery, 2006). The dependent variable for this

analysis was the sum of the Organizational Effectiveness Performance Index (OEPI) score based on the 40 questions in section five of the survey. Independent variables were organizational structure (same versus different office unit) and organizational characteristic (mechanistic versus organic characteristic). International student enrollment size was considered as a covariate. In the analysis, the main effects and two-way interaction were explained. Qualitative review of written comments was analyzed to find out recent organizational changes between 2000 to 2006.

Sample Description

Institutional Sample Description

This section summarizes the demographics of the higher institutions that participated in the survey. Based on the Carnegie Foundation Classification, 1316 higher education institutions were identified as the population of non-profit four-year accredited colleges or universities in the U.S. In the classification description, size and setting description was considered specifically for this population. Universities or colleges were classified into six groups: Exclusively undergraduate two-year; Exclusively undergraduate four-year; Very high undergraduate; High undergraduate; Majority undergraduate; Majority graduate/professional; Exclusively graduate/ professional. There were 363 institutions excluded to ensure validity of the study, because they were not located on the mainland of the U.S. (such as Puerto Rico, Guam, and the U.S. Virgin Islands) and some are exclusive institutions for certain programs (such as medical programs, art program and seminary schools) or racial group (such as American Indian,

Hispanic and Jewish). An email and on-line survey were sent to 953 institutions in the population. The second email was sent to the institutions after two weeks as a reminder and the last email after one week. There were total of 163 participating institutions. The response rate was 17.1%.

Location of Institutions

According to the findings, all 163 institutions answered the question in regard to their location. Sixty eight were located in urban (41.7%), 55 in rural (33.7%), and 40 in the suburbs (24.5%).

Accreditation Body of Institutions

The entire 163 institutions were also recognized by six regional accreditation bodies. Eleven were accredited by New England Association of Schools and Colleges (6.9 %), 52 by North Central Association of Colleges and Schools (32.7 %), 29 by Middle States Association of Colleges and Schools (18.2%), 48 by Southern Association of Colleges and Schools (30.2%), 10 by Western Association of Schools and Colleges (6.3%), and nine by Northwest Commission on Colleges and Universities (5.7 %).

Carnegie Classification

Based on size and setting in the classification, the total 163 universities or colleges were classified into six groups: One was Exclusively undergraduate two-year (0.7%); Five were Exclusively undergraduate four-year (3.3%); 13 were Very high undergraduate (8.6%); 27 were High undergraduate (17.9%); 88 were Majority

undergraduate (58.3%); 14 were Majority graduate/professional (9.3%); and three were exclusively graduate/ professional (2.0%).

Type of Institution

Eighty one schools responded as private institutions (50%) and the exact number of institutions responded as public institutions.

Total Enrollment

One hundred fifty five ($N = 163$) institutions provided their total enrollment number for spring 2007. Table 5 displays the results of total enrollment. The median and mode scores were 6000. The minimum and maximum enrollment numbers were 150 and 46588 respectively and it showed a drastic difference among institutions in terms of enrollment size.

Table 5

Total Enrollment, International Student Enrollment, and Average Living Cost

Category	Mean	SD	Median
Total Enrollment	9897	10597	6000
International Student Enrollment	546	931	200
Average Living Cost	27670.51	9431.13	25134.00

International Student Data

One hundred fifty four institutions provided their international student enrollment data for Spring 2007. However, 119 institutions also provided the international student data for Fall 2004; 116 for Fall 2003, 115 for Fall 2002, and 112 for Fall 2001.

The median institutional enrollment was 200 in 2007 Spring term. The minimum and maximum enrollment numbers were 3 and 5637 respectively. As depicted in Figure 7, it also showed a drastic difference among institutions in terms of international student enrollment size.

Level of Internationalization

Twelve institutions out of 152 (7.9 %) responded that their level of internationalization was high and 25 replied (16.4 %) as low. Fifty five institutions (36.2%) graded their level of campus internationalization as average. Thirty six (22.2 %) institutions responded as below average and 25 (24 %) institutions responded as above average respectively. Less internationalized institutions were slightly larger than the more internationalized institutions among total participated higher education institutions in the U.S.

The Average Cost

One hundred forty-seven institutions responded about the average cost for tuition and living per academic year for international undergraduate. The minimum cost was 8000 USD and the maximum was 60,000 USD per academic year. The most frequently cited cost was 20,000 USD per year. There was a drastic gap among participated institutions in terms of the average cost for tuition and living per academic year for international undergraduate.

Supporting System

Residential facility, an ESL program, assistantship, staffs for international student recruitment or international student advising or international student activity were considered as components of a support system for international student based on literature review (Kim, 2001; Magaya, 2004; Weidman, 2005). More than 75% of the institutions which participated responded that they have a supporting system in each component except 'ESL' and 'Staffs for Recruiting' (see Table 6). In terms of valid percentage, 45.2% institutions did not have English as a Second Language program and 34.4% institutions did not have a staff or staffs for recruiting international students.

Recent Organizational Changes

As to the following question regarding any recent organizational change, 74 institutions responded that they experienced some changes between 2000 to 2006. The organizational changes were calculated based on year as shown in *Figure 6*. There were high frequencies of organizational changes in year 2004 and 2006. Their comments were analyzed later with other qualitative responses in the discussion.

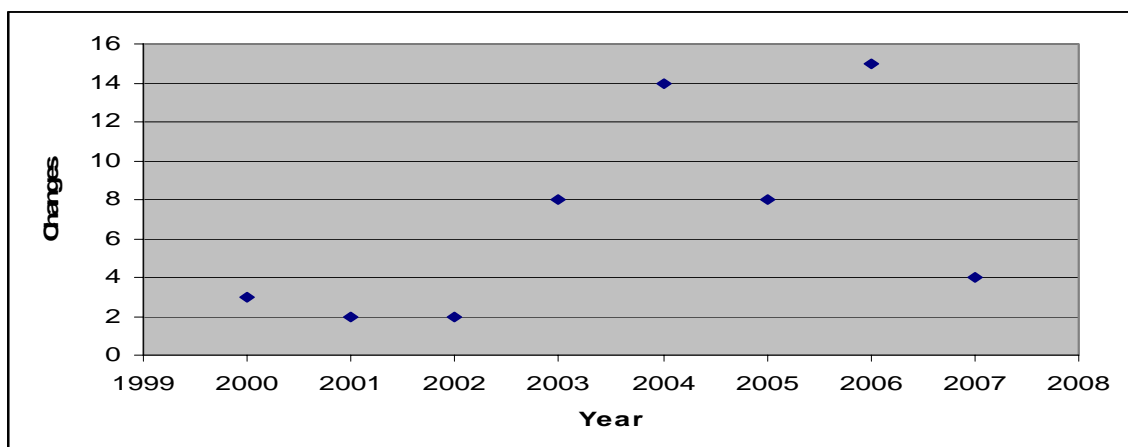


Figure 6. Organizational Changes between Year 2000 to 2007.

Table 6

*Descriptive Data for Location, Accreditation Body, Carnegie Classification,**Internationalization and Supporting System*

Category		N	%	
Location	Urban	68	41.7	
	Rural	55	41.7	
	Suburb	40	24.5	
Accreditation Body	New England Association of Schools and Colleges	11	6.9	
	North Central Association of Colleges and Schools	52	32.7	
	Middle States Association of Colleges and Schools	29	18.2	
	Southern Association of Colleges and Schools	48	30.2	
	Western Association of Schools and Colleges	10	6.3	
	Northwest Commission on Colleges and Universities	9	5.7	
Carnegie Classification	Exclusively undergraduate two-year	1	0.7	
	Exclusively undergraduate four-year	5	3.3	
	Very high undergraduate	13	8.6	
	High undergraduate	27	17.9	
	Majority undergraduate	88	58.3	
	Majority graduate/professional	14	9.3	
	Exclusively graduate/professional	3	2.0	
Level of Internationalization	Low	25	15.4	
	Below Average	36	22.2	
	Average	55	34.0	
	Above Average	24	14.8	
	High	12	7.4	
Supporting System	Assistantship	No	27	16.7
		Yes	127	78.4
	Residential Facility	No	33	20.4
		Yes	122	75.3
	ESL	No	70	43.2
		Yes	85	52.5
	Recruiting Staff	No	53	32.7
		Yes	101	62.3
	Activity Staff	No	18	11.1
		Yes	135	83.3
	Advising Staff	No	20	12.3
		Yes	134	82.7

Individual Sample Description

Participants

The questions about participants were minimized to ensure this survey was anonymous and confidential. However, for the consideration of validity and reliability, their work experience in the current institutions and professions were considered a part of the general demographics. The mean number of years in the current profession and institution were 4.19 and 3.86 years respectively. The mode for stress level was 4 which is slightly higher than mean score (3.49) in the scale from 1 (low) to 5 (high). In Table 7, stress level and years in the current profession and institution were analyzed further by 7 Carnegie classification.

Table 7

Participants' Stress Level and Years in the Current Profession and Institution

Category	Carnegie Classification	N	%	Mean	SD
Years in Profession	Exclusively undergraduate two-year	1	0.7		
	Exclusively undergraduate four-year	4	3.3	3.75	1.50
	Very high undergraduate	13	8.6	4.31	1.75
	High undergraduate	23	17.9	4.09	1.97
	Majority undergraduate	82	58.3	4.01	1.88
	Majority graduate	14	9.3	5.00	1.30
	Exclusively graduate	2	2.0	4.50	2.12
Years in Institution	Exclusively undergraduate two-year	1	0.7		
	Exclusively undergraduate four-year	4	3.3	3.50	1.73
	Very high undergraduate	13	8.6	4.31	2.09
	High undergraduate	23	17.9	3.65	1.87
	Majority undergraduate	82	58.3	3.82	1.77
	Majority graduate	14	9.3	4.43	1.55
	Exclusively graduate	2	2.0		
Stress Level	Exclusively undergraduate two-year	1	0.7		
	Exclusively undergraduate four-year	4	3.3	3.50	0.57
	Very high undergraduate	13	8.6	3.62	0.65
	High undergraduate	23	17.9	3.48	1.03
	Majority undergraduate	82	58.3	3.50	0.86
	Majority graduate	14	9.3	3.00	1.17
	Exclusively graduate	2	2.0	3.00	1.41

Research Questions

Data analyses were directed by the three research questions identified in this study. The three questions will be used to guide the presentation of results.

Research Question 1

What are the organizational characteristics of each institution?

Organizational Characteristics for International Student Enrollment Service

Based on organizational theories (Burns & Stalker, 1961; Daft, 1992; Zaltman, Duncan, & Holbek, 1973), the characteristics were analyzed into mechanistic, organic, and hybrid. In mechanistic organizational unit, tasks are broken down into specialized parts and rigidly defined. There is a strict hierarchy of authority and control in the unit. In organic organizational unit, tasks are redefined through employee teamwork. There is less hierarchy of authority and control. Knowledge and control of tasks are located anywhere in the organic organization.

Ninety institutions out of 143 (62.9%) responded that their organizational characteristic for international student service as organic and 39 institutions (27.3%) as mechanistic (see Table 8).

Table 8

Current Characteristics for International Student Enrollment Service

		Frequency	Percent
Valid	Organic	90	55.6
	Mechanistic	39	24.1
	Hybrid	14	8.6
	Total	143	88.3
Missing	System	19	11.7
Total		162	100.0

Organizational Structure for ISES

Sixty-four institutions out of 162 (41.8 %) replied that they have the same organizational units for international student enrollment services. They have same organizational unit for international student admissions and international student immigration services. Fifty-seven institutions out of 153 (37.3 %) replied as different organizational units, 18 out of 153 (11.8 %) as hybrid, and 14 out of 153 (9.2 %) as other.

Seventy-two institutions out of 148 (48.6 %) responded that they preferred to have the same organizational unit for international student enrollment services for admissions and immigration services. In the meantime, 55 institutions out of 152 (36.2 %) preferred to have different unit.

Admission Unit for International Undergraduate and Graduate Student

Eighty-six institutions out of 154 (53.1 %) have separate admission units for international graduate and international undergraduate admissions. When asked for their preferences, 89 institutions out of 147 (60.5 %) wanted to have separate admission units.

Research Question 2

What are the levels of organizational effectiveness for each institution?

Section five of the survey consisted of 40 likert scale questions about organizational effectiveness and international student enrollment services. The content was adopted from NAFSA's Code of Ethics (2003) and NAFSA's Statement for Professional Competencies (1996). Each question was analyzed based on Three Tiers of Organizational Intelligence and other organization theories. The 40 likert scale items were assigned a numerical value to each response. The responses were (1) not at all, (2) below average, (3) average, (4) above average, and (5) a great extent.

A Cronbach alpha reliability coefficient was used to obtain consistent results. As recommended by Ary, Jacobs & Razavieh (2002) it is a useful measure for internal consistency of likert scales. The Cronbach's alpha reliability coefficient for the 40 likert type scale item was .972 which reflects homogeneity of items or internal consistency.

A two-way Analysis of Variance (ANOVA) was used for inferential statistics (Cohen & Lea, 2004; George & Mallery, 2006). The dependent variable for this analysis was the sum of the Organizational Effectiveness Performance Index (OEPI) score based on the 40 questions in section five of the survey. Independent variables were structure and characteristics for international student enrollment services. In the following analysis, the levels of organizational effectiveness for each institution were analyzed based on each institution's structure and characteristics. The analysis was detailed further according to each institution's category in the Carnegie classification.

Ninety-nine institutions out of total 163 were selected as the population for ANOVA for their complete data. As seen in the Table 9, all four conditions do not have an equal numbers of institutions. However, the cell sizes are proportional and the data are assumed as proportional (Antonius, 2003; Shannon & Davenport, 2001). The overall mean for the variable OEPI for the entire sample ($N = 80$) was 147.67 with the standard deviation of 31.006. The institutions in the same structure (same office unit for international admissions and immigration-related service) scored higher (OEPI=148.92) than the institutions in the different structure (OEPI=147.67). In the same structure, the institutions which have organic characteristics have higher scores (OEPI=153.96) than the institutions which have mechanistic characteristics (OEPI=138.85). In the different structure, the institutions which have organic characteristics also have higher scores (OEPI=151.00) than the institutions which have mechanistic characteristics (OEPI=137.79).

OEPI score of each institution was analyzed further based on the Carnegie Classification to understand the level of organizational effectiveness in each category. In the category of exclusively undergraduate two-year (ExU2), there was no institution which has different structure or organic characteristic. The mean score of OEPI in same structure and mechanistic characteristic was 128.

In the category of exclusively undergraduate four-year (ExU4), there was no institution which has different structure. The mean score of OEPI in same and organic was 132 and same and mechanistic scored 141. in ExU4. In the category of very high undergraduate (VHU), the institutions which have different structure scored higher (OEPI=166) than the ones which have same structure (OEPI=153.67). In terms of

characteristics, mechanistic institutions in VHU have higher mean score (OEPI=172.33) than organic ones (OEPI=152.00). Combined categories in terms of structure and characteristics also showed differences in the OEPI score; same and organic (142.50), same and mechanistic (176.00), different and organic (161.50), and different and mechanistic (170.50).

In the category of highly undergraduate (HU), the institutions which have different structure scored higher (OEPI=158.40) than the ones which have same structure (OEPI=150.17). In terms of characteristics, organic institutions in HU have higher mean score (OEPI=165.00) than mechanistic ones (OEPI=134.50). Combined categories in terms of structure and characteristics also showed differences in the OEPI score; same and organic (170.50), same and mechanistic (109.50), different and organic (157.67), and different and mechanistic (159.50).

In the category of majority undergraduate (MU), the institutions which have same structure scored higher (OEPI=151.52) than the ones which have different structure (OEPI=141.61). In terms of characteristics, organic institutions in MU have higher mean score (OEPI=153.41) than mechanistic ones (OEPI=118.00). Combined categories in terms of structure and characteristics also showed differences in the OEPI score; same and organic (155.65), same and mechanistic (135.00), different and organic (151.05), and different and mechanistic (96.75).

In the category of majority graduate/professional (MGP), there was no institution which has same structure and organic characteristic. The institutions which have different structure scored higher (OEPI=155.83) than the ones which have same structure (OEPI=140.00). In terms of characteristics, mechanistic institutions in MGP have higher

mean score (OEPI=152.83) than organic ones (OEPI=149.00). Combined categories in terms of structure and characteristics also showed differences in the OEPI score; same and mechanistic (140.00), different and organic (149.00), and different and mechanistic (159.25).

In the category of exclusively graduate/professional (ExGP), there was no institution which has same structure and organic characteristic or different structure and mechanistic characteristic. The institutions which have same structure scored higher (OEPI=186.00) than the ones which have different structure (OEPI=113.00). In terms of characteristics, mechanistic institutions in ExGP have much higher mean score (OEPI=186.00) than organic ones (OEPI=113.00). Combined categories in terms of structure and characteristics also showed differences in the OEPI score; same and mechanistic (186.00), and different and organic (113.00).

Table 9

Descriptive Statistics for Two-Way ANOVA

Dependent Variable: Organizational Effectiveness Performance Index (OEPI)

Current Structure	Current Characteristics	OEPI Mean	Std. Deviation	N
Same	Organic	153.96	25.048	26
	Mechanistic	138.85	35.641	13
		148.92	29.428	39
Different	Organic	151.00	29.246	27
	Mechanistic	137.79	38.305	14
		146.49	32.758	41
Total		147.67	31.006	80

Research Question 3

What is the relationship between organizational characteristics (mechanistic versus organic characteristic and same versus different office unit) and organizational effectiveness in international student enrollment services?

In the following analysis, the main effects, and two-way interaction were explained. A two-way ANOVA was used.

Main Effect for Structure

Thirty-nine institutions which have different organizational units for international student admission and immigration services scored an average of 148.92 OEPI scores while 41 institutions which have same units scored 146.49. The $F = .042$ and $p = .614$ verify that there is no significant main effect for organizational structure.

Main Effect for Characteristics

This result (see Table 10) indicates that 53 institutions which have organic organizational characteristics for international student enrollment scored a mean total of 152.45, while 27 institutions which have mechanistic characteristics scored a mean total of 138.30. An F -value of 4.022 and p of .049 indicate differences for scores of organic organizational unit and mechanistic organizational unit. An eta squared of .053 indicates that 5.3% of the variance of total is accounted for by characteristics.

Two-Way Interaction, Structure by Characteristics

This results (see Table 10) indicate no significant structure by characteristics interaction ($F = .003, p = .959$).

Table 10

Tests of Between-Subjects Effects

Source	df	MS	F	Sig.	Partial Eta Squared
Structure	1	242.803	.257	.614	.003
Characteristic	1	3538.431	3.743	.057	.048
Interaction	1	2.563	.003	.959	.000

Qualitative Responses from Participating Institutions

The survey questionnaire invited participating institutions' comments. There were two comment boxes in the web-survey. In the first comment box, they were asked, "If there was any organizational change between 2000 to 2006, please specify the time (year and term) and the change (e.g. merging of offices)." In the second box, participating institutions were invited to comment freely: "Please feel free to comment on this subject or survey." Those qualitative responses were collected and quoted in the discussions (chapter 5) to support and interpret the quantitative findings.

More than one third of comments are related to their organizational changes for international student enrollment services such as changes in staff members, creation of new positions, structural changes, and characteristics changes. Some institutions commented on the subjects in supporting programs, organizational challenges in their services for international students, and their task and work allocation.

Summary

This chapter presents an analysis of data regarding organizational effectiveness for international student enrollment. The data analysis is presented in two sections. The first section covers the general characteristics of participated institutions and participants, such as location, accreditation body, Carnegie classification, type (private or public), total enrollment, international student number in spring 2007, fall 2004, fall 2003, fall 2002, and fall 2001, level of internationalization, the average cost for tuition and living per academic year for international undergraduate, organizational characteristics, and any recent organizational change. The second section reveals the respondents' scores on the organizational effectiveness questionnaire of the survey.

The Cronbach's alpha reliability coefficient for the 40 likert type scale item was .972 which reflects homogeneity of items or internal consistency. The $F = .042$ and $p = .830$ verify that there is no significant main effect for organizational structure. An F -value of 4.022 and p of .049 indicate differences for scores of organic organizational unit and mechanistic organizational unit. An eta squared of .053 indicates that 5.3% of the variance of total is accounted for by characteristics. There was no significant interaction between characteristic and structure.

CHAPTER V: SUMMARY, DISCUSSIONS, RECOMMENDATIONS, AND IMPLICATIONS

“Each age produces a form of organization appropriate to its own tempo.”
--- *Alvin Toffler*

Introduction

The purpose of this study was to examine the relationships between organizational characteristics, organizational effectiveness, and international student enrollment. Chapter I explained the background of study, problem statement, purpose of the research, theoretical framework, overview of methodology, research questions, significance of the study, assumptions of the study, limitations of the study, and definitions of terms. Chapter II provided the review of the literature, which discussed the historical aspects and current issues of international student enrollment, the internal and external factors which influenced on international student enrollment and organizational theories. Chapter III identified the research methods and the procedures used to perform this research. The chapter also discussed the instrumentation, reliability and validity, pilot study, survey questionnaire, data collection, and data analysis. Chapter IV provided an analysis of data regarding organizational effectiveness for international student enrollment. The first section covered the general characteristics of participated institutions and participants and the second section revealed the respondents' scores on the organizational effectiveness questionnaire of the survey.

The final chapter of this study will offer discussions, conclusions, and some recommendations for future research.

The following research questions were used in this study:

1. What are the organizational characteristics of each institution?
2. What are the levels of organizational effectiveness for each institution?
3. What is the relationship between organizational characteristics and organizational effectiveness in international student enrollment services?

Summary

The statistical procedure used in this study was a two-way analysis of variance (ANOVA). The analysis of data was performed through the use of the Statistical Package for the Social Sciences (SPSS). Data were gathered from 163 university or college administrators who represented each institution. They participated voluntarily through an on-line survey (Appendix B). For the consideration of validity and reliability, their work experience in the current institutions and professions were considered as part of the general demographic. The mean number of years in the current profession and institution were 4.19 and 3.86 years respectively. Eighty institutions were considered for the analysis of two-way ANOVA after screening incomplete and unnecessary information.

This study found an effect of organizational characteristics on organizational effectiveness in the organizational units for international student enrollment services. According to the result, 53 institutions which have organic organizational characteristics for international student enrollment scored a mean total of 152.45, while 27 institutions

which have mechanistic characteristics scored a mean total of 138.30. An *F*-value of 4.022 and *p* of .049 indicate differences for scores of organic organizational unit and mechanistic organizational unit. An eta squared of .053 indicates that 5.3% of the variance of total is accounted for by characteristics.

However, there was no significant effect on organizational effectiveness by organizational structure or international student enrollment size. Additionally, there was no statistically significant indication of interactions among organizational characteristics, organizational structure, and international student enrollment size. A larger sample size would provide more statistically reliable findings and reveal much stronger relationships among variables.

Discussions

International student enrollment rates and trends indicate the impact of the internal and external challenges. Enrollment of all foreign students, in undergraduate, graduate and postdoctoral programs, fell for the first time in three decades in an annual census released in fall 2004. At the same time, university enrollments have been surging in England, Germany and other countries, such as Australia and Canada (Dillon, 2004; NAFSA, 2004; Open Doors, 2006).

Even though the internal and external challenges are understood clearly among researchers and administrators, the dilemma is that in reality most higher education institutions do not have enough staff or funds to deal with the internal and external challenges (Magaya, 2004; Kim, 2001). Two experienced administrators who participated in the survey for this study expressed the reality as follows:

As a one-person office, I do try to do my best in all areas, but more and more find myself falling behind in skills and knowledge, especially in recruiting and admissions work, and while I have the best of intentions, implementation and follow-through is often flawed. [58]

2006 Int'l Services unit changed from a stand alone unit in the Division of Student Affairs to an embedded unit within the Office of Admissions & Scholarship in the same division. The Int'l Services unit lost two professional employees and programming responsibility was regulated to another unit within the same division. [62]

The purpose of this research was to investigate possible relationships between organizational characteristics and organizational effectiveness in international student enrollment services. This study implies that there is relationship between organizational characteristics and organizational effectiveness. Understanding this relationship can help senior college or university administrators to increase their organizational effectiveness by focusing on organizational characteristics or atmosphere rather than physical structural changes. It may help them to avoid any budgetary increase or unnecessary confusion or conflicts among organizational units. An administrator identified parts of these issues in the open comment in the survey:

Because of the officer in charge of international admissions is highly competent and dedicated, her work meditates the abysmal level of the enrollment services top administrator. A recent uprising led by the administrator of international student services has generated some lip-service in response. [23]

However, it is limiting to apply the finding regarding the relationship between organizational characteristics and organizational effectiveness not only due to the sample size of this study but also the fundamental limitation in the organizational theory.

Organization theory is not a collection of facts but a way of thinking about organizations (Daft, 1992) and there are no right or wrong ways exist to view organization (Bensimon,

Neumann, & Birnabum, 1989). In addition to the paradigm based on organizational theory, historically, the higher institutions in the U.S. have been developed uniquely based on their environmental needs and shaped their organizational characteristics.

The limitations mentioned above were also revealed by several comments in the survey:

These are difficult questions to answer on behalf of an entire unit, as the rating might be very different for each individual employee. [17]

The questions are rather vague and thus difficult to respond to in some cases. International admissions functions are administered by admissions office; recruitment is done ad hoc and without full time staff from international student services and ESL offices. The international admissions office is not charged with orientation or support services. [23]

It appears there were many assumptions about organizational structure merged services and admissions. [14]

However, as Terenzini's three tiers of organizational intelligences suggested, one participating administrator agreed that organizational effectiveness is closely related to employees' intelligence as a whole organization unit:

We need surveys of this nature. We feel that at our university we have been able to give both professional and personal attention to the needs of our international students. Our university's organization is competent and caring vis a vis US students going abroad and international students on our campus. However, as employees change we are always in need of best practices which can be provided through studies such as this. [19]

As Birnbaum (1988) indicated, the uniqueness of higher education institutions as an organization supported the finding that organic organizations which are loosely connected and decentralized, are somewhat effective than mechanistic organization units. This study needs to be expanded at a larger scale and in the different administrative units other than international student enrollment services. Birbaum (1988) also

indicated that the concept that best reflects the ways in which institutions of higher education differ from other organizations is governance. Issues of governance are ambiguous at higher education institutions because there is no center of authority (Birnbaum, 1988). However, further research needs to be conducted to find out whether organic organizational units are more effective than mechanistic ones by their nature or are they more effective because they reflect more of the nature of higher education institutions.

From the qualitative data from the survey, several institutions mentioned their decentralized and institutional-based unique evolution to a more effective organizational function for international student enrollment services:

Fall 2002 - Creation of SEVIS compliance officer that does not have programming responsibilities. Fall 2003 - International Admissions unit taken out of undergraduate admissions and merged with the Graduate School. Fall 2004 - International Sponsored Student office aligned with Graduate School from Division of Agriculture. [38]

The International student office became part of Enrollment Services in 2003 under Student Affairs. Enrollment Services was then moved under Academic Affairs in 2006. International student activities and clubs were moved under Multicultural Affairs in Student Life. Other international admissions and advising functions have remained in one office. [32]

In 2003, our division (Center for International Programs) that oversees International Admissions & Recruitment, International Student and Faculty Immigration Services, Study Abroad and ESL, was moved from the Vice President of Multicultural Affairs to Vice President of Academic Affairs. The Executive Director of the CIP now reports to the VP of Academic Affairs. [44]

2005 Office of International Affairs was closed. International Recruitment and Admissions now housed in Admissions (Student Affairs) - International Advising in University College (Academic Affairs)

However, as organization theory reflects the dynamic change of organizations throughout the history, it would be hard to conclude that organic characteristics are far

more effective for international student enrollment services in the U.S. As Toffler (1971) mentioned, a unique form of organization has been created at each age based on the necessity of the time.

Recruiting international students is becoming much more difficult. There are environmental factors, such as the rapid growth of distance learning and profit higher education institutions that contribute to this challenge. Distance learning is becoming popular among international student. Profit seeking higher education institutions are also becoming more popular because of their market-driven approach by considering students as customers. The internal and external factors such as government regulations, global competition, budgetary limitation, and support programs which influence international student enrollment are also factors in recruiting strategies.

According to the findings of this study, there was no significant effect on organizational effectiveness by international student enrollment size and there was no statistically significant indication of interactions among organizational characteristics, organizational structure, and international student enrollment size. However, some administrators' comments suggested that the result of this study could be different on a larger samples or different methodology:

Prior to 2000, the Admissions Office did all paperwork and advising. In 2001, Admissions created a position for an International Student Admissions Coordinator. In 2004, a secretary and a part-time student worker was added to this department. In the fall 2006 semester, the International Office was moved from one office, 2 desk office, to a 2-office with waiting area space to better accommodate the students. [17]

In December of 2006, a Director of International Programs was added to the organization. Formerly there was one employee who handled all matters. The addition of the Director raised the office staff to 2. This allowed one person to

focus on incoming international students and one to focus on study abroad programming. [33]

There was Admissions and Records as one office and as of 2005 there was a split to Admissions and a separate Registrar's Office. The International Advisor's Office stayed with Admissions. A recruiting office for international students is emerging separate from the Admissions Office and may incorporate all international services soon, including in addition to recruiting admissions, international support services and immigration advising.

There are differences between business firms and higher education institutions (Birnbaum, 1988). Baldrige, Curtis, Ecker, and Riley (1978) concluded that the organizational characteristics of academic institutions are so different from other institutions that traditional management theories do not apply to them. For the reason, they pointed out that the goals of academic institutions are more ambiguous and diverse and there are highly professionalized key employees and amateur decision-makers in academic institutions.

Data from this study suggests that organic organizational characteristics are more effective in some areas which are related to unique elements in the characteristics of higher education institutions, such as sense-making and symbolic structure (Birnbaum, 1988). The findings of the study support that creating shared symbols, myths, and perceptions of reality are important in universities because they help participants to share common goals and tasks for their institutions (Birnbaum, 1988). The organic organizational units gained higher scores in the areas such as, advocating for the shared goals of international education, participating in significant on-going intercultural experiences, networking and sharing appropriate knowledge with other professionals, respect for the diverse backgrounds and viewpoints of one's colleagues, and responsibility and willingness to share one's professional expertise, as based on

Birnbaum's organization theory.

This study suggests and supports that decentralized, loosely coupled, organic organizational characteristics may be more effective in higher education institutions. In addition, they need to have highly intelligent organizational units in order to be organizationally effective. International student enrollment services are not an isolated administrative function, but a highly cooperative one. The following response for survey question 13 in section 3 regarding organizational characteristic (see Appendix B) illustrates this fact:

It is difficult to answer item 13 because all services are located in one unit, but the unit is composed of one person who does everything. This one person international office collaborates frequently with various other offices, including admissions, student records, student affairs, etc., but basically has control and authority over what happens with international students. From 2002-2004, the office was composed of two persons. Teamwork, less hierarchy, and vertical communication characterized the organization then. [15]

Recommendations

Future research could include, but not be limited to the following:

1. Use additional surveys to measure organic organizational units and international student enrollment services to examine organizational effectiveness from international students' perceptions.
2. Minimize survey questions to increase survey responses.
3. Use professional endorsement to increase survey responses.

4. Use other quantitative models such as multivariate analysis of variance (MANOVA) which can have more than two dependant variables, such as enrollment rates and student satisfaction.
5. Replicate this study on a larger scale in the United States or other countries.
6. Replicate this study at two-year colleges in the U.S.
7. Replicate this study in different administrative units in addition to international student enrollment services.
8. Replicate this study at profit higher education institutions in the U.S. and compare with non-profit institutions.
9. Use qualitative methods to ascertain other aspects of organizational effectiveness for international student enrollment trends.

Implications

This study suggests that organizational characteristics may be related to organizational effectiveness for international student enrollment services regardless of other institutional factors, such as its enrollment size, region, type or structure. However, for effective international student enrollment services in U.S. higher education institutions, adhering to U.S. governmental policies and regulations is also a critical factor (NAFSA, 2006). The Association of International Educators, also know as NAFSA recommends that the United States require a strategic plan for enhancing international student access consistent with national and homeland security. It emphasizes that the strategic plan must provide a coherent government approach to international students, as opposed to an approach where one part of the government

cancels out the other. According to NAFSA, such a plan must: (1) specify the roles, and provide for coordinating the efforts, of the principal agencies that must be involved in a comprehensive effort to recruit international students; and (2) provide guidance for removing unnecessary governmentally imposed barriers to international student access.

International Education Week (IEW) is a good example of an effort from the governmental level. It originated in 2000 and is sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs and the U.S. Department of Education. It is an important week observed all across the United States and in more than 100 countries overseas. IEW is celebrated in November each year during the week before the American holiday of Thanksgiving. Former U.S. Secretary of State, General Colin Powell, speaking about International Education Week, urged to work for increasing peace, prosperity and democracy by using people-to-people diplomacy, created through international education and exchanges, for the national interests of the U.S. (Moffatt, 2002).

Considering cooperative efforts with the government as mentioned above, following implications may be considered by staff members and faculty at universities or colleges:

1. This study implies that administrators may evaluate their organizational effectiveness in terms of organizational characteristics and structure for international student enrollment services. They may consider their institutional environment and history and develop organizational intelligences for changing their work atmosphere and increasing productivity.

2. This study implies that administrators and faculty members can develop their organizational effectiveness by an organization theory paradigm for understanding organizational characteristics.
3. This study implies that international student enrollment services require highly complex and cooperative approach. Administrators and faculty members need to have high level of organizational intelligence which includes understanding their institution as well as their professional knowledge and skills.
4. This study implies that organizational effectiveness for international student enrollment services can be different in terms of characteristics and structure depending on the category in the Carnegie Classification. In the category of majority undergraduate (MU), the institutions which have different and organic characteristics have much higher score (OEPI=151.05) than the ones have different and mechanistic characteristics (OEPI=96.75). In the category of exclusively graduate/professional (ExGP), in terms of characteristics, mechanistic institutions in ExGP have much higher mean score (OEPI=186.00) than organic ones (OEPI=113.00). This study also implies that mechanistic organization can be more effective for ISES in the categories of exclusively undergraduate four-year (ExU4), majority graduate/ professional (MGP), and very high undergraduate (VHU). According to the findings of this study, organic organization can be more effective than mechanistic one in the highly undergraduate (HU) and majority undergraduate (MU) institutions.
5. This study implies that the level of characteristics (mechanistic verses organic) are different in every participating institution and should be factors to consider

for international student enrollment services. Each institution may need a different level of characteristic, such as highly organic or somewhat organic or hybrid or highly mechanistic or somewhat mechanistic based on its unique institutional culture, organizational dynamics, and members' personality.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL
AUBURN UNIVERSITY

From: Human Subjects Friday - April 20, 2007 8:24 AM
To: Kim, Ji-chul
CC: Witte, Maria
Subject: IRB Protocol review

Dear Ji-chul,

Your protocol entitled "Effective Organizational Characteristics for International Student Enrollment" was reviewed by the IRB. Your protocol does not constitute "human subjects research" as the study has been described in your protocol.

The IRB reviewer's comments are as follows:

"The survey is designed to collect information about an institution, not about a particular 'human subject'. (There are a couple of questions related to 'how long in the profession' and 'stress in your position'.) This really is not human subject research and does not require IRB approval to proceed. (Note: My friendly recommendation is to follow the procedures you have outlined and use the consent document since these are well-written and clear - and appropriate for collecting data.)"

You can begin your study as proposed. Please remember that if you make any changes to the study you should contact our office to determine if the modification has changed the classification of your study. More information is contained in the letter that you should receive shortly.

We wish you the best with your study!
Susan

Susan Anderson
Research Compliance Specialist
Office of Human Subjects
307 Samford Hall
Auburn University, AL 36849
(334) 844-5966
hsubjec@auburn.edu

APPENDIX B
SURVEY INSTRUMENT

Survey of International Educators' Perceptions on Effective Organizational Unit

1. Introduction

I am interested in YOUR FEEDBACK regarding organizational effectiveness for international student enrollment. Specifically, my research is looking at organizational effectiveness based on organizational characteristics. I hope you will please take a few moments to answer survey questions. It is quite a sad reality that we have very few academic researchers in international student services, even though the importance and need are so great. After serving five years as an international educator, I became a full-time graduate student to focus on this research project.

This survey is designed for anonymity and confidentiality (see next page for detailed information). Please do not mention your name or institution. The survey analysis will be shared through research network of NAFSA and Auburn University Electronic Thesis and Dissertation this year (planned in November). <http://graduate.auburn.edu/auetd/>

Your participation is greatly appreciated... thank you for your assistance in this project!

Jichul Kim
Doctoral Program in Educational Leadership
Auburn University
kimjich@auburn.edu

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Survey of International Educators' Perceptions on Effective Organizational Unit
2. Information Sheet

---An Effective Organizational Unit for International Student Enrollment---

You are invited to participate in a research study on effective organizational characteristics for international student enrollment. This study is being conducted by Jichul Kim, a doctoral candidate in Educational Leadership for Higher Education Administration in EFLT (Educational Foundations, Leadership and Technology) Department at Auburn University under the supervision of Dr. Maria M. Witte, Associate Professor, EFLT Department. I hope to learn about effective organizational characteristics for international student enrollment at various institutional settings in the U.S. You were selected as a possible participant because you are identified as a major administrator for international student enrollment at your institution.

If you decide to participate, it will take about 15 minutes to complete the survey which requires one time participation. There will be no risks or discomforts in the participation. The survey analysis will be shared as a benefit through Research Network of NAFSA and Auburn University Electronic Thesis and Dissertation upon the completion of the research project. Any information obtained in connection with this study will remain anonymous. Information collected through your participation may be published in a professional journal, and/or presented at a professional meeting. You may withdraw from participation at any time, without penalty, however, after you have provided anonymous information you will be unable to withdraw your data after participation since there will be no way to identify individual information.

If you have any questions, please contact me by e-mail at kimjich@auburn.edu. For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Investigator's signature Date

Print Name
Page 1 of 1

Investigator's signature Date

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Survey of International Educators' Perceptions on Effective Organizational Unit

3. About Your Institution

1. Where is your institution located?

- Urban
- Rural
- Suburb

2. What is your institution's accreditation body?

- NEASC (New England Association of Schools and Colleges)
- NCA (North Central Association of Colleges and Schools)
- MSA (Middle States Association of Colleges and Schools)
- SACS (Southern Association of Colleges and Schools)
- WASC (Western Association of Schools and Colleges)
- NWCCU (Northwest Commission on Colleges and Universities)

3. Where does your institution fit in based on Carnegie classification?

- ExU2: Exclusively undergraduate two-year
- ExU4: Exclusively undergraduate four-year
- VHU: Very high undergraduate
- HU: High undergraduate
- MU: Majority undergraduate
- MGP: Majority graduate/professional
- ExGP: Exclusively graduate/professional

4. Is your institution private or public?

- Private
- Public

5. What is the total enrollment of your institution?

6. What was the total international student enrollment for the following semesters?

Fall term 2004	<input type="text"/>
Fall term 2003	<input type="text"/>
Fall term 2002	<input type="text"/>
Fall term 2001	<input type="text"/>

7. How many international students are currently enrolled?

8. How many staff members do you have in international student admissions and other related services?

9. Please check what applies to your institution.

Does your institution have:

	Yes	No
separate admission units for international undergraduate and international graduate admissions?	0	0
scholarships or assistantships for international students?	0	0
residential facilities for international students?	0	0
an ESL program?	0	0
staff members for international student recruitment?	0	0
staff members for supporting international student activity?	0	0
staff members for international student advising?	0	0

10. How do you rate the level of internationalization on your campus?

- 1 (Low)
- 2
- 3
- 4
- 5 (High)

11. What is the average cost for tuition and living per academic year for international undergraduate students?

12. Which kind of organizational unit best describes your international student admissions (e.g. foreign credential evaluation) and other services (e.g. SEVIS and international student activity support) at your CURRENT institution?

- Same office unit
- Different office unit

- Hybrid
- Non traditional
- Other (please specify)

13. Please mark every statement which describes your CURRENT organizational unit for international student enrollment:

- Employees contribute to the common task of the unit
- Tasks are broken down into specialized parts.
- Tasks are redefined through employee teamwork
- Tasks are rigidly defined
- There is less hierarchy of authority
- There is less hierarchy of control
- There is a strict hierarchy of authority
- There is a strict hierarchy of control
- There are many rules
- There are few rules
- Knowledge and control of tasks are located anywhere in the organization
- Knowledge and control of tasks are centralized at the top of organization
- Communication is horizontal
- Communication is vertical

14. If there was any organizational unit change between 2000 to 2006, please specify the time (year and term) and the change (e.g. merging of offices):

▲

■

▼

◀

▶

Survey of International Educators' Perceptions on Effective Organizational Unit

4. About Your Perspective

15. How long have you worked in your current profession?

- 1 or less than 1 year
- 2 to 3 years
- 4 to 5 years
- 5 to 8 years
- 8 to 10 years

16. How long have you worked at your current institution?

- 1 or less than 1 year
- 2 to 3 years
- 4 to 5 years
- 5 to 8 years
- 8 to 10 years
- More than 10 years

17. How do you rate the level of stress in your position?

- 1 (Low) 2 3 4 5 (High)

18. Do you prefer to have separate admission units for international graduate and international undergraduate admissions?

- Yes
- No

19. (Your preference) Which kind of organizational unit do you PREFER to have for international student admissions and other services?

- Same office unit
- Different office unit
- Hybrid
- Non traditional
- Other (please specify)
- Other (please specify)

20. (Your preferences) Please mark every statement which matches your organizational unit PREFERENCES for international student enrollment.

- Employees contribute to the common task of the unit

- Tasks are broken down into specialized parts.
- Tasks are redefined through employee teamwork
- Tasks are rigidly defined
- There is less hierarchy of authority
- There is less hierarchy of control
- There is a strict hierarchy of authority
- There is a strict hierarchy of control
- There are many rules
- There are few rules
- Knowledge and control of tasks are located anywhere in the organization
- Knowledge and control of tasks are centralized at the top of organization
- Communication is horizontal
- Communication is vertical

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Survey of International Educators' Perceptions on Effective Organizational Unit

5. Organizational Effectiveness Questionnaire for International Student Enrollment

The following organizational effectiveness scale questionnaire was developed based on NAFSA's Code of Ethics and Professional Competencies for International Educators (2003), Terenzini's Forms of Organizational Intelligence (1999) and Birnbaum's Organizational theory (1988).

21. Please rate the level of each item which applies to your CURRENT organizational unit for international student enrollment services:

	1-Not at all	2	3	4	5-A Great Extent
Improving the knowledge and skills needed by an individual to carry out a current job	0	0	0	0	0
Expanding an individual's skills and knowledge to move beyond current job demands on a career path	0	0	0	0	0
Enhancing an institution's ability to carry out international activities	0	0	0	0	0
Performing all professional responsibilities to the best of the individual's ability	0	0	0	0	0
Advocating for the shared goals of international education	0	0	0	0	0
Recognizing the limits of one's knowledge and expertise	0	0	0	0	0
Participating in significant on-going intercultural experiences	0	0	0	0	0
Networking and sharing appropriate knowledge with other professionals	0	0	0	0	0
Encouraging entry into the profession by person from all backgrounds and the mentor those new to the profession	0	0	0	0	0
Creativity and innovation in the practice of professional responsibilities	0	0	0	0	0
Respect for the diverse backgrounds and viewpoints of one's colleagues	0	0	0	0	0
A responsibility and willingness to share one's professional expertise	0	0	0	0	0
Knowledge of the mission and goals of one's institution or organization	0	0	0	0	0

Skills at functioning in an institutional or organizational setting	0	0	0	0	0
Understanding of the role and structure of international education at one's institution or organization	0	0	0	0	0
Knowledge of relevant technologies	0	0	0	0	0
Counseling and advising skills	0	0	0	0	0
Leadership skills	0	0	0	0	0
Knowledge of the resources available for professional development	0	0	0	0	0
Comprehension of the history, philosophy and structure of U.S. education	0	0	0	0	0
Knowledge of other educational systems	0	0	0	0	0
Cultural, geographical, political, historical, and economic knowledge of other countries	0	0	0	0	0
Knowledge of cultural values and assumptions and their effect on interactions with individuals and groups	0	0	0	0	0
Intercultural communication skills	0	0	0	0	0
Knowledge about learning another language	0	0	0	0	0
Awareness of how culture and language influence learning styles	0	0	0	0	0
Knowledge of funding mechanisms, sources, and trends in depth knowledge of the structure of the U.S. and/or home educational system	0	0	0	0	0
Knowledge of the comparability of foreign credentials in terms of U.S. and/or home country educational equivalents and institutional admissions requirements	0	0	0	0	0
Knowledge of their institution's or organization's foreign market and enrollment trends	0	0	0	0	0
Basic knowledge of immigration regulations relevant to the student population served	0	0	0	0	0
Skills in collecting and analyzing data on international student admissions and enrollment	0	0	0	0	0
Skills in working effectively with faculty and academic departments	0	0	0	0	0

Maintaining high standards of professional conduct	0	0	0	0	0
Following ethical practices outlined in the Code of Ethics	0	0	0	0	0
Resisting pressures (personal, social, organizational, financial, and political) to use their influence inappropriately and refuse to allow self-aggrandizement or personal gain to influence their professional judgments	0	0	0	0	0
Seeking appropriate guidance and direction when faced with ethical dilemmas	0	0	0	0	0
No discrimination with regard to race, color, national origin, ethnicity, sex, religion, sexual orientation, marital status, age, political opinion, immigration status, or disability	0	0	0	0	0
Maintaining the confidentiality, integrity, and security of participants' records and of all communications with program participants	0	0	0	0	0
Providing information, orientation, and support services needed to facilitate participants' adaptation to a new educational and cultural environment.	0	0	0	0	0
Upholding agreements when participating in joint activities and give due credit to collaborators for their contributions	0	0	0	0	0

22. Please feel free to comment on this subject or survey.

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6. Thank you very much!

Please click DONE for submission. Thank you again for your precious participation!

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