THE RECRUITMENT OF NON-COLLEGE BOUND,

AT-RISK HISPANIC HIGH SCHOOL STUDENTS

IN TEXAS COMMUNITY COLLEGES

By

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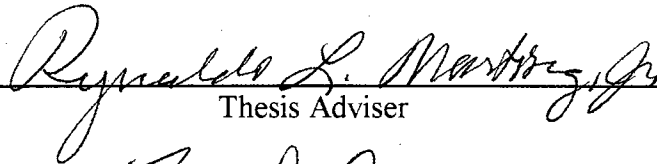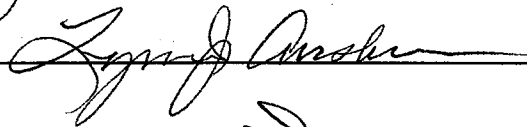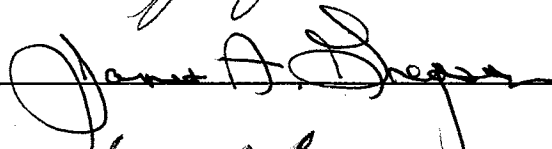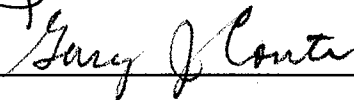
AT-RISK HISPANIC HIGH SCHOOL STUDENTS

IN TEXAS COMMUNITY COLLEGES

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In Loving Memory
of My Mother

Sofia G. Montiel

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

The current and projected growth of the Hispanic population in the United States was the impetus for this investigation. Occupational advances in technology required a workforce with college level competencies in all academic and vocational areas (Grubb, 1996; Stern, et.al., 1994). However, opportunities in higher education for this purpose has often been limited for the at-risk Hispanic population (Gomez-Quinones, 1994). Community colleges have often been the only vehicle available for Hispanics to enter higher education (Grubb, 1996; National Center for Educational Statistics, 1995). The community college system allowed this and other minority populations to enroll in higher education through the open-door policy of community colleges for occupational education and remediation of academic skills (Grubb, 1996). However, many non-college bound at-risk Hispanic high school students were not considered in recruitment practices of community colleges. Hispanics had to rely on serendipity and luck rather than on sound recruitment planning.

Personal Case Study

A primary motivation for this investigation was a reflection of demographic, ethnographic, economic, labor, and educational predispositions and personal experiences

of the investigator that were easily traced back through two generations. I am a second generation Mexican-American born in the south Texas border town of Laredo. My grandparents on both sides of the family were from Mexico but migrated across the border to Laredo, Texas, in the early 1900s. Neither of these grandparents spoke English or had any formal traditional or vocational education from which to draw resources. Rather, they survived by means of an extraordinary work ethic.

My beloved mother, Sofia, never finished formal schooling, and my father, Manuel, who still lives today, completed his third grade of public schooling in Laredo, Texas. They were married in the mid-1900s and within 11 years bore ten children. Labor tensions between illegal Mexican immigrants and the Mexican-Americans of south Texas were exacerbated by the Bracero Act of 1931 that allowed Mexicans to enter the United States for seasonal farm labor (Gonzalez, 1990). Overwhelmingly, the labor market in Laredo became flooded with cheap illegal and bracero labor from Mexico. Determined to break away from farm labor in the cotton fields, Manuel became a truck-driver, but it was impossible for him to earn a sustainable wage to support a family of ten children. Scratching out a living for ten years was nearly impossible had it not been for Sofia's incredible ability to stretch the wages that Manuel earned from his occupation. Determined to secure an occupational future for his children, Manuel sought job opportunities away from Laredo.

Leaving his family behind, and against enormous odds, Manuel hitchhiked to Dallas, Texas, where competition from illegal workers from Mexico was not as severe. Upon arrival, he walked into a main truck terminal and asked in a thick Spanish accent, "I

am hungry, do you have any work for me?" The dispatcher pointed out a dilapidated early

model rust bucket that he called a truck and told Manuel that this load needed to go to

Corpus Christi, Texas. Not having eaten in days, he grabbed a donut and a cup of coffee

from the terminal lounge, mounted this heap of rust, and headed for Corpus Christi,

Texas. Once at his destination, he secured two full-time jobs as a truck driver and

gathered enough money to move the family to Corpus Christi. He returned to Laredo and

loaded all ten children into an old station wagon and moved across the state. The year was

1964. Later in his life he stated that the move to Corpus Christi was solely to provide

occupational opportunities for his children in the future. He described the first house we

lived in as "barely livable" but soon moved to a more suitable residence, then finally to a

better home in a predominately White neighborhood. It was at this point that I began

public education.

Upon beginning education in 1968 at an all White school in Corpus Christi, I found

that the only other Hispanics in the schools were my brothers and sisters, who were

attending higher-grade levels in the same school district. Every morning in class I recall

being asked to identify my ethnicity by standing up in what was called a mandatory "ethnic

minority count." Reflecting on this practice as an adult, there is no discontent, but rather,

curiosity as to why the teacher could not surmise there was only one student who stood

up every morning when told to participate in this ethnic count.

The school district was going to place the younger children in a lower grade than

they had been in the Laredo school because school officials assumed that his children were

less intelligent than the White children and thus warranted such action. The school

district's decision was not based on any test scores at all, but rather on a biased conclusion

from school officials. Manuel and Sofia won the battle and all remained in the proper

grade levels. However, this was my first year of school and I was placed in a class for

slow learners. In addition, I was required to attend speech improvement class during the

school day when other children were playing at recess. I am not aware whether I had a

speech problem that warranted this action. At the time, I submitted completely to the

directions of the teacher and attended the speech program without question. Once again,

there are no ill feelings toward the teachers, but as an adult and an educator, I question the

rationale behind the decision for placement in such a program.

My grades were well below average and thus I was considered on several

occasions by the school for retention in a grade. Memories include being intimidated by

teachers and other students for being a so-called "ethnic minority", which was reinforced

on a daily basis during the ethnic count. Supplies needed for special projects (e.g., map

colors, crayons, glitter, shiny little stick-on stars, etc) were rare because Sofia could not

afford them. It seems that whenever possible, the teacher made embarrassing comments by

asking facetiously if anyone would be "Arturo's friend" and let him borrow some supplies.

The family was doing better economically by this time, but still, it was necessary to work

in the school cafeteria washing dishes in exchange for free lunch.

My grades became progressively worse as the completion of primary education

drew near. Basic academic skills were nearly non-existent. At every grade level, in every

subject, I was just beginning to understand the material when the rest of the class would

move on, thus leaving me to fall further and further behind.

Rebellion described my junior high school years, and the principal's office became

a familiar place. "After school detention" was given more times than can be counted. A

best guess is that I experienced at least one hundred instances of after school detention,

perhaps fifty "licks" (corporal punishment), three suspensions of at least three days each,

and one expulsion. Violations that led to these punishments varied in severity but were

limited to skipping class, fist fighting, disrespect of teachers, lighting fireworks in the hall,

stealing from other students, smoking in the boy's room, and cheating on exams. The only

subjects in which I experienced success were in wood shop class, and later in high school,

driver education.

Inevitably, I dropped out of school and never completed the tenth grade.

Enrollment in the local "Alternative Education Program" ended in expulsion from that

program when a police dog sniffed marijuana in my car. Placement in the local county

juvenile detention center resulted in a period of time where psychological evaluations were

performed. Simultaneously, The Corpus Christi Police Department (CCPD) was compiling

a record of my offenses as well. The CCPD file included driving without a license, auto

collision, speed contest, driving while intoxicated, wrong way on a one way, public

disturbance (fighting), resisting arrest, and breaking and entering.

My final visit to the county judge resulted in an ultimatum. The judge warned that

a return visit to his courtroom would result in charges as an adult and the sentence would

be the maximum time in the county jail. The alternative, he said, was enlisting in the

United States Armed Forces. I chose the latter, and the United States Marine Corps

became the choice that resulted in a life-changing experience. I became a poster Marine

and was meritoriously promoted on three occasions. Citations for meritorious conduct,

service, and excellence were common during my enlistment period. Choosing not to re-

enlist at the end of the four-year commitment resulted in an opportunity to complete a

high school diploma through an adult education program that served military personnel. However, this opportunity was to be awarded to any Marine in the unit solely upon the commander's discretion.

Being selected for this program was totally by chance as the platoon of 28 Marines was formed and told to count off by four. The Marines that were identified as "ones" were to be placed on mess duty, "twos" would serve on the base guard detachment, "threes" would report for yard maintenance duty, and "fours" would be sent to participate in the adult education program regardless of educational attainment. I was a "four" and reported to the program the following day. However, the struggle had just begun.

A review of academic records found too many high school education credits were lacking to possibly get a diploma within the six months remaining of enlistment. Fortunately, an English teacher with a beautiful British accent overheard the conversation with the program guidance counselor and offered personal tutoring with an arrangement to attend school on weekends in addition to the full-time weekdays of instruction that the adult education program required. With this agreement, the English teacher, who was certified in all areas of teaching, began tutoring me throughout the rigorous basic education classes until I was awarded a high school diploma at the end of my enlistment.

During this instruction, I learned that my self-perception of being a slow learner was not true, but rather a non-college bound at-risk student who learned differently was my reality. What happened to me was not by design, but a result of chance. This being the

case, I wondered how many other non-college bound, at-risk Hispanics lose the opportunity for higher education because community colleges did not have an effective recruiting policy or program to reach this population.

The fulfillment of my enlistment in the Marine Corps and the awarding of my high school diploma from the adult education program were simultaneous. My excitement at the possibilities to pursue higher education seemed within reach. I immediately enrolled in the local community college upon arrival in my hometown of Corpus Christi, Texas. However, I was required to enroll in remedial English and math courses before I could begin my desired major area of study.

I passed remedial math with a "D" average, and failed remedial English. My second attempt at remedial English in the next semester was successful and I was allowed to continue my enrollment. However, my third semester resulted in a failing grade in regular Freshman English. My final attempt to pas freshman English during my second year in community college was a disaster and I decided to end my pursuit of higher education.

Eleven years passed before I decided to return to higher education. However, this attempt was somewhat different because I enrolled in a program that was taught in an occupational context. This particular occupational program did not require freshman English or math to obtain the program certification. Interestingly, this certification program required applied academics in the areas of English and math. These applied academics put the academics in the context of the occupation that I was pursuing.

Through this contextualized learning, I was able to grasp the concepts in a meaningful and personal way.

I successfully completed the required course work for my certificate of achievement in welding applied technology at Del Mar Community College in Corpus Christi. A quick browse through the college course catalogue and a review of my transcripts revealed that I needed only five more courses to receive an Associate of Applied Science degree in welding applied technology. I was excited, but the thought of attempting freshman English for the third time was sobering. The rationale behind my decision to attempt these five courses was the success that I had experienced in my applied academics courses in the occupational program.

I spent the next year in intensive course work while maintaining a full time job at a welding fabrication shop. During this time, I successfully completed freshman English I and II. I was given credit for my "D" in math from my first attempt eleven years earlier, and passed courses in psychology and speech. The successful completion of these five courses led to the awarding of an Associate of Applied Science degree.

The excitement of my progress in higher education motivated me to complete my undergraduate work in the area of occupational education at Texas A&M – Corpus Christi. Having obtained a Bachelor of Science degree, I was ready to go back into the field of welding as a construction manager or welding supervisor because many construction companies were seeking my experience and education in the area of welding. Although I always had a high level of motivation and work ethic, this accomplishment of higher education made me feel that I could command my own destiny in the area of construction that I loved so much.

However, the though of attempting graduate work to obtain a Master of Science degree was appealing. This appeal led me to investigate the feasibility of such an endeavor. Unfortunately, I was unable to maintain a job and provide for my children while attending graduate school. Furthermore, I had become extremely curious about the doctoral program at Texas A&M–Corpus Christi. My investigation led me to the director of the doctoral program whose secretary would not allow me to schedule an appointment. Instead I was handed a brochure for my trouble. I continued to investigate further by attempting a telephone conversation with the director but was not able to get past the secretary. The secretary informed me that I needed a Master's degree before I could speak to the director about a doctoral program. In addition, the literature in the university catalogue as well as the brochure suggested that limited space was available in the program and a prerequisite was employment with the local school district. My aspirations for graduate work ended at this point.

Although I was already entertaining several possibilities for employment, I decided to attend a career fair at Texas A&M–Corpus Christi. During this career fair, I made several contacts with construction companies and was invited to travel to Houston, Dallas and Louisiana for further interviews. Initially, I avoided the area where representatives from graduate schools from around the country were recruiting. I felt all graduate schools would see my position n the same light at Texas A&M–Corpus Christi had seen. A chance meeting with one of my professors directed me toward a Hispanic gentleman representing Oklahoma State University, Stillwater, Oklahoma. I introduced myself and explained my situation as fast as I possibly could. My fear was that I would lose his attention since there was a great deal of traffic in this area of the career fair.

This Hispanic gentleman was Dr. Reynaldo Martinez, an Associate Professor at Oklahoma State University (OSU) in the Occupational and Adult Education department. L I immediately felt a sense of connection with Dr. Martinez as we spoke for nearly an hour. I learned that he was also an alumni of Texas A&M–Corpus Christi and was originally from the south Texas area. Dr. Martinez carefully explained the graduate program at OSU in great detail and gave me his contact information. In addition, to this initial personal contact, within the next few days, we spoke on the telephone, corresponded by U.S. mail, and made the connection with the graduate school at OSU. Dr. Martinez facilitated the graduate enrollment process, provided a research assistantship, processed several scholarships, and arranged living accommodations through campus housing.

I felt that the opportunity for graduate studies was finally a reality through this personal contact with an Hispanic role model, and made the decision to relocate to Stillwater, Oklahoma. I recall a conversation with Dr. Martinez where I committed to making the necessary progress on my Master's and Doctoral program providing that he would keep the door to higher education open for m. In return, all that I asked for was a chance to prove that I was able to perform as well as any other student. Throughout my studies at OSU I maintained a 3.90 GPA and was awarded many scholarships, one of which was a national award.

Much of the recent literature regarding the educational, occupational, and socioeconomic attainment of the Hispanic population in the United States suggested that traditional methods of recruitment by institutions of higher education had not served Hispanics (Gomez-Quinones, 1994). Moreover, these institutions seemed to be oblivious to serious workforce implications if this growing population continued to be overlooked

by community colleges whose mission included providing a strong, competent workforce for the community they served (Carter & Wilson, 1993; Fisher, 1998; Gomez-Quinones, 1994; Melendez, 1991).

Historical Context of the Study

The Spanish conquest of Mexico, South and Central America in the 1400s, and the inevitable northward migration of Latinos to the United States in later centuries influenced the Hispanic population's primary way of life in the United States as it existed today (Rosaldo, Calvert & Seligmann, 1977). The socially efficient hierarchical Spanish ranch labor system dictated how each social class or ethnic group would serve the Spanish land owner (Montejano, 1989). Typically, the Mexican Indians served as *peone* ranch labor and domestic servants. The Mexican Indians were not educated because it did not serve the landowner's purpose in society. The expansion of United States territory into Mexico, the Industrial Revolution, and immigration laws caused violence between Mexico and the United States (Montejano, 1987).

As the American Industrial Revolution began, the ranch labor system became less prevalent primarily because of the emergence of the railway system that enabled ranchers to transport livestock and goods to market rather than by means of the traditional cattle drive. This innovation of transportation as well as industrialization displaced the American cowboy and his skills. The majority of these displaced Anglo workers sought work in expanding industrial factories and consequently moved closer to the city. However, although industrialization was growing rapidly, ranch owners still needed a strong supply

of ranch labor. New Anglo ranch owners turned to Mexican immigrants to fill the demand

for farm and ranch labor in the United States (Montejano, 1987).

The rapidly growing Mexican-American population forced legislation that

mandated the education of Mexican-Americans in the United States. At this point in

history the Progressive Movement became involved in the education effort through the

Americanization Program that relied primarily on vocational education (Gonzalez, 1990).

Specifically, the Progressives targeted the Mexican female as the change agent. They

believed that the Mexican culture revolved around the mother of the family, and by

changing the mother, they in turn would Americanize the whole family. In Los Angeles,

the Americanization program sought Mexican females in nurseries, elementary schools,

junior and senior high schools, factories, and agricultural labor camps in an effort to reach

the entire population. The curriculum consisted of Americanization training, English,

nutrition, homemaking, and hygiene. The ultimate goal of this comprehensive program

was " to completely eliminate the Mexican culture in the United States"

(Gonzalez, 1990, p. 46). Although the effort to eliminate the Mexican culture failed, the

question of educational and socioeconomic attainment among Hispanics remained

throughout the 20th century (Gonzalez, 1990).

Current and Projected Growth of the Hispanic Population

Hispanics constituted ten percent of the total population in the United States in

1990 (Cattan, 1993). The Census Bureau reported that this population grew by 53 percent

from 1980 to 1990. It was projected that this segment of the population would continue to

increase and will represent 48 percent of the total United States population by the year 2050 (Fisher, 1998).

This rapid growth in the Hispanic population posed a unique problem to the labor force in the United States (Melendez, et.al., 1991). In 1994, the Bureau of Labor Statistics (BLS) reported an aging of the predominately White labor force in America, with a median age of 53 years. In contrast, 30 percent of the Hispanic population was reported to be under the age of 15, with a median population age of 26. These statistics suggested that the Hispanic population would dominate the labor market as well as constitute a near majority by the year 2050 (Fullerton, 1997).

This increase in population had not reflected increased educational attainment nor social mobility in a democratic society. Similarly, employment opportunities with sufficient benefits and labor wages to improve socioeconomic status for the Hispanic population remained limited (Fullerton, 1997).The statistics suggested that the mission and open-door policy of community colleges would likely fulfill the needs of the local workforce while increasing opportunities in higher education for Hispanics through recruitment programs.

Defining Terms

The transition from high school to college was often complicated by a myriad of obstacles (Horn, 1997). The common accepted practice among public/private school officials was to guide all high school students toward higher education. These school officials measured educational excellence in their institutions by the number of students who made the transition from high school to baccalaureate degree programs in higher education (Parnell, 1985). Unfortunately, more than 50 percent of young Americans who

enrolled in college after high school never completed undergraduate studies and received a bachelor's degree (Grey and Herr, 1998; NCES, 1998). Moreover, for those who did receive a bachelor's degree, only 5 percent practiced in the area in which their studies prepared them for in college (NCES, 1998). Dale Parnell called this percentage of students who did not consider higher education while attending high school *The Neglected Majority* (Parnell, 1985). Parnell (1985) postulated that little attention was given to large numbers of ordinary students who were considered non-college bound but who needed some type of post-secondary academic or vocational training.

Inevitably this population who left high school, with or without a diploma, entered the nation's workforce. This population spent a great deal of time between the ages of sixteen and twenty-six seeking a suitable career (Klerman & Karoly, 1995). These young adults received neither the academic preparation nor the occupational training in high school necessary to compete in a rapidly growing technological workforce (Grubb, 1996; Merritt, 1996). More often, they spent much time either unemployed or under employed until at least 28 years of age (Stern, et.al., 1994). These "non-college bound" young adults were characterized as facing a floundering period from high school through their mid twenties, holding many different jobs, and facing frequent periods of unemployment or underemployment (Klerman & Karoly, 1995).

This segment of the population was been described as the *Forgotten Half* (The William T. Grant Foundation Commission on Work, Family and Citizenship, 1988). Drawing from literature on the inadequate academic and occupational preparation in high school for The Neglected Majority and The Forgotten Half, this study drew the following definition of non-college bound high school student. A non-college bound high school

student is one who has not achieved academically and thus is not seen to have the ability to perform well in higher education and often works while attending high school because of a lower socioeconomic status. Furthermore, because of this disposition, high school counselors may not assist in preparing this high school student for the possibilities of higher education nor do the institutions of higher education actively recruit this student.

<div align="center">At-Risk Hispanic High School Students</div>

The at-risk student had been described as one who was in danger of leaving high school before graduation (Deschamps, 1992). The most common explanation for dropping out of high school was academic failure (Alexander, Entwisle, & Horsey, 1997). Characteristically, at-risk students were from low-income families and represented an ethnic minority status (Reddick & Peach, 1990). This at-risk status of a high school student often leads to an ultimate decision to drop out of high school.

In the 1990s, the level of education attainment and socioeconomic status was positively correlated in many studies (Clayton, 1992; Fisher, 1998; Perez & Salazar, 1993). The high school dropout rate for the Hispanic population ranged from 30 percent in some areas too as high as 50 percent in highly concentrated pockets across the nation (Clayton, 1992). In contrast, the White non-Hispanic dropout rate was 8.2 percent, and 12.9 percent for African-Americans in similar studies (National Center for Educational Statistics, 1996). The average annual income of a high school dropout was reported to be about $12,000, compared to $32,000 for those with a bachelor's degree. For the Hispanic population, "economic prosperity and full participation in American society seems to be

dictated by whether they are lucky enough to fall into one of the school systems that serve them well" (Fisher, 1998, p. 152).

Community Colleges

Historically, the Hispanic population had been served through the community colleges' open-door philosophy assuring that most students had equal opportunity for higher education regardless of academic or socioeconomic status (Grubb, 1996; Oliver, 1995; Parnell, 1985). This foundational philosophy was best articulated by Jesse B. Bogue, Executive Director of the American Association of Junior Colleges from 1946-1958. Oliver (1995) referred to Bouge's work when he stated that, "the role of the Junior College could play an important part in promoting and in preserving American democracy" (p. 3). This open-door philosophy drew many Hispanic students to community colleges where they were largely represented in the late 1900s (Grubb, 1996).

The mission of the community college, in most cases, had been to provide the community they served with a strong workforce through academic and vocational education (Zwerling, 1986). The number of Hispanics in higher education had increased incrementally over the last three decades. Hispanic enrollment in higher education in 1968 was approximately 1 percent when they represented 4 percent of the total U.S. population. By 1978, these numbers increased to 2.5 percent when they represented 5 percent of the population (Gomez-Quinones, 1994). This incremental progress continued as Hispanics represented 8.1 percent of college enrollment in 1988 and finally 11.1 percent in 1994 when the total U.S. Hispanic population was almost 10 percent. These increases in

enrollment in higher education over the last three decades were overwhelmingly located in community colleges (Carter & Wilson, 1994; Fisher, 1998; Gomez-Quinones, 1994).

The purpose of the American Association of Community Colleges has been, "to establish a network of community colleges throughout the nation, thus placing higher educational opportunities within reach of a greater number of citizens" (Vaughan, 1985, p. 8). The community college traditionally had multiple purposes. The first purpose was to serve as an institution of vocational education to train the local workforce. The second was to serve as a preparatory college for matriculation to a four-year comprehensive university. The third was to serve as a link between high schools and higher education for community youth (Parnell, 1985; Parnell, 1995; Vaughan, 1982). It was the first of these purposes served by community colleges that increased the awareness of politicians, school administrators, and industry regarding the Hispanic population (Oliver, 1995).

Recruitment of Hispanics in Community Colleges

The designation of "Hispanic" did not appear on the U.S. Census form until 1980, thus limiting the viable research on this population to the last two decades of the twentieth century. Moreover, a large portion of the available research during this time identified the Hispanic population as a homogeneous group. Consequently, until recently, programs designed to recruit Hispanics into higher education have had limited success (Mortenson, 1991).

Efforts to recruit Hispanics into higher education was often based on decisions from biased data that was not representative of the population (Mortenson, 1991; Oromaner & Krynicky, 1987; Rendon, 1981). For example, early research by Marshal and

Miller (1977) maintained that low socioeconomic and educational attainment among

Mexican-Americans reflected low traditional values. They posited that "Mexican-

American families fail to motivate children to aspire to high status career achievements"

(Marshal & Miller, 1977, p. 348). This research had been refuted, because positions such

as this and similar studies relied heavily on limited data of the Mexican-American

population. Garza and Lubeck, (1988) and Montiel (1972) held that the Mexican-

American population aspired to higher levels of educational and occupational

achievements than Anglos but were often deterred by institutional barriers and ethnic

discrimination.

Two general concerns had been addressed by two-year institutions of higher

education regarding the recruitment of Hispanics. These concerns were drawn from more

recent literature that better represented the Hispanic population for the purpose of

understanding and addressing recruitment issues. Research suggested that academic

preparedness and the availability of financial resources were central issues in current

efforts to recruit Hispanics (Angel & Bareiro, 1991; Darder, et al, 1997; Hoyte, 1999;

Tinto, 1996). "The success or failure of minority recruitment initiatives seems directly

related to how well the institution addresses these concerns" (Angel & Bareiro, 1991,

p. 31).

In 1990, about 25 percent of institutions of higher education in the nation had

recruitment programs that actively sought candidates to attend their institutions (Jaramillo,

1992). Interestingly, 100 percent of public two-year institutions maintained comprehensive

remedial education programs that served non-traditional minority students (National

Center for Research in Vocational Education, 1996). In contrast, the majority of these

institutions of higher education with recruitment programs in place focused their recruitment efforts on high-achieving students with above average high school GPAs (Grimes & David, 1998).

Programs to recruit Hispanic students generally fell under the overall recruitment effort of the institution. Statistics revealed that there were only about fifteen recruiting programs that targeted Hispanics specifically (Acosta, 1996). The evidence provided by recruiting programs and statistics that reflected this trend suggested that efforts to recruit Hispanics into higher education required a deeper understanding of educational attainment as affected by the socioeconomic predisposition of this population (Acosta, 1996; Grimes & David, 1998; Mortenson, 1991; Oromaner & Krynicky, 1987; Rendon, 1981; Thomas, et al, 1999).

Rosen, Curran, and Geenlee (1998) listed the ten most common recruiting tools used by institutions. They were: (1) university catalog; (2) on-campus tours; (3) general information brochure; (4) scholarships; (5) high school visits; (6) meetings with high school guidance counselors; (7) visits to junior and community colleges; (8) telephone calls; (9) personalized letters; and (10) minority recruiting programs. These tools for the recruitment of the general population served as a guide to describe the recruitment practices of community colleges to target the non-college bound, at-risk Hispanic high school student population in the present study.

Need for the Study

In the 1990s, about 25 percent of institutions of higher education in the nation had recruitment programs that actively sought candidates to attend their institutions (Jaramillo,

1992). Jaramillo (1992) defined active recruiting as making personal contact with potential students. Scientific literature on the recruitment of minority students revealed three major issues that hindered efforts to recruit minorities into higher education.

The first issue, which was previously mentioned, was the lack of racial data regarding minorities in higher education. Efforts to recruit Hispanics into higher education had been based on data that were not representative of the population (Marshal & Miller,1977; Mortenson, 1991; Oromaner & Krynicky, 1987; Rendon, 1981). Moreover, low socioeconomic status and low traditional values were cited as reasons for low educational and occupational attainment among Mexican-Americans (Garza & Lubeck, 1991; Marshal & Miller, 1977; Montiel, 1972).

Two more issues were drawn from recent literature that better represented the Hispanic population for the purposes of understanding and addressing recruitment strategies. Research suggested that academic preparedness and the availability of financial resources were central issues in current efforts to recruit Hispanics (Angel & Bareiro, 1991; Darder, et al, 1997; Hoyte, 1999; Tinto, 1996). "The success or failure of minority recruitment initiatives seems directly related to how well the institution addresses these concerns" (Angel & Bareiro, 1991, p. 31).

Finally, Grimes and David (1998) concluded that possessing a strong grade point average (GPA) high school was not a good method of identifying possible college recruits. Their research showed that students with low GPA scores in high school had similar GPA scores in college to high achievers under the same conditions. More importantly, focusing on high GPA scores as a method of recruiting potential students automatically eliminated the large Hispanic population who traditionally had below average GPA scores (Grimes &

David, 1998). Moreover, college remedial courses were often "non credit," and the students not yet placed in an official enrollment status were thus overlooked as potential candidates for recruitment (Easterling, Douglas, Patten, & Krile, 1998). These remedial programs had positive effects on students' GPAs and persistence rates, however, by statistical measuring standards, the effects were small (Kulik, Kulik, & Shwalb, 1983).

The under-education of non-college bound, at-risk Hispanics in America had serious implications for the nation as well as the workforce. Since 1980, the U.S. economy had shifted from a manufacturing low-skill workforce to a service-based technologically advanced one in which some researchers claimed basic skills and minimal high school competencies were obsolete (Grubb, 1996). In Perez and Salazar (1993), they noted that the 1990 Census Bureau reported that Hispanics' median earnings were two-thirds that of their non-Hispanic counterparts. Interestingly enough, the gap continued to widen in the last decade of the century.

The need for this study arose from the growth and under-education of the U.S. Hispanic population when evidence suggests that the majority of the nation's workforce will be comprised of ethnic minority workers. Thus there was a need for investigating the higher education opportunities for the Hispanic population. This mandated attention from educators, administrators, and legislators who represented two-year colleges where Hispanics are primarily active in higher education (Mortenson, 1991; Gomez-Quinones, 1994). Therefore, this study regarding the recruitment of Hispanics in selected Texas community colleges with occupational programs may increase the awareness of administrators directly responsible for recruitment programs in community colleges. This

awareness may offer possibilities to implement more effective methods of recruitment to serve their local workforce and the needs of the Hispanic population.

Statement of the Problem

Much of the recent literature regarding the educational, occupational, and socioeconomic attainment of the non-college bound, at-risk Hispanics population in the United States suggested that traditional methods of recruitment by institutions of higher education had not served the Hispanic population (Gomez-Quinones, 1994).

Purpose of the Research

The purpose of the research was to identify, describe, and measure the perceived effectiveness of the tools used by community colleges with occupational programs in Texas to recruit non-college bound, at-risk Hispanic high school students. An additional purpose was to develop recommendations to administrators directly responsible for developing or implementing recruiting policies that may improve recruitment practices that target this population.

Research Questions

The following research questions were used to guide this study:

1. What tools were most frequently used to recruit high school students in selected Texas community colleges with occupational programs?

2. How do selected community colleges with occupational programs in Texas describe the tools used to recruit high school students?

3. What tools were used most frequently to recruit non-college bound, at-risk Hispanic high school students in selected community colleges with occupational programs in Texas?

4. What methods of recruitment were recommended to increase non-college bound at-risk Hispanic enrollment in selected community colleges with occupational programs in Texas.

5. How do community college administrators and recruiting personnel perceive the effectiveness of their own current recruiting tools targeting the general and non-college bound at-risk Hispanic high school students?

6. Did selected community colleges in Texas with occupational program actively recruit non-college bound, at-risk Hispanic high school students to enroll in occupational programs?

<p align="center">Significance of the Study</p>

The results of this study will identify the degree of activity and perceived effectiveness of strategies that were currently used to recruit non-college bound, at-risk Hispanic high school students. Further, the results could identify possible recruitment strategies that community colleges should use to prepare the local workforce and create greater higher education opportunities for the Hispanic population.

Definition of Terms

Definition of terms were drawn from the literature while others were used operationally in the study.

Anglo/White – Identifies U.S. non-Hispanic, but does not include African-American.

At-Risk – A high school student who is in danger of leaving high school before graduation (Deschamps, 1992).

Community College – Public two-year post-secondary institution of higher education with occupational programs.

Hispanic – The official term used by the U.S. Census Bureau that includes sub-cultures in the United States from South and Central America, Mexico, Puerto Rico, Cuba, and the Dominican Republic (U.S. Census Bureau).

Non-College Bound Student - A non-college bound high school student is one who has not achieved academically and thus is not seen to have the ability to perform well in higher education (William T. Grant Foundation, 1988).

Recruitment – Active identification and selection of potential students by making personal contact to enroll in an institution of higher education (Jaramillo, 1992).

Remedial Student – A student who is required to complete at least one remedial course in his/her freshman year of post-secondary education (National Center for Educational Statistics, 1995).

Assumptions of the Study

The following assumptions were made related to this research:

1. All participants in the study will answer truthfully, and

2. Community college personnel are interested in increasing enrollment of non

    college bound at-risk Hispanic students.

CHAPTER II

LITERATURE REVIEW

Introduction

Hispanics represented nearly 10 percent of the total United States population in 1994, and by 2050 are expected to represent a near majority (Cattan, 1993). This rapid growth had severe implications insofar as the nation's labor force was concerned because of the technological advancements that required a better-educated worker. As the nation's White labor force drew closer to retirement, a young Hispanic workforce emerged with limited educational attainment levels (Fisher, 1998). The educational and socioeconomic attainment of the Hispanic population was the impetus for research that sought to understand and reduce the educational gap between this population and others in the nation. The mission of many two-year post-secondary institutions of higher education sought to provide a well-educated labor force for the community that they served (Angel & Barrera, 1991). To this end, issues of recruitment, retention, and persistence of Hispanics in post-secondary education were central to the mission of these institutions of higher education and the U.S. workforce.

Historic and Cultural Context of Hispanics

Considered a minority for nearly two hundred years, Hispanics increased their

presence in the United States considerably in the 20th century. This increase was

documented from the time of the Spanish Conquistadors to desegregation in the middle of

the 20th century when workforce education became a volatile cultural and political issue.

Educating the Hispanic population and preparing it for the workforce prompted the

emergence of conflicting educational philosophies toward teaching and learning.

Historically, a series of events set the scene for Spanish migration to the United

States. The Spanish sailing expeditions of Christopher Columbus in 1492 were perhaps the

most celebrated "discovery" of the New World, although Columbus never really

discovered America at all (Madsen, 1965). He did, however, discover Hispanola which

was later named Cuba. This discovery blazed a trail for the Spanish explorer Hernan

Cortes to discover Southern and Central America. It was from this point that the Spanish

expanded to Mexico, conquering and enslaving the natives of the region along the way

(Banks, 1997).

Other expeditions included that of Cabeza de Vaca who was sent in 1528 by the

Spanish to settle Florida but was ship wrecked by a tropical storm on a small island near

his destination. Cabeza de Vaca and his crew made small crafts from scattered material

and attempted to follow the Gulf Coast South to Mexico where he had hoped to find other

Spanish settlements. Instead, Cabeza de Vaca wrecked again on an island they named

"malhado" (isle of misfortune) which today is known as Galveston, Texas. Cabeza de

Vaca became the first Spaniard to set foot on American soil. Eventually, Cabeza de Vaca

found the Rio Grande River and followed it to Mexico where he found a Spanish outpost and relayed his exaggerated account to the King of Spain (Cambell, 1997).

In his account to the King of Spain, Cabeza de Vaca's men told stories of cities of gold that they gathered from the Indians in Texas. This account prompted the King of Spain to launch another expedition lead by Francisco Vasquez de Coronado with the explicit mission of conquering land in the name of Spain and seizing as much gold as possible for the throne. Later Spanish expeditions resulted in the colonization of Texas inland from the Gulf Coast. These expeditions soon converged with expanding Spanish interests from South America and Mexico (Cambell, 1997).

Issues of Contemporary Cultural Identities

The convergence of Spanish conquests of South and Central America from the South, and Texas from the east, caused a mix of cultural identities that continued through the 20th century (Rosaldo, Calvert, & Seligmann, 1977). The original term "Mexican-American" used by U.S. government agencies in the early 1900s identified someone who was born in the United States with Mexican heritage (Rosaldo, et al, 1977). This label was used to identify an entire United States cultural population under one category up until about 1980 when the term "Hispanic" was first used on official documents. For example, on the census, "Hispanic" included those whose descendants were from Mexico, Cuba, Puerto Rico, Central and South America, and Spain. Before 1980, the U.S. Census Bureau simply labeled this population as "White" with a Spanish sir name (Clayton, 1992). It was not until 1980 that the U.S. Census Bureau included the term Hispanic on the new census form. This new term that grouped together the Hispanic population included many

different ethnic heritages. The term Latino was also used unofficially to describe the same population.

However, cultural identities varied from one sub-culture to another, depending on their origins. For example, the term "Chicano" came from South and Central American Aztec culture that identified indigenous people. The Spanish, wishing to distinguish themselves from the lower class Chicanos, simply called themselves Spanish or Castilian. The term "Mexican-American," as previously noted, was an American born person with Mexican heritage. The Spanish who migrated to California, New Mexico, and Arizona called themselves Hispano, Spanish, or Latin American. In the end, the label "Latino" prevailed to represent the population in this region of the United States. Texans, on the other hand, called themselves "Tejano" which was a name given to them by the Native-Americans around the time of the Texas revolution in the early 1800s (Montejano, 1987).

Occupational Foundation

These groups were united through a way of life and limited work opportunities that resulted in the establishment of the ranch labor system. This was a unique and successful organization of labor that continued to the present day. It was underscored with a pragmatic philosophical perspective of occupational tracking that included the notion of social efficiency. The Hispanic population's primary way of life emerged as agricultural labor. This ranch labor system was so effective that the new Anglo landowners who acquired land from Mexico after the War of 1812 adopted the same system with few changes (Montejano, 1987).

Ranch management was a task of epic proportions and required a great deal of manual labor with different levels of skill. The "patron" (boss) system consisted of three levels in a hierarchy. The top of the hierarchy was the patron himself, who was usually the landowner. At the second level were the "vaqueros" (cowboys). Finally, the lowest level in the hierarchy were the "peones" (peons) (Montejano, 1987).

Originally the patron was granted land title through the Spanish government. At the time these land titles were granted to the family name and were to be passed down from generation to generation. The patron and his family lived in the hacienda (ranch house), and his primary responsibilities were the business of ranching and the welfare and safety of the workers. More often, the patron was well educated and came from well-known family lines.

The vaquero's primary responsibility was care, maintenance, and mobility of high price livestock. His secondary responsibility was guardian of the ranch and its workers against enemies that may threaten profits or livelihood. The vaquero's education was primarily a vocational one that focused on the utilitarian needs of the ranch society while enabling him to be self-sufficient.

Finally, the "peones" tended to the menial tasks of small livestock and farming necessities that provided food for the ranch society. The female peones' primary tasks were care of the patron's family, which always involved domestic chores. Education for the peones was not deemed necessary for the menial tasks that they performed. This ranch labor system required that workers on all levels reside on the premises but in different locations and guaranteed survival and efficiency of the ranch society (Montejano, 1987).

At the same time, early in the 1900s, the Industrial Revolution in the United States along with immigration laws posed new problems for the Hispanic population as demands from business and industry for a strong labor force increased. Most members of the progressive school of thought during this time believed that a good vocational education and training program during the Industrial Revolution stressed an individuals' contribution to a democratic society (Thomas & Moran, 1991). This contribution was set forth by a progressive philosophy that was centered on the Social Efficiency Doctrine of the early 1900s. This doctrine was adopted by the school system, which tracked students into specific occupations based on social class. Elements of the curriculum in these schools were job specific and based on economic and industrial trends of the time (Thomas & Moran, 1991). However, issues of race, gender, and class posed special problems for the Hispanic population in the United States at the time.

Early in the 20th century, the progressive movement was heavily involved in the Americanization of Mexican-Americans and Mexican immigrants to the United States (Gonzalez, 1990). As the Industrial Revolution progressed, the ranch labor system became less prevalent, primarily because of the emergence of the railway system that enabled ranchers to transport livestock and goods to market rather than by means of the traditional cattle drive. This innovation of transportation, as well as industrialization, displaced the American cowboy and his skills. The majority of these Anglo displaced workers sought work in expanding industrial factories and consequently moved closer to the city. However, although industrialization was growing rapidly, ranch owners still needed a strong supply of ranch labor (Montejano, 1987).

Ranch owners turned to Mexican immigrants to fill the demand for farm and ranch labor, and it was at this point in history that the progressive movement became involved in the education of the Mexican-American population. However, as immigration increased, so did hostility toward the Mexicans. New immigration laws, specifically in California, mandated that the Mexican immigrants were to be educated. Displaced Americans from the ranch labor system feared that the Mexicans would eventually find their way into factory jobs as well as farm and ranch labor. Moreover, if a Mexican immigrant managed to secure a job in the factory, he was not allowed to join the local labor union. Conversely, landowners feared that educating this population would enable the Mexicans to seek better work, thus leaving them with no labor force at all (Gonzalez, 1990).

The Bracero Act of 1931 allowed Mexican immigrants to cross the border into the United States to provide farm and ranch owners with seasonal labor. Many immigrants never returned to Mexico and sought naturalization in the United States. The progressive movement focused on the Americanization of the immigrants through vocational education. Specifically, the progressives targeted the Mexican female as the change agent. They believed that the Mexican culture revolved around the mother of the family, and by changing the mother, they in turn would Americanize the whole family.

In Los Angeles, the Americanization program sought Mexican females in nurseries, elementary schools, junior and senior high schools, factories, and agricultural labor camps in an effort to reach the entire population. The curriculum consisted of Americanization training, English, nutrition, homemaking, and hygiene. The ultimate goal of this comprehensive program was " to completely eliminate the Mexican culture in the United States" (Gonzalez, 1990, p. 46). Although the effort to eliminate the Mexican

culture failed, the question of educational attainment and opportunity remained throughout the 20th century (Gonzalez, 1990).

Non-College Bound, At-Risk, and Socioeconomic Contexts

The transition from high school to college was often complicated by a myriad of obstacles (Horn, 1998). The common accepted practice among public/private school officials is to guide all high school students toward higher education. These school officials measure educational excellence in their institutions by students who make the transition from high school to baccalaureate degree programs in higher education (Parnell, 1985). Unfortunately, more than 50 percent of young Americans who enroll in college after high school never complete undergraduate studies and receive a bachelor's degree (Grey and Herr, 1998; NCES, 1998). Moreover, for those who do receive a bachelor's degree, only 5 percent practice in the area in which their studies prepared them for in college (NCES, 1998). Dale Parnell calls this percentage of students who do not consider higher education while attending high school *The Neglected Majority* (Parnell, 1985).

> The great debate about excellence in education is closer to a monologue of
> the one-sided opinions of the well-meaning individuals and groups who
> have little contact with non-baccalaureate-degree America . . . little
> attention was given to the host of ordinary students needing some post-
> secondary education and training, although not necessarily a baccalaureate
> degree. We must constantly remind ourselves that the majority of our
> population will never earn a baccalaureate degree. What about the ordinary
> students? (Parnell, 1985, p. 6)

Although non-college bound high school students face a myriad of problems, there are three common obstacles that these students must face. They were: (1) School official's assumptions that these students do not have aspirations for higher education,

(2) inadequate finances due to low socioeconomic status, and (3) Lack of assistance from school counselors in negotiating the college application process (Horn, 1997; McCormick, et al., 1998; Parnell, 1985).

The term "non-college bound" was not an accurate term because school officials and policy makers' assumptions concerning the plans and aspirations of high school students were not clear. In the 1980s, nearly one-third of high school students were unsure whether they would attend college after high school. Unfortunately, these students were enrolled in courses that failed to prepare them for academic or occupational futures (McCormick, 1998).

Financial concerns were a major obstacle that minimized the chances of higher education for non-college bound high school students. Most policy makers believe that non-college bound students will never make it to college in the first place thus reducing the emphasis of scholarships and information regarding financial assistance and possibilities (Bragg, 1999). For example, "among 1988 eighth graders in the lowest socioeconomic quartile, about one-third enrolled in some form of post secondary education by 1994, compared to 88 percent of students in the highest socioeconomic quartile" (Horn, 1997, p. 1). College aspirations will often go unrealized for non-college bound high school students simply because of the lack of guidance and information from school officials (Horn, 1997).

Assuming that the non-college bound high school student managed to overcome the first two obstacles listed in the aforementioned thesis, then the problem became navigating the college application process. Many non-college bound students were from first generation, low socioeconomic, minority status (Deschamps, 1992; Horn, 1997;

McCormick, et al., 1998; Parnell, 1985; Stern, 1994). One-third of non-college bound students' parents completed no more than a high school education. Therefore, for the non-college bound student, there was no first hand experience from which to draw guidance in the college application process, thus leaving the student to rely on teachers and counselors (Horn, 1997).

Inevitably this non-college bound population who leave high school, with or without a diploma, enter the nation's workforce. This population spends a great deal of time between the ages of 16 and 26 seeking a suitable career (Klerman and Karoly, 1995). These young adults have received neither the academic preparation nor the occupational training in high school necessary to compete in a rapidly growing technological workforce (Grubb, 1996; Merritt, 1996). More often, they spend much time either unemployed or under employed until at least 28 years of age (Stern, 1994).

> Such young people are often characterized as facing a "floundering period" from high school through their mid twenties during which time they move in and out of the labor force, holding numerous jobs, none for very long, and experience interspersed periods of non-employment. Instead of settling into longer term jobs, these youth are portrayed as "milling about" or "churning" not holding any job for very long and having no clear career progression. (Klerman and Karoly, 1995, p. 6)

This segment of the population has been described as the *Forgotten Half* (The William T. Grant Foundation Commission on Work, Family and Citizenship, 1988). Drawing from literature on the inadequate academic and occupational preparation in high school for *The Neglected Majority and The Forgotten Half*, this study drew the following definition of non-college bound high school student. A non-college bound high school student is one who does not have the academic ability to perform well in higher education and who often works while attending high school because of socioeconomic and ethnic

minority status. Furthermore, because of this disposition, high school counselors may not

assist in preparing this high school student for the possibilities of higher education nor do

the institutions of higher education actively recruit this student. Characteristics of non-

college bound high school students were similar in another student population designated

as at-risk.

The at-risk student has been described as one who was in danger of leaving high

school before graduation (Deschamps, 1992). The most common explanation for dropping

out of high school was academic failure (Alexander, Entwisle, & Horsey, 1997).

Characteristically, at-risk students are from low-income families and represent ethnic

minority status (Reddick & Peach, 1990). This at-risk status of a high school student often

leads to an ultimate decision to drop out of high school.

In the 1990s, the level of education attainment and socioeconomic status has been

positively correlated in many studies (Perez & Salazar, 1993). The average annual income

of a high school dropout was about $12,000 compared to $32,000 for those with a

bachelor's degree. For the Hispanic population, "economic prosperity and full

participation in American society seems to be dictated by whether they are lucky enough

to fall into one of the school systems that serve them well" (Fisher, 1998). The high school

dropout rate in 1992 for this population ranged from 30 percent in some areas to as high

as 50 percent in high concentrated pockets across the nation (Clayton, 1992). In contrast,

the White non-Hispanic dropout rate was 8.2 percent and 12.9 percent for African-

Americans (National Center for Educational Statistics, 1996).

According to Grubb (1992), the primary reason Hispanics gave for dropping out of

school was low academic achievement. Further, the consequence of dropping out of

school for Hispanic students resulted in a profound lack of basic skills necessary to participate in the labor market or higher education. Employers expressed concerns that high school dropouts were not able to read repair manuals, follow basic written and verbal instructions, or make appropriate calculations by themselves. Other concerns addressed the issue of the cost of remediation in terms of lost productivity to the employers. School systems in the United States, on the other hand, were aware of basic skills retention by students but efforts to remedy the lack of basic skills had been abandoned in the past because skill requirements in the labor market had increased so rapidly that schools had not been able to keep up with this trend (LeCompte, 1987).

A predisposition of parents' achievement was also considered in education and socioeconomic attainment among the Hispanic population. Valverde (1987) concluded that the majority of high school dropouts' parents had received no education beyond elementary grade level. Consequently, most parents of this population held manual labor or service industry related jobs.

However, despite increased high school dropout rates, the number of Hispanics in higher education has increased incrementally over the last three decades. Hispanic enrollment in higher education in 1968 was approximately 1 percent when they represented 4 percent of the total U.S. population. By 1978, these numbers increased to 2.5 percent when they represented 5 percent of the population (Gomez-Quinones, 1994). This incremental progress continued as Hispanics represented 8.1 percent of college enrollment in 1988 and finally 11.1 percent in 1994 when the total U.S. Hispanic population was almost 10 percent. These increases in enrollment in higher education over the last three decades were overwhelmingly concentrated in two-year post-secondary

institutions of higher education (Carter & Wilson, 1994; Fisher, 1998; Gomez-Quinones, 1994).

Two-year post-secondary institutions of occupational and adult education faced a problem with multiple dimensions (Gray & Herr, 1998). The first was the need for remedial education programs to serve the Hispanic population, and the second was the adult nature of this population (Grubb, 1996). Occupational education for this growing diverse population made central the concepts and assumptions of andragogy and its possibilities for addressing issues of teaching and learning in workforce education.

Knowles (1980) defined andragogy as "the art and science of helping adults learn" (p. 43). Knowles believed that adults learned best when the content of instruction was relevant to them. Elias and Merriam (1995) cited Lindemen's work when they stated that, "every adult person finds himself in specific situations with respect to his work—which call for adjustments. Adult education begins at this point. Subject matter is brought into education, is put to work when needed" (p. 53). Learning styles and educational attainment of this population demanded that educators adopt curriculum that better served students (Adams, 1975).

Community Colleges, Remedial Education, and Philosophy

Remedial education was one way of addressing the Hispanic non-traditional adult education need. It existed well over one hundred years ago and served many of the same purposes as it does today. In the 1700s, the content of academic curriculum contained Latin instruction, and remediation was often required. The social structure of the time made remediation an option for the affluent, but not for the poor because they could not

afford postsecondary education anyway (Tomlinson, 1989). The term "college preparatory," as Tomlinson (1989) reported, became popular with the signing of the Morrill Act in 1862 that established land grant colleges that offered higher education through agriculture and mechanical training. This new form of higher education was the true impetus for remedial training.

By the late 1800s, land grant and private universities experienced growth in preparatory courses. Prestigious universities such as Vassar, Cornell, Harvard, Yale, and Princeton offered preparatory instruction. The President of Vassar College reported that students' grades on traditional subjects ranged from marginally acceptable to below levels detectable by instruments of the time. The University of Wisconsin, in 1865, reported that of the three hundred thirty-one students enrolled, only forty-one were academically prepared. Vassar College officials noted the social effects of remedial courses among both teachers and students. Preparatory teachers were held in less regard by mainstream faculty, as were students by their peers. Consequently, attempts to eliminate preparatory courses and the under-prepared students they represented, in an attempt to raise achievement records resulted in low overall enrollment. Ultimately, the President of Vassar decided to implement a preparatory program separate from regular academic course work. The rationale was that it would be better to have under prepared students than no students at all. Vassar College was followed by Harvard, Yale, and Columbia in implementing preparatory programs, all of which were freshman English. By 1907, 50 percent of all applicants could not meet entrance standards (Tomilinson, 1989).

The growth of remedial programs by the 1920s sparked a surge in related publications. Over one hundred books were published for students and teachers that were

primarily "how to study" books. Three hundred and fifty colleges offered remedial

courses, and by 1930 the first survey addressing remedial programs was published.

The history of remedial programs was impacted perhaps most heavily by World

War II. Gordon (1999) pointed out the Servicemen's Readjustment Act of 1944, known

as the GI Bill of Rights, was an added impetus for remedial courses. The purpose of the

bill was to help veterans of the war adjust to civilian life through vocational or academic

training. Large enrollment numbers and few academic limitations on college entrance

exams required post-secondary institutions to expand remedial curricula.

Community colleges founded a democratic open-door philosophy assuring that all

students have equal opportunity to higher education regardless of academic ability (Grubb,

1996; Oliver, 1995; Parnell, 1985). This foundational philosophy was best articulated by

Jesse B. Bogue, Executive Director of the American Association of Junior Colleges from

1946-1958. Oliver (1995) referred to Bogue's work when he stated that, "the role of the

Junior College could play an important part in promoting and in preserving American

democracy" (p. 3).

The overwhelming majority of post-secondary institutions of higher education

ground their guiding philosophies in progressivism (Angel & Barrera, 1991). Their

mission, in most cases, was to provide the community they served with a strong workforce

through academic and vocational education (Zwerling, 1986). Although most two-year

institutions maintained this democratic progressive philosophy, there remained

implications for minorities who attempted to access this democracy due to racial

discrimination that was prevalent throughout the United States (Kincheloe, 1999).

The Servicemen's Readjustment Act of 1944 (The GI Bill) was instrumental in narrowing the socioeconomic and educational gap across the nation (Gordon, 1999; Vaughan, 1982). The GI Bill provided financial support for U.S. military veterans to pursue higher education "with the firm commitment on the part of the federal government that no one should be denied access to higher education because of financial need" (Vaughan, 1985 p.7). In essence, this commitment from the federal government challenged the social belief that only the "bright and well to do" student could attend college. The Truman Commission felt that without the GI Bill, the democratic ideals for which the nation had gone to war would be lost in the postwar years (Gordon, 1999; Vaughan, 1985). Unfortunately, this commitment failed to include the Hispanic population of the nation regardless of military combat war service (Rendon & Hope, 1996).

The American Association of Community Colleges was established by the Truman Commission "to establish a network of community colleges throughout the nation, thus placing higher educational opportunities within reach of greater number of citizens" (Vaughan, 1985, p. 8). The community college had multiple purposes. The first was to serve as an institution of vocational education to train the local workforce. The second was to serve as a preparatory college for matriculation to a four-year comprehensive university. The third was to be a link between high schools and higher education for community youth (Parnell, 1985, 1995; Vaughan, 1985).

Late in the twentieth century, the progressive philosophy of the two-year institution shifted its emphasis to solving social problems in the belief that they could have an impact on unemployment, welfare, housing, etc. through non-traditional curriculum that served a diverse population of minority adult students (Zwerling, 1986). Community

college advocates conceded that in addition to traditional academic or vocational education, the community college would, "teach anyone, anywhere, anything, at any time, whenever there are enough people interested in the program to justify its offering" (Vaughan, 1982, p. 15).

Pincus (1980) argued that public and school officials perhaps over emphasized the democratic open-door policy of community college. Pincus (1980) posited that community colleges exacerbated the race and gender inequality and promoted the segregation of class and socioeconomic status. Community colleges offered a terminal vocational education that they considered was the best that could be expected for ethnic minorities and women. In essence, the limited high paying occupational careers that required a higher level degree that were traditionally filled by White Americans were secured by vocational education in community colleges that served the minority class.

Progressive education began at the time of industrial growth during the early 1900s when rapid growth in centralized communities exacerbated social problems such as crime and poverty. Progressive educators thought that these problems could be solved by

> developing a school system from kindergarten through high school to socialize the new immigrants, ameliorate the social ills brought about by urbanization, train workers and leaders needed for the growing industrial society, and contribute to the development of a democracy. (Elias & Merriam, 1993, p. 47)

The philosophical basis of progressivism was pragmatism (Elias & Merriam, 1995). Pragmatism was derived from the Greek word that means "action" which in turn meant "practical" in the English language. This philosophy embraced the individual's life experiences to interpret what he/she believed to be true based on facts presented (Cole, 1997). Pragmatism "is an attitude of looking away from first things, principles, categories,

supposed necessities, and of looking towards last things, fruits, consequences, facts"

(Durant, 1926). Pragmatism was not an easy method of finding truth because pragmatism

sought truth from as many theories as possible but would only hold a theory true as long

as it served a definitive purpose or a utilitarian need (Coles, 1997). James (1926) wrote,

> She (pragmatism) has in fact no predjudices whatever, no obstructive
> dogmas, no rigid canons of what shall count as proof. She is completely
> genial. She will entertain any hypothesis, she will consider any evidence.
> She will count mystical experiences if they have practical consequences.
> What other kind of truth could there be, for her, than all this agreement
> with concrete reality. (Reprinted in 1987, p. 21)

The goal of these pragmatic courses offered to the general public were intended to

empower the students to be socially responsible, thus enabling them to be self-sufficient

and not rely on social programs such as welfare (Angel & Barrera, 1991; Elias & Merriam,

1995). The utilitarian objectives of such curriculum were based on inductive reasoning

drawn from experiences of the individual rather than the deductive reasoning of traditional

academic thought (Elias & Merriam, 1995). The relevant occupational content of this

curriculum, the open-door philosophy, and the availability of remedial programs made

higher education accessible to minorities to serve their utilitarian needs.

The scope of remediation was nearly impossible to calculate because of the

complexity of state laws that governed some community colleges. In addition,

institutional compliance and the way students were identified as needing remediation

varied from one institution to another. Further limits were noted when national mandates

such as Welfare-to-Work (W-to-W) and the Job Training Partnership Act (JTPA) added

to the number of students that were participating in postsecondary remedial programs.

The National Center for Research in Vocational Education, (1996) reported that, "while

there has been a surge in writing about skill deficiencies, there have been almost no examinations of what programs are offered and what the relationships among them are" (NCRVE, 1996, p. 128). They further reported, "locating only nine evaluations of remedial or developmental programs, of which six were for community colleges and none of which was published more recently than 1971" (NCRVE, 1996, p. 129).

The identification of a remedial student was purely a matter of judgment, according to post secondary administrators (NCES, 1995). Administrators agreed that a remedial student was one who was enrolled in at least one remedial course in his or her freshman year. Analysis of programs offered that were common among all institutions as reported by the NCES (1995) revealed that:

- 78% of private four-year higher institutions offered remedial courses;

- 94% of public four-year institutions offered remedial courses;

- 100% of public two-year institutions offered remedial courses; and

- 99% of public two-year institutions offered remediation in all areas, math, reading and writing, with the highest percentage of remedial courses being math related.

Institutions that reported no or few remedial courses stated that, (1) students did not need remediation, (2) students took remedial courses at other institutions, and (3) school policy did not allow remedial courses. Student need for remediation was defined most often by standardized testing. However, some reported using high school GPA or counseling to encourage remediation. Further findings concluded that there was ample or flexible time limits for students to complete remedial work (NCRVE, 1996).

Growth and Impact on the U.S. Workforce

Hispanics constituted 10 percent of the total population in the United States in 1990 (Cattan, 1993). The Census Bureau reported that this population grew by 53 percent from 1980 to 1990. In 1998, it was projected that this segment of population will continue to increase and was expected to represent 48 percent of the total United States population by the year 2050 (Fisher, 1998).

This rapid growth in the Hispanic population posed a unique problem for the labor force in the United States (Melendez, 1991). The Bureau of Labor Statistics (BLS) reported an aging of the predominately White labor force in America in 1994, with a median age of 53 years. In contrast, 30 percent of the Hispanic population was under the age of 15, with a median population age of 26. These statistics suggested that the Hispanic population would dominate the labor market as well as constitute a near majority by mid 2000 (Fullerton, 1997). The increase in the Hispanic population had not reflected educational attainment nor social mobility. Similarly, employment opportunities with sufficient benefits and labor wages to improve socioeconomic status for this population remained limited.

The under-educated Hispanic adult education population level in America had serious implications for the nation as well as the workforce. Since 1980, the U.S. economy has shifted from a low-skill manufacturing workforce to a technologically advanced service-based one in which basic skills and minimal high school competencies were insufficient. The 1990 Census Bureau reported that Hispanics' median earnings were two-thirds that of their non-Hispanic counterparts. Interestingly enough, the gap continued to

widen in the last decade of the century (Perez & Salazar, 1993). The growth of the U.S. Hispanic population ensures that the nation's workforce will be comprised of minority workers, thus mandating attention from educators, administrators, and legislators that represent two-year colleges where Hispanics were largely represented in higher education (Mortenson, 1991; Gomez-Quinones, 1994).

Persistence of Hispanics

Two-year post-secondary institutions of higher education had begun to realize the impact and implications surrounding the rapid growth of the Hispanic population on their institutions as well as the U.S. workforce (Mortenson, 1991). Among Hispanics who completed high school, poor academic preparedness in terms of linguistic and computational skills was a central finding in most studies (De la Rosa, 1990; Mortenson, 1991). Improper counseling, program placing, and racial prejudice further exacerbated poor academic preparedness. According to Mortenson (1991), Hispanic standardized test scores consistently fell below average scores for non-Hispanic groups. The gap between these two groups increased as children drew closer to graduation. Hispanics tested in the areas of math, science, and reading at age nine trailed further by age thirteen and even further by graduation age when the student sought opportunities for higher education.

The issue of persistence among Hispanics in post-secondary institutions was related to the high numbers of this population in remedial programs (Angel & Barrera, 1991). Some studies suggested that the terms *persistence* and *retention* were closely related because the former was not accomplished without the latter (Oromaner & Krynicky, 1987; Rendon, 1981). McMillan (1998) defined persistence as completion of a

technical/occupational certificate or degree program. Mendocino College in Ukiah,

California, assessed their Extended Opportunities Programs and Services (EOPS) by

identifying minority students, particularly Hispanic students, who achieved their goal of

successfully completing a certificate or degree program as a measure of persistence. The

cohort of Hispanic students was easily identified and followed because the program was

linked to Pell Grant government funds. The investigation sought to assess the effectiveness

of the program and encourage a greater participation in higher education among

historically disadvantaged minority students (McMillan, 1998).

The investigators drew their sample population from EOPS participants who met

the following criteria: (1) California residency, (2) twelve units of credit, (3) qualification

for Pell Grant or TANF welfare assistance, (4) non-high school or GED achievement,

(5) basic math and English deficiency, (6) low high school GPA, (7) non English speaking

family setting, and (8) Hispanic ethnicity (McMillan, 1998).

The director of EOPS established a data base system to maintain records of the

EOPS student population over the past decade, on the basis of which it was possible to

identify changing characteristics of students who participated in the program and the

study. This database further evaluated student retention and academic performance for

those students initially served by EOPS in the fall semesters of 1991 through 1995

(McMillan, 1998).

The statistical techniques used by the researchers included a series of frequency

data reported in histograms and pie charts. These charts represented the subjects from Fall

1991 to 1995 and revealed an increase in students' progress in the EOPS program from 15

credits earned in 1991 to over 60 credits in 1995. Frequency distributions were used to

show the typical GPA achieved by the subjects in the same time frame. The independent variable was the range of GPA scores possible from .99 to 4.00, while the dependent variable was the number of students that achieved a particular GPA. In this case, over 200 of 250 subjects achieved a 2.99 GPA, while only about ten reached the 4.00 level (McMillan, 1998).

Pie charts were used to reveal the types of awards earned and to whom those degrees were awarded in terms of minority or non-minority classification. The type of award earned was divided into two categories; associate degree or certificate of completion. The pie chart revealed that 71 percent of minority students that persisted earned a certificate of completion while 29 percent earned associate degrees. The second pie chart revealed that 81 percent of degrees and certificates of completion awarded were minority students while 19 percent were non-minority students. The final category determined the persistence through a frequency distribution that represented the length of time EOPS persisters took to complete the program. The results revealed that 50 percent of persisters took an average of three years to complete their respective programs. Less than 10 percent of persisters took more than five years to complete EOPS certificate or degree programs (McMillan, 1998).

Easterling, Douglas, Patten, and Krile (1998) focused their research efforts to determine persistence and capital accountability at their community college. Their hypothesis of "common perception" which was the perception that remediation was needed to persist in higher education, was also tested. The methodology consisted of tracking (following) students over a five-year period. Remedial students were labeled 1-4 in which (1) was the highest level (extensive) remediation needed, and (4) was the lowest

level of remediation (no remediation). Their "common perception" hypothesis surprisingly was not supported. Persistence rates were found to be lower among students in the lower level (4) remediation. This study suggested that, in contrast to what was expected, students considered "high risk" had equal and sometimes better chances of persistence than those "low risk" remedial students.

Moraine Valley Community College (1996) defined persistence as the increase of higher-level course enrollment following remediation. Additionally, remedial subjects were categorized by remedial course subject matter rather than by individual remedial risk level as in the previous study. In this case, the study showed that generally, remedial students were not likely to enroll in higher levels of academic courses. Typically, remedial students took only the necessary requirements of their respective program after remediation. These findings indicated that persistence, as defined by the study, was not found.

Similar studies such as the two previously presented were consistent. The findings suggested that remedial programs were necessary to reflect the democratic philosophy of community colleges. Consistent by subjective and ambiguous findings from other studies reviewed prompted researchers from the University of Michigan (Kulic, Kulic, & Shwalb, 1983) to conduct a meta-analysis study in an effort to reveal objective data.

The study began with data collected from a pool of sixty studies that had used primarily quantitative methods. The researchers, Kulic, Kulic, and Shwalb (1983) sought to find differences in overall GPA (grade point average) and persistence among students enrolled in college remedial programs and those not enrolled. Their findings regarding GPA indicated a small, but significantly greater increase in GPA for students in remedial

programs. They reported a 2.03 GPA for students in remedial programs, and a 1.82 GPA for the control group. Although a smaller pool of studies was used to quantify data insofar as persistence rates were concerned, they were somewhat consistent with the GPA findings. In twenty-one of the studies, persistence was greater for students in remedial programs. In five studies the control group was more persistent, and in four studies the two groups were identical.

However, the researchers (Kulic, et al., 1983) warned that, "persistence effects are generally smaller and harder to detect than effects on GPA" (p. 406). In their conclusion and discussion, the researchers concluded that college remedial programs had positive effects on students' GPA and persistence rates. However, although statistically significant, were small. They additionally suggested the need for further research and noted that, "novelty rather than experience seemed to be the key factor in program success" (p. 408).

<div align="center">Retention of Hispanics</div>

Early studies regarding persistence among Hispanics in higher education supported the hypothesis of low self-esteem as a factor that impeded upward social and economic mobility (Andrade, 1982; Cortese, 1982; Gould, 1980; Kuvlesky, 1971; Marshal & Miller; 1977). However, these studies failed to consider equal opportunity and cultural socioeconomic predisposition of this population in higher education as a possible factor in the retention of Hispanics (Darder, Torres, & Gutierrez, 1997). More often, the lack of persistence among this population was attributed to first generation college student status, low socioeconomic position, and cultural disadvantage rather than low self-esteem

(Grimes & David, 1998). Interestingly enough, these same factors were also found among minority remedial populations of community colleges (Grubb, 1996).

Tinto (1996) underscored seven major causes of student withdrawal from college. The leading cause of poor student retention in the first year of college was *insufficient academic skills*. Although this trend continued to increase, insufficient academic skills accounted for only 30 percent to 35 percent of all college dropouts across the nation. In most cases, the student withdrew from college voluntarily and cited academic rigor as the reason. Accordingly, this rate increased for two-year colleges when the minority and non-traditional part time adult working population increased dramatically and was accounted for (Hoyte, 1999). *Adjustment difficulties* in a higher education for non-traditional students affected retention rates as well. Social adjustments to a new environment as well as exposure to a diversity of classmates and instructors often led to withdrawal from the first year of college as early as six weeks into the first term.

First-year college students had *uncertain goals* and expectations and varied in intensity and purpose regarding their direction in higher education. Many students had vague notions as to why they pursued a college education. Although uncertainty of career aspirations was typical among first-year college students, many failed to overcome this obstacle. Mortenson (1991) found that first-year students who declared a major field of study early in their college careers were twice as likely to persist than those who failed.

Earning a degree in higher education, regardless of the field of study, required a great deal of *commitment* from students. Some students had a stronger commitment than others or perhaps internal and external forces working against them that might provide an impetus toward completing a degree of higher education. Angel & Barrera (1991)

proposed that a large portion of the 50 percent of students who droped out or rather

"stopout" of college returned later to complete their education. This trend suggested that

the maturity level of a young student changed a great deal along with his/her level of

commitment as a returning adult college student.

Financial inadequacies was the reason most often given by students who

withdrew from college during the first year of studies. In his research, Tinto (1996)

administered several follow-up interviews with these students and determined that

financial inadequacies were just smoke screens as to why they actually withdrew from

college. More often, students felt they were not getting the quality of education that they

expected for their dollar. In contrast, Tierney (1999) warned that, "Tinto's theory of

student retention misses the mark for minority students" (p. 80). Tierney (1999) believed

that financial assistance was necessary for minority retention in higher education and

should not be undermined. However, financial aid as an independent remedy to minority

retention was not a sufficient effort. Olivas (1996) argued that, in public institutions of

higher education, Hispanics were disproportionately enrolled in community colleges and

questioned whether these institutions of higher education were actually receiving the funds

necessary to serve this population.

Closely related to the factor of financial inadequacies was the notion of

incongruency between the student and the institution. Some students felt they did not fit

into the typical college environment, either academically or socially. The difference

between Hispanic and non-Hispanic students in this regard was that the former had no

alternative transfer options if the institution did not met their needs. Non-Hispanic

students were twice as likely to apply and be accepted into institutions of higher education

than were their Hispanic counterparts (National Center for Educational Statistics, 1999).

In addition, Hispanic students were not likely to participate in school retention programs

that addressed this issue (Darder, et al., 1997). Consequently, Hispanic students began to

feel *isolated* during the first year of college. Many students felt they were unable to make

meaningful connections with their peers, classmates, and professors that would foster a

friendlier environment.

Overwhelmingly, the two salient factors in the retention of Hispanics in higher

education were the lack of basic academic skills and financial inadequacies (Darder, et al.,

1997; Grimes & David, 1998; Grubb, 1996; Hoyte, 1999; Olivas, 1996; Tierney, 1999).

Interestingly, the majority of retention efforts were non-academic in nature and focused

primarily on orientation of freshman, counseling, social activities, mentoring, and

affiliation efforts (Tinto, 1996). "As a result, existing retention programs have done little

to improve the daily academic experiences of students in the classroom and laboratories"

(Tinto, 1996, p. 3). Furthermore, financial aid packaging in two-year public institutions

were complicated by full-time enrollment (FTE) limitations that were prevalent in four-

year institutions. This was of particular concern considering that federal aid (welfare)

monies were affected when an economically marginalized part-time Hispanic student

received financial aid from a two-year institution of higher education (Darder, et al.,

1997). Two-year post-secondary institutions of higher education faced complicated

factors that affected student persistence and retention. For this reason, administrators and

faculty must consider viable means of increasing Hispanic enrollment in these institutions.

Recruitment of Hispanics

Racial data regarding minorities in higher education had been available since the

late 1700s and pertained mostly to the African-American population of the United States.

However as stated earlier, the designation of "Hispanic" had not appeared on the U.S.

Census form until 1980, thus limiting the viable research on this population to the last two

decades of the twentieth century. Moreover, a large portion of the available research

during this time identified the Hispanic population as a homogeneous group.

Consequently, until recently, programs designed to recruit Hispanics into higher education

have had limited success (Mortenson, 1991).

Efforts to recruit Hispanics into higher education often based decisions on biased

data that were not representative of the population (Mortenson, 1991; Oromaner &

Krynicky, 1987; Rendon, 1981). For example, early research by Marshal & Miller (1977)

maintained that low socioeconomic and educational attainment among Mexican-

Americans reflected low traditional values. They posited that "Mexican-American families

fail to motivate children to aspire to high status career achievements" (Marshal & Miller,

1977, p. 348). This research had been refuted, because positions such as this and similar

studies relied heavily on limited data of the Mexican-American population. Garza and

Chavkin, (1988) and Montiel (1972) held that the Mexican-American population aspired

to higher levels of educational and occupational achievements than Anglos but were often

deterred by institutional barriers and ethnic discrimination.

Two general concerns had been addressed by two-year institutions of higher

education regarding the recruitment of Hispanics. These concerns were drawn from more

recent literature that better represented the Hispanic population for the purpose of understanding and addressing recruitment issues. Research suggested that academic preparedness and the availability of financial resources were central issues in current efforts to recruit Hispanics (Angel & Barrera, 1991; Darder, et al, 1997; Hoyte, 1999, 1997; Tinto, 1996). "The success or failure of minority recruitment initiatives seems directly related to how well the institution addresses these concerns" (Angel & Barrera, 1991, p. 31).

In 1990, about 25 percent of institutions of higher education in the nation had recruitment programs that actively sought candidates to attend their institutions (Jaramillo, 1992). Interestingly, 100 percent of public two-year institutions maintained comprehensive remedial education programs that served non-traditional minority students (National Center for Research in Vocational Education, 1996). In contrast, the majority of these institutions of higher education with recruitment programs in place focused their recruitment efforts on high-achieving students with above average high school GPAs (Grimes & David, 1998).

Grimes & David (1998) concluded that high school GPA was not a good method of identifying possible college recruits. Students with low GPA scores in high school had similar GPA scores in college as high achievers did under the same conditions. More importantly, this method of recruiting potential students automatically eliminated the large Hispanic population who traditionally had below average GPA scores (Grimes & David, 1998). Similarly, college remedial courses were often "non credit" and the students not yet placed in an official enrollment status were thus overlooked as potential candidates for recruitment (Easterling, Douglas, Patten, & Krile 1998). It was worth repeating that

statistics on persistence of remedial students suggested that students considered "high risk" had equal, and sometimes better, chances of persistence than those "low risk" remedial students. These remedial programs had positive effects on students' GPA and persistence rates, however, these effects were small (Kulik, Kulik, & Shwalb, 1983).

Similarly, most institutions used predictive modeling to target students most likely to apply or enroll in higher education so that they could be more cost efficient in their efforts. Thomas, Reznik and Dawes (1999) found that institutions that targeted high probability potential students often diverted crucial finances needed to recruit from the general high school population because the high probability prospect usually had many options available. "Admission resources should be targeted where they will cause the greatest increase in the probability of students' enrolling, and those may not be the students with the highest probability of enrollment" (Thomas, Reznik & Dawes, 1999, p. 6). In essence, these methods of recruitment failed to consider the non-college bound at-risk Hispanic student as a possible target for recruitment efforts.

Some institutions of higher education considered the growth of this non-traditional population in efforts to implement effective recruiting strategies (Acosta, 1996). DesJardins (1997) investigated the factors that influenced students' application and enrollment decisions regarding college choice. They postulated that recruitment efforts might be incongruent with students' needs. Therefore, studies that reflected market demands might lead to more effective methods of attracting potential students. In the study, DesJardins (1997) used the *application decision model* to understand the decision made by applicants. This model was based on ACT scores and human capital and thus maintained that an applicant weighed the monetary cost of attending an institution against

net benefits upon completion. Once the first step in the model was completed, and the student scored well, then the applicant made a choice to apply to a specific institution. Results of this model indicated that an institution was more likely to attract students of high ability. This also meant that students of high ability within an ethnic group were more likely to be attracted (DesJardins, 1997). The implication of this model was that the Hispanic population might have been overlooked based on socioeconomic position as well as educational attainment.

Recruitment efforts that considered the student a consumer, and themselves a business with a specific product to market, relied on similar models in recruiting potential students. Rosen, Curran, and Greenlee (1998) adopted the *Brand Elimination Framework* model to increase enrollment in their business program. The impetus for this model was the decline in enrollment at their university that inevitably had an impact on their business program as well. The Brand Elimination process included five major steps in the students selection process, they were: (1) total set, (2) awareness set, (3) consideration set, (4) choice set, and (5) decision. Rosen, et al. (1998) implied that traditional efforts to persuade potential applicants in this decision process were being over looked in many instances. As a remedy, they proposed that colleges could capitalize on the opportunity to persuade potential applicants at any stage of their *Brand Elimination Model*.

Rosen, et al. (1998) found that all consumers (potential inquiries) gathered as much information from as many different institutions as possible, which defined the *total set*. At this point, the institutions' ability to distribute general informational material regarding their college was critical. The *awareness set* was the point in the decision model where students had filtered through the undesirable institutions and limited inquiries to this

set. Generally, the *awareness set* included about twelve to fifteen selections. The opportunity for the institution to capitalize at this stage of the model included actively contacting the student with more specific information about the institution with the goal of getting themselves into the *consideration set* of the model.

Once the institution had positioned themselves into the *consideration set*, then efforts to draw a commitment from the student (i.e., exams, transcripts, application, etc.) placed them into the *choice set* step. Finally, the *decision* step in the model was perhaps the most important. The institution considered that competitors were also aware of the students' progress based on their own information, thus requiring the institution to aggressively maintain communication and solidify their commitment by actually enrolling the student (Rosen, et al., 1998).

Each of the stages in the *Brand Elimination Model* considered the effectiveness of the most common recruiting tools used by institutions of higher education. The identification of these tools and their effectiveness as applied in the model helped the investigators select the most effective tools at any particular stage in the recruitment model. The ten most common recruiting tools used by institutions of higher education according to administrators were: (1) university catalog, (2) on-campus tours, (3) general information brochure, (4) scholarships, (5) high school visits, (6) meetings with high school guidance counselors, (7) visits to junior and community colleges, (8) telephone calls, (9) personalized letters, and (10) minority recruiting programs (Rosen, et al., 1998).

The same administrators were asked to rank the most *effective* tools that they used from the list. They were: (1) on campus tours, (2) high school visits, (3) college program specific brochures, (4) telephone calls, and (5) university catalogs. The results of the study

indicated that the *awareness set* stage in the model yielded the most potential for institutions to persuade potential students, and revealed the top five most effective strategies to employ at each particular stage in the *brand elimination framework model* (Rosen, et al, 1998).

Programs to recruit Hispanic students generally fell under the overall recruitment effort of the institution. Statistics revealed that there were only about 15 recruiting programs that targeted Hispanics specifically (Acosta, 1996). The evidence provided by recruiting programs and statistics that reflected this trend suggested that efforts to recruit Hispanics into higher education required a deeper understanding of educational attainment as affected by the socioeconomic predisposition of this population (Acosta, 1996; Grimes & David, 1998; Mortenson, 1991; Oromaner & Krynicky, 1987; Rendon, 1981; Thomas, et al., 1999).

Observations

The historic cultural context that lead to the educational and socioeconomic level of the Hispanic population in the United States necessitated rigorous research regarding the educational attainment gap between the Hispanic and non-Hispanic groups. Research revealed an awareness of the complex issues but yielded few cohesive programs to improve recruitment, retention, and persistence of the Hispanic population in community colleges. Thus the problem continued to permeate and shape the future workforce of the nation. Overall, the two-year post-secondary institutions of higher education that served this population and the needs of the U.S. workforce were the leaders in this effort.

Recruitment, retention, and persistence programs and the issues that frame them are central to addressing such factors as educational access and opportunity in higher education for Hispanic students. This study aimed to investigate practices of recruitment of Hispanic students in selected community colleges with occupational programs in Texas. The findings will reveal possibilities for innovative approaches to this problem. It was vital that administrators and faculty consider innovative approaches to increase Hispanic enrollment in these institutions and reach the objectives of, (1) trained workforce, (2) prepare for a four-year university, and (3) serve the community.

CHAPTER III

METHODOLOGY

General Description

This study originally sought participation from 25 accredited community colleges with occupational programs in Texas. These community colleges were selected because they were in areas with high concentrations of Hispanics. Initial contacts were made via telephone by the principal investigator in an effort to solicit participation because they fell into the parameters set forth by the study for participants. Although guaranteed anonymity, ten of these community colleges declined to participate in the study, citing possible condemnation by representatives from Affirmative Action and Hispanic civic groups. Furthermore, five community colleges declined to participate based on policy set forth by their "institutional effectiveness" department of the college. The community college representatives did not elaborate this policy; they simply declined and offered o further explanation.

This was a descriptive study using both quantitative and qualitative research techniques to answer the research questions. Data derived from an institutional document analysis and a written survey instrument comprised the quantitative component. The qualitative component was composed of further analysis of content reported in the document analysis and responses to open-ended questions of the survey instrument. The

use of both quantitative and qualitative data on a carefully targeted sample was expected to yield rich data, thus increasing this study's chances of arriving at sound conclusions.

The document analysis provided a descriptive data regarding current recruitment policies and practices utilized by community colleges with occupational programs in Texas aimed at non-college bound at-risk Hispanic students. The survey data yielded perceptual data from individuals who either create or implement current recruitment strategies and gained insights into practitioners' recommendations for effective recruitment strategies for non-college bound, at-risk Hispanic students.

Population

The population for the study was community colleges with occupational programs in Texas that had an overall enrollment of at least ten thousand students. For purposes of anonymity, this population was divided into three geographic areas. They were: north, central, and south Texas. Each geographic area had at least a 60 percent concentration of Hispanics in the community college geographic service area. In addition, the high school districts in the community college service area were ranked in the top one hundred largest high school districts in the nation each with more than 50 percent Hispanic enrollment.

Sample

The stratified representative sample drawn from this population was ten administrators and personnel directly responsible for recruiting policy and programs in ten community colleges with occupational programs in Texas. The administrators and personnel identified themselves as either a *"dean of enrollment* or *recruiting specialist"*

within the population of community colleges. In either case, the administrator was directly responsible for recruitment policy and procedures in their community college.

United States Hispanic Population Demographics

The U.S. Census reported that, "The race and Hispanic origin categories used by the Census Bureau are mandated by Office of Management and Budget Directive No. 15, which requires all federal record keeping and data presentation to use four race categories" (United States Census Bureau, 1999). The race categories were: White, Black, American Indian and Alaskan Native, Asian and Pacific Islander. The Census Bureau also uses the designation of Hispanic or Non-Hispanic to identify ethnicity (U.S. Census Bureau, 1999). Therefore, a Hispanic can be categorized under either of the six race designators.

In 1999, the "estimated United States Hispanic population was 31.7 million or 11.7 percent of the total population" (Ramirez, 1999). The majority, 65.2 percent, of the Hispanic population was of Mexican origin. The remaining Hispanic population represented people from Puerto Rico, Cuba, Central and South America (Ramirez, 1999).

Reporting race and ethnicity in public schools was somewhat different from the Census Bureau federal standards as previously described (NCES, 1998). 55 percent of the nation's public schools reported that they collect information on race and ethnicity only when students initially enroll. Other public schools reported that they collect information annually or when the student transfers from one district to another (NCES, 1998). About 70 percent of public schools allowed the parent or guardian to report race or ethnicity for their children, while about 30 percent reported students race and ethnicity based on

teacher and administrators observations (NCES, 1998). For example, only five states in the nation used the same standards used by the U.S. Census Bureau. California schools use up to nineteen racial and ethnic categories, one of which was *multiracial*. Therefore, statistical information regarding educational statistics on the Hispanic population may be confusing.

The dropout rate for the Hispanic population in the United States was 39.5 percent in 1997. This dropout rate included 16 to 24 year olds who were not enrolled in school and who had not completed a high school or GED program. In terms of higher education, 18.4 percent of the Hispanic population attained an associate degree or less. The attainment levels of higher education for this population decreased with higher-level degrees (Digest of Educational Statistics, 1998).

Labor force participation in 1999 for the Hispanic population 16 years and older in the United States was 78.4 percent for men and 55.8 percent for women. This labor force participation was within five percentage points of the non-Hispanic population for men and women respectively. However, the overall unemployment rate for Hispanics overall was twice as high than any other population and nearly half of the Hispanic dropouts were not participating in the labor force (Ramirez, 1999).

Texas Hispanic Population Research Area Demographics

Texas ranks second for the highest concentration of Hispanics in the United States. The overall Hispanic population in Texas increased by more than 35 percent in the last decade of the 20th century. The topic of non-college bound, at-risk Hispanic high school students make high school enrollment data important to this study. There are 35 states that

have at least one of the 100 largest school districts. Florida and Texas have thirteen

districts among the 100 largest (NCES, 1998). Some of the community colleges service

areas in this research were representative of the top 100 largest school districts in the

United States (Digest of Education, 1998; U.S. Census Bureau, 1999; NCES, 1998).

The first community college service area (College A) in north Texas had an overall

Hispanic population of more than 50 percent of the total population. The community

college itself had more than an 80 percent Hispanic enrollment. The occupational/technical

program enrolled more than half of the total population of the community college. The

local high school district was ranked in the top 100 largest school districts in the United

States and had more than a 60 percent Hispanic enrollment. The dropout rate for this high

school population was more than five percent (Digest of Education, 1998; U.S. Census

Bureau, 1999; NCES, 1998).

The second community college service area (Colleges B, C, D, E) is located in

Central Texas and had an overall Hispanic population of more than 40 percent of the total

population. The community college itself had more than a 25 percent Hispanic enrollment.

The occupational/technical program enrolled more than 25 percent of the total population

of the community college. The local high school district was ranked in the top 100 largest

school districts in the United States and had more than 50 percent Hispanic enrollment.

The dropout rate for this high school population was 18 percent (Digest of Education,

1998; U.S. Census Bureau, 1999; NCES, 1998).

The third community college service area (Colleges F, G, H, I) in central Texas

had an overall Hispanic population of more than 70 percent of the total population. The

community college itself had more than a 50 percent Hispanic enrollment. The

occupational/technical program enrolled about 30 percent of the total enrolled population of the community college. The local high school district was ranked in the top 100 largest school districts in the United States and had more than an 80 percent Hispanic enrollment. The dropout rate for this high school population was more than five percent (Digest of Education, 1998; U.S. Census Bureau, 1999; NCES, 1998).

The last community college service area (College J) in south Texas had an overall Hispanic population of more than 50 percent of the total population. The community college itself had more than a 50 percent Hispanic enrollment. The occupational/technical program enrolled about 30 percent of the total enrolled population of the community college. The local high school district was ranked in the top 500 largest school districts in the United States and has more than a 60 percent Hispanic enrollment. The dropout rate for this high school population was more than 20 percent (Digest of Education, 1998; U.S. Census Bureau, 1999; NCES, 1998). These demographics satisfied the selection criteria and justified the inclusion of these community colleges in the stratified representative sample.

<div align="center">Institutional Document Analysis</div>

The documents analyzed were the recruitment policy and procedures outlined by the institution. These documents from each community college (A-J) in the sample were reviewed using qualitative content analysis. The process of evaluation of these documents drew from the work of Denzin and Lincoln (1994), Kellhear (1993), and Patton (1990).

Content analysis was used to identify, code, and categorize the primary patterns of the document (Denzin & Lincoln, 1994). The process began with labeling various kinds of

data and establishing an index to simplify complicated text (Patton, 1990). In the present study, certain words, phrases, and ideas were counted that composed the index. Then the text was carefully read to determine what was important or unimportant, relevant or irrelevant with the intent of understanding, theorizing, and developing explanations through recurring patterns in the documents (Kellhear, 1993). The results of the content analysis was an index of recurring text and possible meanings of the content of recruitment policy and procedures used by community colleges in the sample.

<div align="center">Instrumentation</div>

The survey instrument that was administered to the representative sample of community college administrators and personnel was designed to gather data on non-college bound, at-risk Hispanic high school students. The purpose of the survey instrument (Appendix A) was to determine the perception of administrators and personnel directly responsible for recruiting policy and programs in Texas community colleges with occupational programs. Specifically, the focus of these perceptions were regarding the effectiveness of recruiting tools used to target the non-college bound, at-risk Hispanic high school population.

A review of the related literature revealed an instrument (Rosen, Curren & Greenlee, 1998) that determined the top ten recruitment tools and the perceived effectiveness of those tools by administrators in institutions of higher education. The findings from this study (Rosen, et al., 1998) were used to construct a two-part instrument. The instrument measured the frequency of use by selected community colleges of these top ten recruitment tools and their perceived effectiveness. Open-ended questions

were included that allowed the respondents to submit tools not listed in the top ten tools of recruitment and make recommendations for recruitment strategies to increase the enrollment of non-college bound at-risk Hispanic high school students.

The respondents were asked to rank the frequency of use by their institutions of the top ten recruitment tools on a scale of 1 to 10 (1 being the most frequently used and 10 being the least used) In the second section of the survey respondents ranked the perceived effectiveness of these recruitment tools on a five point Likert scale. A sub-section under the second half allowed the respondents to list any additional methods used by their institution to recruit non-college bound, at-risk Hispanic high school students.

Validation Procedures

This study sought external validity by using descriptive data that identified the top ten recruitment tools used by institutions of higher education in a study by Rosen, Curran and Greenlee (1998). Rosen, et al. (1998) found an overall description of recruiting tools used by institutions of higher education and the perceptions of administrators directly responsible for recruiting programs on the effectiveness of the recruiting tools. The authors were tenure track faculty in marketing at the University of Rhode Island and Miami University (Oxford, Ohio) and the study was published in the Journal of Marketing for Higher Education.

Rosen, et al. (1998) pre-tested a mail survey by sending it to administrators directly responsible for recruiting programs in their institutions to ascertain the overall recruiting strategy. The survey included a list of recruiting tools and asked the respondents to indicate which tools were used most often. The respondents were also asked to include

any additional tools their institution used. The sample included 512 institutions of higher education made up of accredited and non-accredited four year programs randomly selected from Peterson's Guide to Four Year Colleges: 1994-1995. The survey attained a 47 percent response rate and was analyzed using descriptive statistics.

Results yielded the top ten most used recruiting tools by these institutions. These tools were: (1) university catalog; (2) on-campus tours; (3) general information brochure; (4) scholarships; (5) high school visits; (6) meetings with high school guidance counselors; (7) visits to junior and community colleges; (8) telephone calls; (9) personalized letters; and (10) minority recruiting programs (Rosen, et al., 1998).

A survey that measured the administrators' perceived effectiveness of the top ten recruiting tools by allocating 100 points among them yielded the top five most effective recruiting tools. Over 50 percent of the respondents included campus tours among the five most effective recruiting tools giving it a mean score of 25 based on an allocation of 100 points. The recruiting tool given the highest mean score (26.4) was the university catalogue. General information, scholarships, and high school visits completed the perceived top five most effective recruiting tools used by institutions of higher education. Therefore, the present study's instrument was developed drawing from the method and findings of Rosen, et al., (1998).

The survey instrument developed for the present study drew from data regarding the effectiveness of the top ten recruitment tools used by institutions of higher education drawn from Rosen, et al., (1998). The decision to use data from Rosen's (1998) study was based on the absence of specific data on recruitment tools used by institutions of higher education in a review of literature from refereed journals in the field of education.

In addition, two pilot tests were conducted to develop and validate the instrument in the present study. The first pilot test was conducted through telephone conversations with five directors of enrollment and three recruitment specialists from the sample population. In this telephone conversation with administrators, the investigator read the list of the top ten recruitment tools used by institutions of higher education as listed in Rosen, et al. (1998) and asked to validate the list based on their expertise. The responses validated that these tools were also used in their own recruitment policies and practices.

The second pilot test included a full professor and four tenure track professors who specialize in quantitative and qualitative research methods from the School of Curriculum and Educational Leadership and the School of Educational Studies at Oklahoma State University, Stillwater, Oklahoma. The professors reviewed the pilot survey instrument individually and responded with suggestions regarding "misunderstandings, ambiguities, and useless or inadequate items" (Wiersma, 1995). Further review included problems and recommendations in data tabulation, and directions for respondents in completing the survey instrument. Recommendations from both pilot tests were compiled and resulted in the development of the survey instrument used in the present study (Appendix A).

<center>Data Gathering Procedures</center>

The stratified representative sample for this study included community colleges in Texas identified in the American Association of Community Colleges Handbook. The handbook lists all accredited and non-accredited community colleges in the United States. The criteria used to select the stratified sample representative was: (1) the community

college must be accredited, (2) the community college must have an enrollment of at least 10,000 students in 2000-2001 academic year, (3) the community college must offer occupational education courses, and (4) be representative of the stratified representative sample by regional categories.

A letter of solicitation was sent to the selected colleges to authorize participation. Once participation was confirmed by mail, then the survey instrument (Appendix A), consent form (Appendix B), and a letter requesting institutional documents was sent to the community college. A second follow up letter was sent to participants who had not responded to the survey within a 15-day time period via e-mail and telephone communication. Once the data were received from the institutions, the quantitative data were analyzed from the two-part survey and the qualitative data were analyzed from the survey and the institutional documents. Finally, the results, conclusions, and recommendations were completed and presented in the last section of Chapter V.

Analysis of the Data

Survey instrument data resulting from rating was analyzed using descriptive non-parametric statistics such as means, percentages, and frequency distributions. Qualitative data synthesized from the survey instrument and document analysis was analyzed using the response category technique in which all similar and dissimilar responses were grouped. Frequency of comment counts as well as strength of comments was noted.

CHAPTER IV

FINDINGS

Introduction

The purpose of the research was to identify, describe, and measure the perceived effectiveness of the tools used by community colleges with occupational programs in Texas to recruit the non-college bound, at-risk Hispanic high school student population. Recommendations to administrators directly responsible for developing or implementing recruiting policies that might improve recruitment practices were also developed in this study.

These findings were based on a final 100 percent response rate ($\eta=10$) of the survey instrument and content analysis of seven institutional recruitment documents. Responses were reflective of the stratified representative sample of ten community college administrators and personnel drawn from a sample of ten community colleges with occupational programs in Texas.

The findings reported in this chapter are divided into three sections. The first section describes the ranking, identification, and perceived effectiveness of tools currently used by the participating community colleges to recruit the general and non-college bound, at-risk Hispanic population of high school students. The reporting of the data from the survey instrument refers to the following recruitment tools:(1) university catalogue; (2) on

72

campus tours; (3) scholarships; (4) high school visits; (5) meeting high school counselors (6) telephone calls; and (7) minority recruiting program.

The second section shows the results of data collected from an open-ended question in the survey instrument. These responses describe the recommendations from the sample about possible tools to recruit non-college bound, at-risk Hispanic high school students.

The final section of this chapter describes the content of institutional recruitment documents from seven of the community colleges in the sample. The documents described are recruitment policy and procedures reported by the respective institutions. These documents from each community college in the sample were reviewed using a qualitative content analysis technique.

Content analysis was used to identify, code, and categorize the primary patterns of the document (Denzin & Lincoln, 1994). The process began with labeling various kinds of data and establishing an index to simplify complicated text (Patton, 1990). In the present study, certain words, phrases, and ideas were counted that consituted the index. Then the text was carefully read to determine what was important or unimportant, relevant or irrelevant with the intent of understanding, theorizing, and developing explanations through recurring patterns in the documents (Kellhear, 1993).

Quantitative Data Analysis

Table 1 describes the ranking based on frequency of use of tools used by the respondents to recruit the general population of high school students to enroll in their community colleges. The instructions asked respondents to rank the frequency of a list of

seven recruitment tools from one to seven. Number one was given the designation of the most frequent recruiting tool used by their institutions. The sum of the rankings in Table 1 reveal that high school visits were the most frequently used recruitment tool used by the respondents. This tool was followed by on campus tours, university catalogues, meeting with high school counselors, telephone calls, scholarships, and minority programs.

The second column lists the recruitment tools that the respondents were asked to rank. In the returned surveys, three of the respondents wrote in that minority programs did not exist in their community colleges, therefore, they ranked it last in the frequency of tools used. In two other cases, respondents wrote that some of the tools listed were used simultaneously and did not stand alone in their practices. Nevertheless, the respondents did rank the usage frequency as instructed.

Table 2 shows the rating of perceived effectiveness of recruitment tools used to recruit the general high school population. The mean column describes the respondents' average perceived effectiveness of each recruitment tool on a five point Likert scale, with five being the highest perceived effectiveness. The means revealed that high school visits was the perceived to be the most effective tool used by community colleges followed by on campus tours, telephone calls, scholarships, meeting with high school counselors, university catalogue, and minority recruiting program.

Table 1

Ranking of Recruitment Tools by Frequency of Use for the General Population

	A	B	C	D	E	F	G	H	I	J	$\sum$Rank	Rank
High School Visits	1	1	1	1	1	0	0	5	5	0	15	1
On Campus Tours	5	2	2	4	4	3	3	3	4	4	34	2
University Catalogue	1	1	3	3	3	4	6	5	5	5	36	3
Meeting Counselors	1	2	3	3	3	4	5	6	6	6	39	4
Telephone Calls	2	1	1	4	5	6	6	7	7	2	41	5
Scholarships	5	5	5	5	4	4	4	3	6	6	47	6
Minority Programs	7	7	7	6	6	7	7	7	7	7	68	7

Table 2

Rating of Perceived Effectiveness of Recruitment Tools Used for the

General Population

Recruitment Tool	Mean Perceived Effectiveness (5 point scale)
High School Visits	4.7
On Campus Tours	4.3
Telephone Calls	4.2
Scholarships	3.7
Meeting High School Counselors	3.2
University Catalogue	1.8
Minority Recruiting Program	1.7

Table 3 describes the rankings and frequency of tools used by respondents to recruit the non-college bound, at-risk Hispanic high school student population to enroll in their community college. The instructions asked respondents to rank frequency of use list of seven recruitment tools from one to seven. Number one was given the designation of the most frequently used by their institutions. The sums of the rankings in Table 3 revealed that the high school visit was the most frequently used recruitment tool used by the respondents. This was followed by: on-campus tours, meeting with high school counselors, scholarships, university catalogue, telephone calls, and minority programs. Three of the respondents wrote in that minority programs did not exist in their community colleges, therefore, they ranked it last in the frequency of tools used. In two other cases, respondents wrote in that some of the tools listed were used simultaneously and did not stand alone in their practices. Nevertheless, the respondents did rank the frequency as instructed.

Table 3

Ranking of Recruitment Tools by Frequency of Use for the Hispanic Population

Recruitment Tool	A	B	C	D	E	F	G	H	I	J	$\sum$Rank	Rank
High School Visits	4	2	2	2	2	2	5	0	0	0	19	1
On Campus Tours	1	2	2	4	3	3	6	6	3	3	33	2
Meeting Counselors	1	1	2	3	3	4	4	6	6	6	36	3
Scholarships	3	3	3	4	4	4	5	5	5	5	41	4
University Catalogue	1	5	4	4	4	4	5	5	6	3	41	5
Telephone Calls	7	7	6	6	5	5	2	2	1	1	42	6
Minority Programs	7	7	7	6	6	7	7	7	7	7	68	7

Table 4 shows the perceived mean effectiveness of each recruitment tool on a five

point Likert scale, with five as the highest rating. The mean scores reveal that high school

visits was the perceived to be the most effective tool used by community colleges followed

by scholarships, on campus tours, telephone calls, meeting with high school counselors,

university catalogue, and minority recruiting program.

Table 4

Ratings of Perceived Effectiveness of Recruitment Tool for the Hispanic Population

Recruitment tool	Mean of Ratings
High School Visits	4.7
Scholarships	4.5
On Campus Tours	4.3
Telephone Calls	4.0
Meet High School Counselors	3.2
University Catalogue	2.1
Minority Recruiting Programs	1.7

Table 5 shows a comparison of rankings by usage frequency for tools used by the

sample between the general and Hispanic populations. High school visits and on campus

tours were ranked as the most frequently used tools for both populations. The ranked

frequencies for both populations were similar within a few points. However, the noticeable

difference was the use of scholarships as a recruitment tool, which was used more

frequently for the Hispanic population than the General population. Frequency of use of the

university catalogue was higher for the general population than for the Hispanic population.

Table 5

Comparison Ranking Between Recruitment Tools Most Frequently Used for

General and Hispanic Population

Recruitment Tool	General	Recruitment Tool	Hispanic
High School Visits	1	High School Visits	1
On Campus Tours	2	On Campus Tours	2
University Catalogue	3	Meet H.S. Counselors	3
Meeting Counselors	4	Scholarships	4
Telephone Calls	5	University Catalogue	5
Scholarships	6	Telephone Calls	6
Minority Program	7	Minority Programs	7

Table 6 shows a comparison of perceived effectiveness of the tools used by the

sample between the general and the Hispanic population. High school visits and on campus

tours were perceived to be the most effective tool used by the sample for the general

population. However, for the Hispanic population, high school visits was followed by scholarships. The overall perceived effectiveness was similar between the two populations for five of the recruitment tools listed. However, there was a noticeable higher perceived effectiveness of scholarships as a recruitment tool for the Hispanic population than for the general population.

Table 6

Ratings of Perceived Effectiveness of Recruitment Tools for General and Hispanic

Population

Recruitment Tool	General	Recruitment Tool	Hispanic
High School Visits	4.7	High School Visits	4.7
On Campus Tours	4.3	Scholarships	4.5
Telephone Calls	4.2	On Campus Tours	4.3
Scholarships	3.7	Telephone Calls	4.0
Meeting Counselors	3.2	Meeting Counselors	3.2
University Catalogue	1.8	University Catalogue	2.1
Minority Recruitment Program	1.7	Minority Recruitment	1.7

Table 7 shows a comparison of data within the general population of frequency of use and the perceived effectiveness. High school visits and on campus tours were the most frequently used and perceived to be the most effective tools for the general population. Minority recruitment program was the least frequently used and perceived to be the least effective for this population. However, the four remaining recruitment tools were ranked

and rated noticeably different by the sample. The university catalog was third in frequency of use but was perceived to be ineffective by the respondents. In contrast, the use of scholarships were not frequently used but perceived to be effective by the respondents. The four remaining recruitment tools were ranked and rated within a few points of each other.

Table 7

Recruitment Tool Ranking of Frequency and Rating of Effectiveness Within the

General Population

Recruitment Tool	Ranking	Recruitment Tools	Rating
High School Visits	1	High School Visits	4.7
On Campus Tours	2	On Campus Tours	4.3
University Catalogue	3	Telephone Calls	4.2
Meeting High School Counselors	4	Scholarships	3.7
Telephone Calls	5	Meeting H.S. Counselors	3.2
Scholarships	6	University Catalogue	1.8
Minority Recruiting Program	7	Minority Recruiting	1.7

Table 8 shows a comparison of data within the Hispanic population of frequency of use and perceived effectiveness. High school visits were number one for both frequency and perceived effectiveness. Minority recruitment programs were least frequently used and perceived to be the least effective. Scholarships were rated second for effectiveness yet were fourth in frequency of use. On campus tours was ranked second for frequency of use

while rated third in perceived effectiveness. Meeting with high school counselors ranked

third in the order of frequency and fifth in perceived effectiveness. Telephone calls were

ranked sixth in the order of frequency and fourth in perceived effectiveness.

Table 8

Recruitment Tool Ranking of Frequency and Rating of Effectiveness Within the

Hispanic Population

Recruitment Tool	Ranking	Recruitment Tools	Rating
High School Visits	1	High School Visits	4.7
On Campus Tours	2	Scholarships	4.5
Meet High School Counselors	3	On Campus Tours	4.3
Scholarships	4	Telephone Calls	4.0
University Catalogue	5	Meet H.S. Counselors	3.2
Telephone Calls	6	University Catalogue	2.1
Minority Recruiting Programs	7	Minority Recruiting	1.7

Qualitative Data

The data in Table 9 categorizes and lists themes that emerged from an open-ended

question that asked respondents what recruitment tools were recommended to recruit non-

college bound, at-risk Hispanic high school students by community colleges. Space was

allowed to answer the open-ended question. The responses were categorized and analyzed

for possible emerging themes that were common to multiple responses.

Table 9

<u>Recommended Recruitment Tools for the Hispanic Population</u>

Frequency	Recruitment tool
3	Financial aid
2	Scholarships
2	Partnerships with business & industry for scholarships
2	On going recruitment efforts, rather than sporadic
1	Ethnic role model

The most frequently recommended tool for recruiting non-college bound, at-risk Hispanic high school students was "financial aid." One participant reported the need for financial assistance for both the institutional recruitment program as well as the prospective student. The recruitment office in this case received no funds for advertising, marketing, or public affairs. Another community college district reported serving nearly 20 school districts totaling nearly 50 high schools, all of which were considered financially underserved.

Another participant reported that, "although financial resources play an important role, the need can be minimized with an enrollment management plan." As part of this plan, one participant suggested including a "financial aid component especially for parents of at-risk Hispanic students."

Closely related to financial aid was the use of scholarships as a tool to recruit non-college bound, at-risk Hispanic students. For instance, one participant hand wrote the word "scholarships" in bold letters then highlighted with a yellow marker with no further

explanation. One respondent wrote: "Scholarships as a recruitment tool seemed to have limited effect because of the monetary amount offered by some institutions." To offset this, one participant reported the use of scholarships from business and industry rather than rely on institutional scholarships.

Although financial assistance and scholarships were the most frequently recommended recruitment tool by community colleges, "partnerships with business and industry" was the common thread that bound the two together. These partnerships were established with agencies such as Hispanic/Latino civic organizations, educational agencies, local labor bureau, manufacturers, retail conglomerates, and private businesses. However, only two community colleges reported a measurable, comprehensive, and operational partnership with business and industry combined with an on-going recruitment effort. One participant recommended the use of an ethnic role model to enhance the impact of high school visits.

The data in Table 10 reveals whether community colleges recruit non-college bound, at-risk Hispanic high school students into occupational/technical programs. Results indicate that only 30 percent of the respondents recruited this population into such programs. However, although not reflected in the Table 10, institutional documents revealed that two additional community colleges made such efforts and will be reported in the next section of this chapter.

Table 10

Recruitment of the Hispanic Population into Occupational Programs

Institution	Response
Community College A	NO
Community College B	NO
Community College C	NO
Community College D	NO
Community College E	NO
Community College F	YES
Community College G	NO
Community College H	YES
Community College I	YES
Community College J	NO

Document Analysis

This final section of the chapter includes a thematic document analysis of

recruitment policies and practices of the community colleges in the sample. This

investigator's request for institutional documents yielded seven documents which

represented seven institutions. However, the document received from community colleges

G was limited to one page of information. This single page of information was triple

spaced and simply defined several recruitment tools listed in the documents reviewed from

community college A. Therefore, the document gathered from community college G was

not used in the description that follows.

A variety of responses reflected most of the tools listed in the survey instrument used in this study. More important however, was the description of the strategies of each institution as to how these recruitment tools were to be used.

Community College A

This institution entitled the document "Student Recruitment" and consisted of four single spaced pages with a twelve-point font. The document began with a description of the more than sixty high schools that the community college served. Then the document listed the recruitment strategies to be performed by the office of recruitment for the next fiscal year. It is important to note that these strategies were simply listed in the document and not elaborated upon. Further, the document stated that recruitment efforts by the community college were not initiated until services were requested by an outside source (i.e., high school, civic group, student).

Their recruitment efforts were: (1) speaking to high school classes; (2) attending high school career fairs; (3) conducting campus tours; (4) distributing course catalogues; (5) visits from officials from the office of financial aid; (6) collaboration with civic groups; (7) working with high school counselors to enroll students in duel credit high school courses that will transfer for two-year degrees; and (8) distribution of official and hand-made flyers with information.

Community College B

This document consisted of two pages entitled with their community college name and logo in large bold letters. The recruitment office's mission statement followed in a

regular, single-space, twelve-point font. The next section listed the recruitment tool and a

one or two sentence description of the purpose for the recruitment tool. A description of

the tool and its use revealed that "group presentations" were used to discuss the benefits of

a college education and the steps necessary to enroll in the community college.

"Community outreach" was used to make contacts at events such as festivals, forums,

organizational events, trade shows, etc. "Students in the general education diploma

program" were contacted by telephone and mail to present the steps necessary to enroll in

the community college as a regular student. Finally, "group tours" were used to showcase

the facilities at the community college through scheduled appointments.

Community College C

This respondent returned two documents entitled, "Long Term Action Plan," and

"Short Term Action Plan." The two action plans were formatted with the title in large bold

letters centered at the top of the page, consisted of seven full single spaced pages, a table of

contents, and the author's name was printed in twelve-point font at the bottom of the title

page. Both action plans together formed the recruitment strategy. A description of the

strategy used to implement the long-term plan follows. The basic platform consisted of an

initial setup, which required the creation of a recruitment database that included: (1) the

number of high schools in the service area; (2) the number of libraries in the service area;

(3) identification of community organizations; and (4) profiles of the schools in the service

areas. "In office recruitment" efforts focused on indirect recruitment that did not have

direct contact with students (i.e., learning how to use recruitment software, and telephone

networking with civic groups and high schools). A clear indication for tool preference was

"Recruitment visits were considered the most important of all activities." An emphasis was placed on presentations whenever possible. When possible, then material for browsing was recommended on display tables or distribution of brochures. "Alternative recruiting" was used to make a clear and lasting positive image for the student about the community college. Examples of alternative recruitment included, small gifts with the school logo, table banners, and posters in various locations. A small notation recommended that gifts distributed for the purpose of alternative recruiting should be something functional that the student would keep.

Contents of the "short-term action plan" included a "basic platform" that noted the limited amount of time for recruitment efforts which necessitated the modification of more traditional time-consuming recruitment practices. To this end, "general visitation" meant having a presence in high traffic areas such as malls and department stores where high school students frequent with an emphasis on contacting as many people as possible while distributing mass quantities of literature. A "mail campaign" included the general public and members of academic departments to distribute literature to current students. The objective of this mail campaign was to cover areas of the general population while using the community college faculty resources as well. A "telephone information recording system" was also implemented to catch the population that was not contacted in person, by telephone, or by mail. This system provide contact information as well as a brief synopsis of services offered by the recruitment department.

Community College D

This document was titled, "Strategic Enrollment Management Plan" and consisted of two single-spaced pages in a twelve-point font, and the author's name in the top left hand corner. It was important to note that this document was a small part of the overall recruitment policy, but it was unique in that it specifically targeted the at-risk Hispanic high school population.

The strategy was to use scholarships provided by business and industry rather than rely on institutional scholarships funds. These businesses and industries and civic organizations were led or owned by Hispanic citizens. These scholarships were guaranteed to Hispanic students who maintained a nearly perfect attendance record through their high school years, passed all mandatory state exams, and maintained minimum 80 grade point average. Preliminary outcomes were reported as approximately 200 new "first time in college" scholarship recipients. Interestingly, the service areas targeted for recruitment under this strategy were nearly fifty financially under-served high schools and recreation centers. The majority of high school students in this area were considered academically at-risk and had parents with service industry occupations and low-incomes.

Community College E

This document was entitled, "Implementation Plan," and represented a conceptual framework for recruitment strategies. The document consisted of six pages of tables that outlined five recruitment strategies with plans for implementation of the recruitment tools listed within. These strategies were constructed with four systems to monitor progress.

These systems were: (1) objectives; (2) outcomes; (3) timeline; and (4) evaluation. The objectives section described the tools to be used and a brief summary of how they were to be used in the implementation plan to achieve the outcomes. The first strategy was "Personal contacts with prospective students" through visits to high schools including traditional tabletop recruitment. In addition, meetings with high school counselors regarding financial assistance, admissions, and other special needs of students were to be discussed. Further, visits to rural area high schools with the same strategy would be conducted.

The second strategy was "direct mailings to prospective students" and would achieve outcomes by developing and implementing a communication system that followed prospective students through the enrollment process by tracking testing information, admissions information, financial aid, orientation and registration. In addition, a mailing list would be obtained of inner-city high school students for later contact.

The third strategy was "coordination and linkage of recruitment efforts by faculty, staff, and students." In this effort, individual departments maintained a recruitment strategy and reported activities to the recruitment department. In addition, these individual departments maintained web-pages that provided recruitment information to prospective students.

The fourth strategy was "outreach and coordination" and would achieve outcomes by providing services to community-based organizations that served traditional students. Interestingly, a separate effort under this strategy provided services regarding enrollment to organizations that served non-traditional students as well. Informational workshops for high school counselors and administrators were also provided.

The fifth strategy was a "telecounseling program for prospective students." This tool would achieve outcomes by developing a telecounseling system operated by trained students to answer questions about enrollment and facilities from prospective students who called.

Community College F

This community college returned an institutional tri-fold advertisement rather than an institutional recruiting document as requested by the principle investigator. However, this advertisement was analyzed for content as well. This document was a tri-fold glossy spreadsheet that was printed on both sides and described the programs offered to the public. The cover pictures a collage of pictures that represented administrators, instructors, students and staff. Although this community college had over a 70 percent Hispanic population in the service area and an overall enrollment of more than 50 percent Hispanic students, the advertisement pictured one Hispanic building maintenance person.

Summary of Findings

An analysis of the quantitative data discovered that high school visits were ranked number one for frequency and effectiveness for both the general and Hispanic populations. For the general population, university catalogues ranked third with a lower perceived effectiveness rating. Rating and ranking was similar in the use of meeting with high school counselors for both populations.

However, a noticeable difference in ranking and perceived effectiveness in the use of scholarships as a recruitment tool emerged from the data. Scholarships were ranked

sixth for the general population with a perceived effectiveness in the lower end of the Likert scale. Scholarships as a recruitment tool for the Hispanic population was ranked fourth in the frequency of use, but was rated nearly at the top of the Likert scale in perceived effectiveness by the sample.

Comparison between and within the two populations found that high school visits and on campus tours were ranked most frequently used as well as highly perceived in effectiveness. Minority recruitment programs were ranked as the least frequently used and perceived to be the least effective.

An interpretation of qualitative data discovered that themes emerged from the open-ended question of the survey instrument. These themes made up an index listed in Table Nine. Financial aid was the first theme that emerged from the open-ended question and was noted three times throughout the review. Scholarships emerged twice in the contexts of school and community-based awards. Partnerships with business and industry as a recruitment tool was noted twice in the review. On-going recruitment efforts emerged twice in different contexts that will be discussed in the next chapter. Finally, the use of an ethnic role model during high school visits was recommended by one respondent.

The results of a closed-ended question revealed that only three community colleges actively recruited Hispanics into occupational education programs. A qualitative document analysis discovered ten tools that emerged from the institutional documents gathered from seven institutions regarding recruitment policies and procedures from the population. They were: (1) attending high school career fair; (2) visits to high schools   by financial aid officials; (3) distribution of literature; (4) community outreach; (5) group presentations; (6) group tours; (7) visitations to high traffic areas such as malls; (8) alternative recruiting;

(9) mail campaigns; and (10) efforts by faculty and staff.

This document analysis revealed several differences across several sets of data regarding the recruitment of non-college bound, at-risk Hispanic students. Moreover, differences emerged from the closed-ended question regarding the recruitment of Hispanics into occupational programs by community colleges. The first three recruitment tools found in the themes from the document analysis, financial aid, scholarships, and partnerships with business and industry were all related to providing financial resources.

In Chapter V, conclusions will be drawn based on the findings of this study. Finally the implications of this research will be discussed and recommendations for further practice and research will be proposed.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This research sought to discover recruitment practices and strategies used by community college with occupational programs in Texas to recruit non-college bound, at-risk Hispanic high school students. Conclusions, implications, and recommendations are made in this chapter. To properly investigate this issue, the following research questions were used to guide the research.

1. What tools are most frequently used to recruit high school students in selected Texas community colleges with occupational programs?

2. How do selected community colleges with occupational programs in Texas describe the tools used to recruit high school students?

3. What tools are used most frequently to recruit non-college bound, at-risk Hispanic high school students in selected community colleges with occupational programs in Texas?

4. What methods of recruitment are recommended to increase non-college bound at-risk Hispanic enrollment in selected community colleges with occupational programs in Texas?

5.   How do community college administrators and recruiting personnel

perceive the effectiveness of their own current recruiting tools targeting the

general and non-college bound at-risk Hispanic high school students?

6.   Do selected community colleges in Texas with occupational program

actively recruit non-college bound, at-risk Hispanic high school students to

enroll in occupational programs?

Procedures

This descriptive study used quantitative and qualitative methods of collecting data.

The subjects in this study were a group of ten Texas community college administrators

from ten different institutions directly responsible for high school student recruitment

policies and procedures at their institutions. Data was gathered by means of a written

questionnaire developed by the investigator, regarding recruitment tools used by

community colleges, and perceptions of effectiveness. The questionnaire contained

descriptive variables, rating and ranking items, and a short open-ended question regarding

recommended recruitment tools.

A letter was mailed to the participants, which explained the purpose of the

research along with a consent form (Appendix B) and a self-addressed stamped return

envelope. The community college administrators who agreed to participate in this study

were then mailed the survey instrument (Appendix A) with a self-addressed stamped

return envelope. In addition to the survey instrument, the participants were asked to return

any institutional documents that reflected their respective community college recruitment

practices or policies for analysis. A follow-up telephone call was placed to those who did

not respond to the initial mail out survey instrument. These procedures resulted in a 100

percent response rate from the sample population of community college administrators.

The data gathered from the survey instrument answered the first research question.

The order of tools most frequently used by community colleges to recruit high school

students were: (1) high school visits; (2) on campus tours; (3) university catalogue;

(4) meeting with high school counselors; (5) telephone calls; (6) scholarships; and

(7) minority recruitment programs.

The data gathered from the open-ended question in the survey instrument and a

document analysis answered the second research question through a description of

additional recruitment tools not listed in the survey instrument. These additional

recruitment tools were: (1) Financial aid; (2) Partnerships with business and industry;

(3) ethnic role models; (4) attending high school career fairs; (5) including officials from

financial aid in recruitment efforts; (6) collaboration with civic groups; (7) distribution of

flyers; (8) include students from general education diploma program; (9) mail campaign;

(10) telephone information recording system; and (11) include faculty and staff in

recruitment efforts.

Data gathered to answer the third research question revealed the tools most

frequently used to recruit non-college bound, at-risk Hispanic high school students. These

tools were: (1) high school visits; (2) on campus tours; (3) meeting high school

counselors; (4) scholarships; (5) university catalogue; (6) telephone calls; and

(7) minority recruitment program.

Data gathered to answer the fourth research question regarding recommended

tools to increase non-college bound at-risk Hispanic enrollment revealed an index of tools

from a qualitative analysis of an open-ended question on the survey instrument. An index revealed the following recommendations: (1) financial aid; (2) scholarships; (3) partnerships with business and industry for scholarships; (4) on going recruitment efforts; and (5) the use of an ethnic role model.

Data gathered to answer the fifth research question regarding the perceived effectiveness of recruitment tools used for the general and non-college bound, at-risk Hispanic population revealed that high school visits were the most effective for both populations. This was followed by: (2) scholarships; (3) on campus tours; (4) telephone calls; (5) meeting with high school counselors; (6) university catalogue; and (7) minority recruitment programs. Data gathered to answer the final research question regarding the recruitment of non-college bound, at-risk Hispanics into occupational programs revealed that only 30 percent of community colleges in the sample population actively recruited this sample.

Conclusions

The first conclusion that can be derived from the data is that recruitment tools that are characterized by "personal contact" are the most frequently used and perceived to be the most effective because of the congruency that exists between these two variables for the general and Hispanic populations as reported by the participants of the study. This conclusion is supported by the findings from the first six tables in Chapter IV where high school visits were ranked as the most frequently used and rated as the most effective for both populations. Moreover, support for this type of recruitment is reflected in the

literature (Jamarillo, 1999) that defined active recruiting as making personal contact with potential students.

The second conclusion that can be derived from the data is that there was congruency between frequency of use and perceived effectiveness of recruitment tools used for the general population. The sequence of frequency and perceived effectiveness in Tables 1, 2, and 7 for the general population revealed that high school visits and on campus tours were the first and second in frequency and effectiveness. Furthermore, The remaining recruitment tools revealed very little difference between frequency and effectiveness.

The third conclusion is that there is congruency between the use and perceived effectiveness among recruitment tools that allow personal contact with the Hispanic population. This conclusion is supported by the same literature referenced in the previous paragraph regarding personal contact for recruitment purposes.

However, the remaining recruitment tools listed show incongruency especially in the use of scholarships as a recruitment tool. As shown in Tables 3, 4, and 8, scholarships as a recruitment tool was not frequently used, but considered very effective for this population. This fourth conclusion was supported by professional literature that suggested that most policy makers believe that non-college bound students will never attend college in the first place thus reducing the emphasis of scholarships and information regarding financial assistance and possibilities (Bragg, 1999). College aspirations will often go unrealized for non-college bound high school students simply because of the lack of guidance and information regarding financial aid and scholarships from school officials (Horn, 1997).

Furthermore, the infrequent use but high-perceived effectiveness of scholarships by the sample, when combined with the recommendations to seek scholarships from the Hispanic community, suggested that community colleges might not be meeting the financial needs of the Hispanic population by investment of their own institutional funds.

The fifth conclusion that can be derived from the data is that the remaining tools that were not congruent with the frequency of use and perceived effectiveness for the Hispanic population showed that the sample did not implement what they perceived to be the most effective ways to recruit the Hispanic population. Specifically, the incongruency revealed in Tables 3, 4, and 8 showed that meeting high school counselors was ranked high in frequency but perceived to be ineffective for this population. Furthermore, the use of telephone calls was ranked as less frequently used, but considered very effective for recruiting this population.

The sixth conclusion that can be derived from the data is that Hispanic role models were considered effective but seldom used. Only one participant mentioned the use of a Hispanic role model as an effective tool for recruiting non-college bound, at-risk Hispanic high school students. The respondent reported that the use of a Hispanic role model while conducting high school visits and on campus tours was very effective. Further support for this conclusion can be drawn from the literature that defined active recruitment as making personal contact with potential students (Jamarillo, 1999). However, the most compelling support for this conclusion was drawn from the personal case study in Chapter I that described the impact of a Hispanic role model in the successful recruitment of the principal investigator.

The final conclusion is that the recruitment of non-college bound, at-risk Hispanic high school students by the majority of community colleges in the sample is not a priority specifically. These institutions also do not overtly recruit this population into occupational programs. Table 10 supported this conclusion, showing that only 30 percent of the respondents recruited this population into occupational programs.

This conclusion drew further support from the lack of participation by the original 25 community colleges contacted by the principal investigator. This lack of participation by 15 community colleges was troubling because these institutions were located in Texas where the second largest concentration of Hispanics in the nation was found. Moreover, they were selected from regions within the state that in some cases had nearly a 90 percent Hispanic population. It should be noted that the number of participants in the stratified representative sample reflected less than half of the original sample selected by the principal investigator based on regional and demographic information of the Hispanic population. In addition, the data gathered from those who did participate was limited in depth.

In summary, it would appear that in the open-door segment of higher education, and in the state that contains the second highest population of Hispanics in the nation, there is far less active recruitment efforts that are culturally sensitive to the needs of this population than should be expected.

Implications

This study has yielded some basic data on the frequency and perceived effectiveness of recruitment tools, procedures, and policies of the recruitment of non-college bound, at-risk Hispanic high school students. Although the sample drawn from the Texas population was considered as experts in the field of recruitment and enrollment for their respective institutions, some implications should be explored especially in the area for strategies in which these recruitment tools are employed.

Even though high school visits were ranked as the most frequently used and perceived to be the most effective, there existed some variation of the use of this recruitment tool. For example, some respondents suggested that some of the tools do not stand alone, but rather were used as an overall strategy. High school visits for the purpose of making direct contact with students were also used as an opportunity to meet with high school counselors.

On campus tours were used to distribute literature about the community college courses offered as well as financial assistance and scholarships while accomplishing the original goal of making the community college experience connection. The implication here is that some community colleges may not be able to rank the frequency or effectiveness of the recruitment tools as listed in the survey instrument because they are used in a strategy to accomplish an overall recruitment objective.

Financial assistance continuously emerged from the data as recommendations to recruit the Hispanic population. However, awards for financial assistance in community

colleges exceeded that of four-year institutions of higher education (Olivas, 1996). The demographics listed in Chapter III support this implication because the population of the community college service area as well as the overall enrollment was more than 50 percent Hispanic.

Another implication involved data that concluded that scholarships were not frequently used, but rated as very effective to recruit the Hispanic population and was complicated by policies that governed the financial aid system. In addition, although readily available, the competition for scholarship awards was often fierce and offered little monetary award when financial aid is factored into the equation. This may imply that Hispanics do not often apply for scholarships and rather opt for the financial aid from the federal government making the use of this recruitment tool less frequent.

The last implication involves the perceived effectiveness of the recruitment tools used between the two populations. For example, the data revealed that meeting high school counselors was not very effective for the Hispanic population, but used frequently by the respondents. For the general population, meeting high school counselors was not used frequently, nor was it perceived to be effective. This may imply a perception that Hispanic students are presumed to be non-college bound, at-risk students by community colleges and thus warrant verification through meetings with high school counselors.

Similarly, the difference between frequency of use and perceived effectiveness of a university catalogue between the two populations may imply that non-college bound, at-risk Hispanic high school students may not comprehend the university catalogue as it is written. This implication of frequency and effectiveness of the university catalogue and academic abilities of this population is supported by literature that suggested that

academically at-risk students often comprehend printed material at a much lower rate than average students (Mortenson, 1991). Considering the low perceived effectiveness of the university catalogue, it seems reasonable that this printed material should be modified to appeal to the Hispanic population if this population is to be actively recruited.

Recommendations

Based on the findings, conclusions, and implications of this study, the following recommendations are made:

1. The use of high school visits and on campus tours in the community college service area as tools to recruit the non-college bound, at-risk Hispanic population should be the center of recruitment efforts. An emphasis should be made on including parents when using this recruitment tool.

2. On going long term and short term recruitment strategies should be developed and implemented.

3. The community college recruitment plan should include the occupational education department in an effort to network with Hispanic owned and operated business and industry for more attractive scholarship funds to recruit the Hispanic high school population.

4. A task force should be developed that focuses on presenting, researching, and applying for scholarships for non-college bound, at-risk Hispanic high school students.

5. The use of a Hispanic role model as part of the high school visits and on campus tours should be included in recruitment strategies.

6.   Community colleges should consider reworking the catalogue to make it culturally sensitive and appealing to Hispanics in order to make it an effective recruiting tool.

Recommendations for Further Research

Based on the findings, conclusions, and implications of this study, the following recommendations are made:

1.   Further research should investigate reasons why scholarships were ranked less frequently used, but considered very effective for the Hispanic population.

2.   Further research should be conducted that explores the relationship between scholarships and government financial aid.

3.   Further research should be conducted on the effectiveness of scholarships sponsored by Hispanic owned and operated business and industry.

4.   Further research should be conducted to discover the effectiveness of using ethnic role models.

5.   Further research should explore the infrequent use and the perceived ineffectiveness of minority recruitment programs to target the Hispanic population.

6.   Further research should explore the use of a university catalogue as a recruitment tool.

7.   Further research should explore the reasons why community colleges do not recruit this population into occupational programs.

8. Further research should be conducted to examine a wider range of institutional documents to discover evidence of cultural sensitivity and active recruitment of Hispanics.

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APPENDIXES

112

APPENDIX A

SURVEY INSTRUMENT

Survey Instrument

General Student Population - Rank these recruitment tools according to the frequency with which they are used by your college. Use 1 for the most frequently used tool. Do not assign any tie ranks.

University Catalogue   ____

On Campus Tours   ____

Scholarships   ____

High School Visits   ____

Meeting High School Counselors   ____

Telephone Calls   ____

Minority Recruiting Program   ____

General Student Population - Rate the effectiveness of these tools by circling the appropriate number.

	Very Ineffective	Ineffective	Somewhat Effective	Effective	Very Effective
University Catalogue	1	2	3	4	5
On Campus Tours	1	2	3	4	5
Scholarships	1	2	3	4	5
High School Visits	1	2	3	4	5
Meeting With High School Counselors	1	2	3	4	5
Telephone Calls	1	2	3	4	5
Minority Recruiting Program	1	2	3	4	5

Hispanic At-Risk Student Population - Rank these recruitment tools according to the frequency with which they are used by your college. Use 1 for the most frequently used tool. Do not assign any tie ranks.

On Campus Tours _____

University Catalogue _____

Scholarships _____

High School Visits _____

Meeting High School Counselors _____

Telephone Calls _____

Minority Recruiting Program _____

Hispanic At-Risk Student Population - Rate the Effectiveness of the tools by circling the appropriate number.

	Very ineffective	Ineffective	Somewhat Effective	Effective	Very Effective
University Catalogue	1	2	3	4	5
On Campus Tours	1	2	3	4	5
Scholarships	1	2	3	4	5
High School Visits	1	2	3	4	5
Meeting High School Counselors	1	2	3	4	5
Telephone Calls	1	2	3	4	5
Minority Recruiting Program	1	2	3	4	5

Directions: Please answer the following questions.

1. What recruitment tools do you recommend to increase enrollment of at-risk Hispanic high school students?

2. Does your institution currently target at-risk Hispanic students for occupational/technical programs? Yes or No

APPENDIX B

CONSENT FORM

Participant Consent Form

I, _____, hereby agree to participate in the research project that explores perceptions of the recruitment strategies used in my institution regarding Hispanic non-college bound, at-risk high school students in the state of Texas. I understand that the research is part of a doctoral dissertation at Oklahoma State University. To maintain confidentiality, all information obtained in the process will be reported in aggregate and/or by code. No specific references to my identity or that of the institution for which I work will be made at any time. All records of the research will be kept exclusively by the researcher under lock and key. After the research has been concluded and the report approved, all records will be destroyed.

This research is part of an investigation entitled "The Recruitment of Non-College Bound, At-Risk Hispanic High School Students by Texas Community Colleges."

The purpose of the research is to gather information regarding the use and perceived effectiveness of current recruitment policies and practices for the aforementioned population. This information will describe current practices and provide recommendations for those involved in the planning of future decisions regarding recruitment policies and practices for non-college bound, at-risk Hispanic students.

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty. I may contact Dr. Reynaldo Martinez at telephone number (405) 744-7741 or Mr. Arturo Montiel at (405) 707-9179. I may also contact Sharon Bacher, IRB Executive secretary, 305 Whitehurst, Oklahoma State University, Stillwater. OK (405) 744-5700.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy has been given to me.

Date:_____   Time:_____   (a.m./p.m.)

Signed:_____
          (Signature of Participant)

I certify that I personally explained all elements of this form to the subject or his/her representative before requesting the subject or his/her representative to sign it.

Signed:_____
          (Principle Investigator)

APPENDIX C

INSTITUTIONAL REVIEW

BOARD FORM

Oklahoma State University
Institutional Review Board

Protocol Expires: 2/11/02

Date : Monday, February 12, 2001   IRB Application No   ED0178

Proposal Title: THE RECRUITMENT OF NON-COLLEGE BOUND, AT-RISK HISPANIC HIGH SCHOOL
                   STUDENTS BY TEXAS COMMUNITY COLLEGES

Principal
Investigator(s) :

Arturo Montiel   Reynaldo Martinez
519 E. 32nd Ave #2   209 Willard
Stillwater, OK 74074   Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s) : Approved

Signature :

Carol Olson, Director of University Research Compliance   Monday. February 12, 2001
                                                                          Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted Any modifications
to the research project approved by the IRB must be submitted for approval with the advisor's signature The IRB office
MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited
and exempt projects may be reviewed by the full Institutional Review Board.

VITA   *2*

Arturo Montiel

Candidate for the Degree of

Doctor of Education

Thesis: THE RECRUITMENT OF NON-COLLEGE BOUND, AT-RISK HISPANIC
HIGH SCHOOL STUDENTS IN TEXAS COMMUNITY COLLEGES

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Graduated from Escondido Union High School District, Camp
Pendleton, California in June, 1983; received Associate of Applied
Science degree in Welding Applied Technology from Del Mar Technical
College, Corpus Christi, Texas in August, 1996; received Bachelor of
Science degree in Occupational Training and Development from Texas
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for the Doctor of Education degree from Oklahoma State University,
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Experience: Employed as a structural welder at a fabrication shop in Corpus
Christi, Texas; structural welder for Chicago Bridge and Iron, Ltd in
Houston, Texas; adjunct welding instructor, Del Mar College, Corpus
Christi, Texas; graduate research assistant, Oklahoma State University,
Stillwater, Oklahoma in Occupational and Adult Education, 1999 to
present.

Professional Memberships: Oklahoma Association for Career and Technology
Education; Association for Career and Technology Education; American
Welding Society.