



STATUS REPORT ON HIGHER EDUCATION
FOR HISPANICS IN NEW JERSEY

by

Jose Hernandez

Prepared for

New Jersey Department of Higher Education

January, 1986

974.90
C697
1986j

c.1

TABLE OF CONTENTS

Executive Summary	i
Introduction	1
Community Background	1
A Youthful Population	2
A Population in Need	3
Language	5
Ethnicity and Locality	7
Outlook for the Future	10
Higher Education	10
Transition from High School	12
Expanding College Potential	12
Program Directives	14
College Enrollment	17
Recruitment	18
Delayed Entry	19
The Competition	19
Community and State Colleges	20
Part-Time Enrollment	21
Women at All Ages	22
Retention	22
Affirmative Action	23
Graduate Education	25
Conclusion	26
References	28
Methodological Appendix	31

STATUS REPORT ON HIGHER EDUCATION FOR HISPANICS IN NEW JERSEY

Jose Hernandez

Many educators recall the impact of the "Baby Boom" on American colleges and universities some twenty years ago: rapid population growth brought about an urgent need for expansion and improvement in facilities, personnel and programs. Hispanics in New Jersey, primarily as a result of migration, are currently increasing faster than the U.S. population growth rate at the peak of the Baby Boom. Although this demographic change is occurring, it is not reflected in higher education enrollment statistics. In acknowledging that the state's interests are best served by providing all New Jerseyans the opportunity to develop their skills and abilities, the Department of Higher Education has commissioned this report. ITS PURPOSE IS TWOFOLD: TO PRESENT AN OVERVIEW OF THE HISPANIC CONDITION IN NEW JERSEY HIGHER EDUCATION AND TO DETERMINE ITS SIGNIFICANCE FOR POLICY FORMULATION.

1. Community Background

The details of rapid population growth in New Jersey's Hispanic community are as follows:

- * From 1970 to 1980 the Census enumeration almost doubled: from 288,500 to 491,900 inhabitants.
- * The increase in the Hispanic population between 1970 and 1980 (203,400) constitutes 71 percent of the 1970 Hispanic population figure.
- * The New Jersey Hispanic population growth rate ranked third in the United States, after Florida and California.
- * New Jersey currently has the sixth largest Hispanic community in the 50 states.
- * There are now more Hispanics in New Jersey than in New Mexico, Arizona and Colorado, states long considered as more typically Hispanic.
- * Hispanics in New Jersey number more than three times the total in the larger and more populous states of Pennsylvania and Michigan.
- * New Jersey is generally considered very attractive among Hispanics: it has the second largest state population of Puerto Ricans, Cubans, Dominicans and Colombians.

For these and other reasons, Hispanic leaders view New Jersey as crucial to the national struggle for equity in the distribution of public resources.

A Youthful Population

Several phenomena account for the rapid growth of New Jersey's Hispanic sector. Many Hispanics view their community's growth as the natural result of a long-established presence, giving rise to a new generation--born, raised and schooled in New Jersey. Family ties and community attachments have facilitated migration to New Jersey for many others. The fact that Hispanic migrants to New Jersey are often teenagers and young adults might indicate this age group's general inclination to make changes and seek improvements in their lifestyles. More importantly, Hispanics tend to be at a life stage when marriage, childbirth and family development figure prominently as matters of concern. AS A RESULT, A SCHOOL-AGE POPULATION CONCENTRATION IS A BASIC CHARACTERISTIC OF NEW JERSEY'S HISPANIC COMMUNITY: HALF ARE PERSONS YOUNGER THAN 25 AND A THIRD LESS THAN 15 YEARS OLD (80:B,19).

The Hispanic population figures by age in 1980 are provided in Table 1.1:

Table 1.1 Hispanic Population, Migration Rates and Percent Women by Age, New Jersey 1980

Age	Population	Percent: 1975-80 Migrants			Percent Women
		Total	From U.S.	Others*	
0-5	51,428				48
5-9	50,685	21	10	11	49
10-14	50,520	22	10	12	49
15-19	52,386	21	8	13	49
20-24	46,716	28	11	17	52
25-29	42,764	29	12	17	54
30-34	40,434	25	12	13	54
35-39	33,966	20	11	9	54
40-45	30,058	16	9	7	52
45-49	25,367	13	6	7	52
+ 50	67,559	14	7	7	54
Total	491,883	20	9	11	51

Source: 1980 Census. Population Characteristics: Ch. B, Table 24:Ch. D, Table 200. *Other places includes Puerto Rico.

According to these figures, the total population in each 5-year age group was about 50,000 up to the 20-year old age group. This meant that there were about 10,000 Hispanic children in each single year increment, a convenient figure when considering enrollment totals per school grade. About 20 percent, or 1 of every 5 Hispanics up to the age of 20, has migrated to New Jersey during the five-year period prior to the 1980 Census. Further, the migration rate was somewhat higher among Hispanics

in their twenties and early thirties and lower among older Hispanics. The overall migration pattern evidenced a fairly even distribution of origin from both other states and from other places (including Puerto Rico), although "outside" migrants outnumbered "stateside" migrants by a two percent margin. Data showed New York as the point of origin for most of this "stateside" movement. Finally, Table 1.1 demonstrates that boys slightly outnumbered girls in the under 20 age groups, a phenomenon parallel to the general U.S. population (Bogue 1969: 165-170); this situation reversed at age 20 so that women outnumbered men in each successive age group. An adult mortality difference favorable to women probably accounted for the larger percentage of women as is the case in most contemporary populations. Also, women outnumbered men among Hispanic migrants to New Jersey in all age groups from 20 onward. IN SUMMARY, RAPID POPULATION GROWTH HAS RESULTED FROM MIGRATION COMBINED WITH REPRODUCTION IN A VERY YOUTHFUL COMMUNITY.

A Population in Need

EIGHTY PERCENT OF NEW JERSEY'S HISPANIC POPULATION IS NOT MADE UP OF RECENT MIGRANTS. In fact, 65 percent are native-born citizens of the United States, and an additional 13 percent are naturalized citizens of this nation. This signifies that the majority are as American in civil status as the 6 million other residents of the state (80:D,194). Nevertheless, the social identity of "Hispanics" frequently distinguishes them as "different" from others in the everyday world of human relations. Personal traits such as appearance, manner, names and place of residence generally clue others to label them as "Spanish," when and even if they speak only English. Such labeling often results in discrimination.

Evidence for this in New Jersey is readily apparent in the average yearly earnings of full-time, year-round workers in New Jersey (Table 1.2):

Table 1.2 Average Annual Earnings in U.S. Dollars of Full time, Year-round Workers Age 25-34, by Gender, Educational Attainment and Racial-Ethnic Group, New Jersey 1980.*

	<u>Level of Educational Attainment</u>				
	<u>1-3 Years High School</u>	<u>High School Diploma</u>	<u>1-3 Years College</u>	<u>4-Year College Degree</u>	<u>Graduate Advanced Study</u>
<u>Men</u>					
White	\$14,870	\$16,880	\$17,900	\$20,590	\$22,920
Black	11,870	13,500	14,220	17,270	20,160
Hispanic	11,820	13,630	14,680	18,270	18,640
<u>Women</u>					
White	\$ 8,860	\$10,970	\$12,390	\$13,840	\$15,200
Black	8,780	10,330	11,210	13,280	16,020
Hispanic	7,860	9,300	10,520	12,620	13,140

Average Payoff in Annual Earnings for Each Additional Level of Educational Attainment

<u>Men</u>	<u>High School Diploma</u>	<u>1-3 Years College</u>	<u>4-Year College</u>	<u>Graduate Advanced Study</u>
White	\$2010.	\$1020.	\$2690.	\$2330.
Black	1630.	720.	3050.	2890.
Hispanic	1810.	1050.	3590.	370.
<u>Women</u>				
White	\$2110.	\$1420.	\$1450.	\$1360.
Black	1550.	880.	2070.	2740.
Hispanic	1440.	1220.	2100.	520.

Source: 1980 Census. Population Characteristics: Ch.D, Table 237.
 *Averages are mean figures rounded to the nearest \$10.00.

In general, it is clear that education makes an important difference in earnings since, for all groups considered, the average amounts received were consistently greater with each step of advancement in schooling. How much the workers received, however, depended more on their gender and racial identity. The greatest economic payoff was for being a man. For example, white women with some graduate studies (M.A. and professional school level) earned less (\$15,200) than white men with only a high school degree (\$16,880). Race was also an economic indicator: at equivalent levels of educational attainment, blacks earned significantly less than whites of the same gender. For example, a black man with 1-3 years of college education earned less (\$14,220) than a white man who had dropped out of high school (\$14,870).

THE ECONOMIC COST OF BEING HISPANIC TRANSCENDED BOTH GENDER AND RACE, AS ILLUSTRATED IN THE FOLLOWING COMPARISONS:

- * Hispanic men with graduate and professional studies earned \$4,280 less than white men with the same education.
- * Hispanics consistently earned less than blacks in the equivalent gender and educational categories, with the exception of men with a four-year college degree.
- * Hispanic women with graduate and professional studies earned \$1730 less than white men who were high school drop-outs.

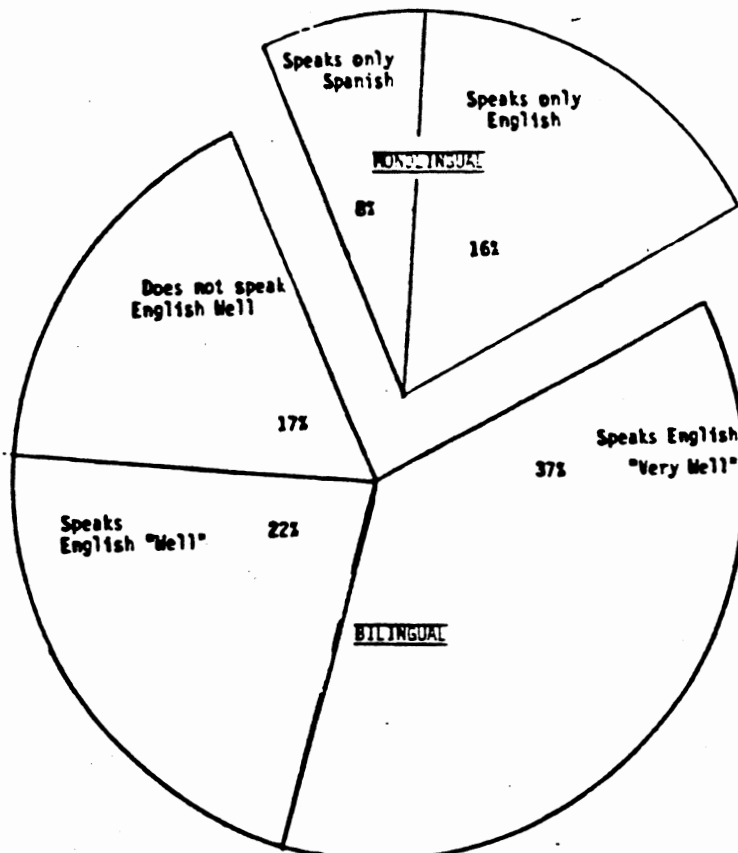
The lower panel of Table 1.2 provides measures of the economic benefit derived from furthering one's education for each of the gender-racial groups considered. For example, a high school degree was worth \$2010 more in yearly earnings for white men as compared with dropping out before graduation. FOR HISPANICS THE GREATEST RELATIVE GAIN OF \$3590 FOR MEN AND \$2100 FOR WOMEN CAME FROM ATTAINING A FOUR-YEAR COLLEGE DEGREE. Advancing from high school to a postsecondary level

short of the four-year degree had a lower payoff in annual earnings than the high school degree itself; advancing from a four-year college degree to graduate and professional study had the least relative value for Hispanic men and women. Both of these results have a direct and significant impact on the condition of Hispanics in higher education: THE FACTS SHOW A HIGH RATE OF ATTRITION FROM FOUR-YEAR COLLEGES AMONG HISPANICS AND A SHARP DECLINE IN GRADUATE ENROLLMENTS. Instead, many Hispanics are opting for postsecondary technical and job-related instruction, typically in schools outside the traditional colleges and universities. This phenomenon leaves Hispanics with a distinct disadvantage for a future that will increasingly demand educational attainment for economic advancement. To earn the same money, Hispanics must have somewhat more education than blacks and much more than whites. To be locked into any attainment level short of four-year college degree completion will sustain an already established underclass condition in the New Jersey job market for Hispanics.

Language

Non-Hispanics generally believe that frequent use of the Spanish language poses the main barrier to educational and economic advancement for Hispanics. Nevertheless, factual information from the 1980 Census documents a different and complex picture of the social significance of language. Specifically, Graph 1.3 portrays a visual representation of actual language proficiency:

1.3 Percent Distribution of Hispanics Age 15 and Older, by Language(s) Spoken at Home, and English Speaking Ability, New Jersey 1980.



Source: 1980 Census Population Characteristics: Ch.D, Table 197.
For calculation details, see Methodological Appendix

Several important conclusions can be generated from this data. The proportion of Hispanics who speak only English (16 percent) is twice as large as the 8 percent who speak only Spanish. The majority of Hispanics (76 percent) speak both languages and therefore are bilingual: of this group, persons who speak English "very well" or "well" (an indicator of a coordinate degree of bilingualism) make up 59 percent. Hispanics speaking "only English", English "very well" or "well" constitutes 75 percent of the Hispanic population. The remaining 25 percent speak English "not well" or "not at all". OVERALL, HISPANICS IN NEW JERSEY DEMONSTRATE DIVERSIFIED DEGREES OF BILINGUAL PROFICIENCY AND HAVE A GREATER COMMAND OF ENGLISH THAN GENERALLY ASCRIBED TO THEM.

Due to the lack of adequate data, it was not possible to determine whether the retention of Spanish among Hispanics was proportionately greater than the retention of non-English languages in other segments of New Jersey's population. Nevertheless, THE DATA AVAILABLE FROM PUBLISHED CENSUS REPORTS STRONGLY SUGGEST A MORE FREQUENT USE OF THE NATIVE LANGUAGE AMONG HISPANICS THAN IN OTHER POPULATIONS LIKELY TO HAVE THE OPTION OF BILINGUALISM. Contributing factors to this retention are numerous. The geographic closeness of Hispanics to places of origin and the local existence of large numbers of Spanish-speaking people with whom to converse are primary, although residential and job segregation patterns strengthen this linguistic enclosure. Very important are the ethnic traditions of using Spanish for interpersonal communication and the symbolic use of Spanish as an ethnic pride marker. The development of bilingual media both in the United States and Latin America has added to the bilingual status. Finally, Hispanics generally consider Spanish as a legitimate medium of expression in Anglo-American conquered and annexed areas (i.e. the southwest, Puerto Rico, Panama Canal Zone). In places such as Miami, Florida and Union City, New Jersey people proud of being Americans still regard Spanish as essential to the meaning of their presence in the United States. These and other reasons unique to each individual Hispanic sustain bilingualism; PROFICIENCY IN BOTH LANGUAGES IS A GOAL SHARED BY MANY HISPANICS REGARDLESS OF BIRTHPLACE AND ETHNIC ORIGIN.

For Hispanics in New Jersey, there are economic costs attached to a lack of English proficiency. Among the 84 percent of Hispanic adults who speak Spanish at home, the census reported the income figures shown in Table 1.4 (80:1,199):

1.4 Hispanic English Proficiency As Related to Annual Income

Speaking English:	Percent in Poverty	Median Annual Income	
		Men	Women
Very Well	22	\$10,610.	\$5,485.
Well	26	11,140.	5,556.
Not Well	28	9,570.	5,178.
Not at All	36	7,590.	4,230.

Compared with only 8 percent poverty among non-Hispanics speaking only English, the rate was almost triple for bilingual Hispanics speaking English very well. Both men and women in the "very well" group had a lower median annual income than those speaking English "well." This may be explained by the fact that most Hispanics work jobs in which English does not matter as much as willingness to work in routine, low-paid, low-prestige, low-responsibility and dead-end positions. When some or all of these features describe a job, a person with a Spanish accent or limited English proficiency may be preferred for employment (Hernandez 1983:73-79,133-138).

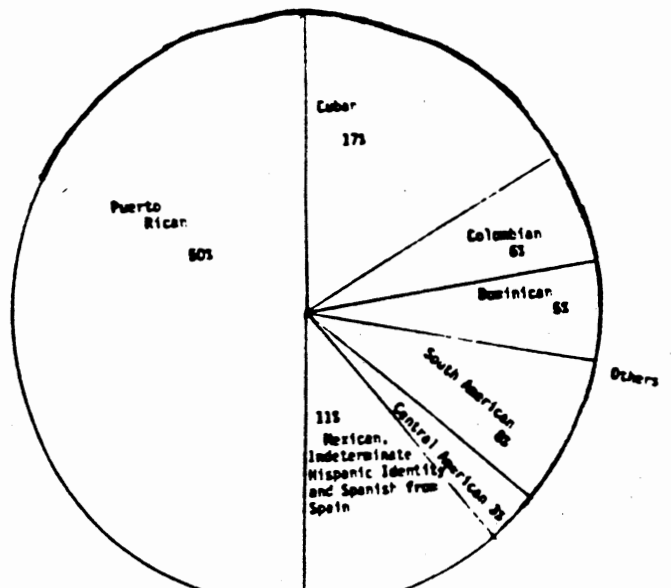
It remains clear, however, that the greatest economic penalties are attached to speaking English "not well" or "not at all". THUS, ENGLISH LANGUAGE DEVELOPMENT FULFILLS THE IMPORTANT FUNCTION OF HELPING TO RAISE THE ECONOMIC LEVEL OF THE HISPANIC COMMUNITY. EQUALLY APPARENT IS THE NEED TO ASSIST HISPANICS TO REACH A HIGH RATE OF ENGLISH PROFICIENCY AS A MAJOR WAY OF OVERCOMING THE STEREOTYPE OF SPEAKING THE LANGUAGE POORLY. Ironically, due to the high attrition rate of Hispanic youth, language development through education remains unaccessible to a population as economically disadvantaged as Hispanics in New Jersey.

Ethnicity and Locality

Presently, ethnicity (or identity by national origin) remains the primary characteristic defining a person's social position within the Hispanic community. Ethnicity signifies much more than nationality; for example, historical circumstances and mode of entry into the United States differ sharply between such groups as Puerto Ricans (U.S. citizens since 1917) and Central Americans who are contemporary political refugees. Although Spanish is commonly spoken by all Hispanic groups, significant variations distinguish people by ethnicity, social class and generation. More significant differences in customs and world views tend to isolate groups having a particular point of origin and migratory experience.

The general ethnic composition of Hispanics in New Jersey is illustrated in Graph 1.5:

1.5 Percent Distribution of the Hispanic Population by National Origin: New Jersey, 1980



Source:
 1980 Census: Supplementary Reports on Spanish Origin: Table 8, 9 and Ancestry: Table 3. for calculation details, see Methodological Appendix.

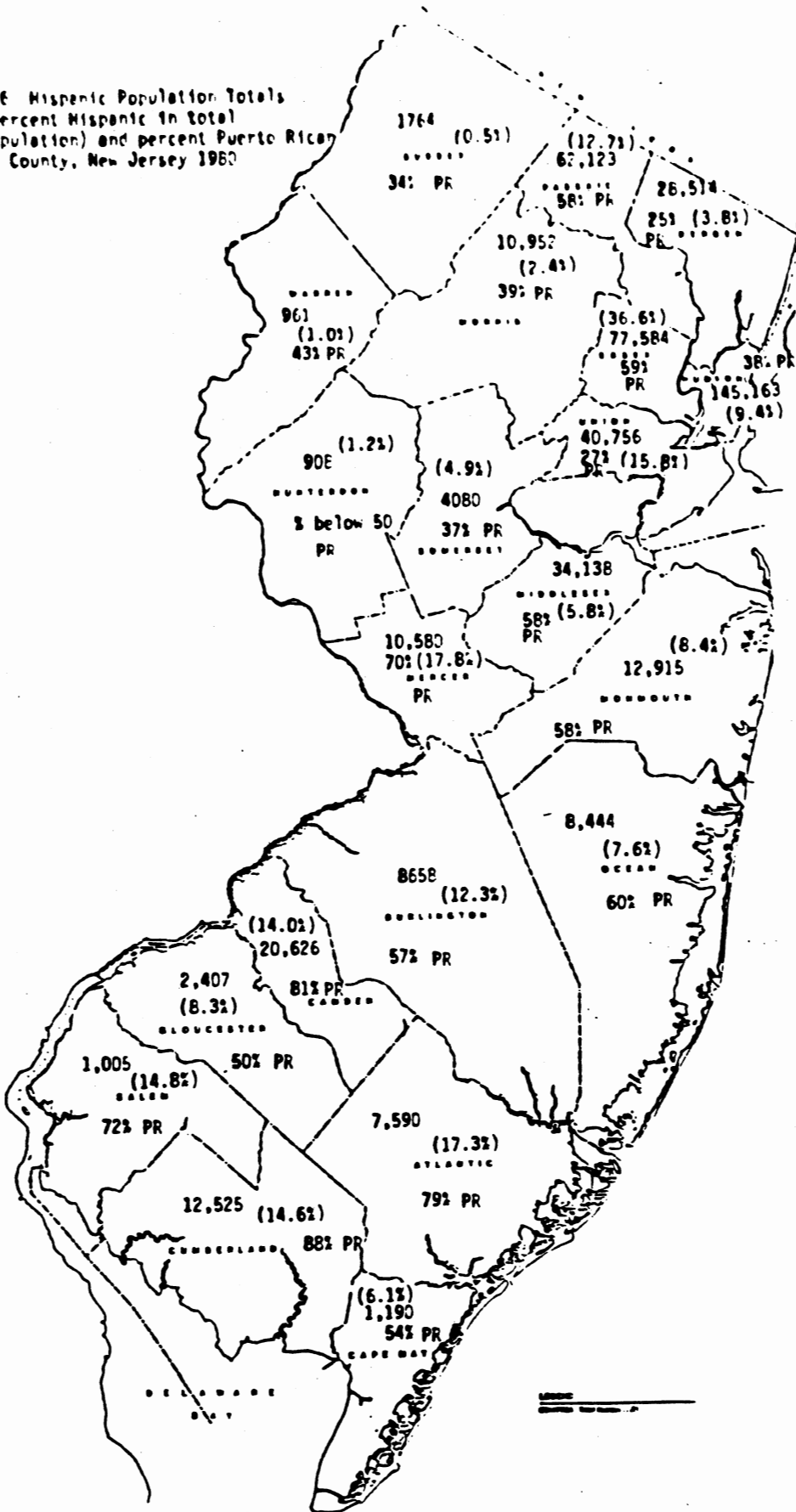
Puerto Ricans made up about half of the Hispanic population of New Jersey in 1980. The Cuban community was second largest with over 80,000 inhabitants or roughly 17 percent of the Hispanic population. The Colombian and Dominican communities each had about 30,000 persons for about a 6 percent share. The residual categories were composed principally of persons of South American origin, Ecuadorans and Peruvians in largest number, and relatively small but rapidly growing communities of Central Americans. A sizable number of persons identified themselves as Hispanic, but not as belonging to a specific nationality. In contrast with other states, persons of Mexican origin were relatively few and represented only 3 percent of the Hispanic population in New Jersey. About 8,000 persons were counted in the 1980 Census as Spanish from Spain, slightly less than 2 percent of the state Hispanic total. THIS DISTRIBUTION RESEMBLES THAT OF NEW YORK AND REFLECTS NEW JERSEY'S ROLE AS A MAJOR NORTHEASTERN SETTLEMENT PLACE FOR MIGRANTS FROM THE HISPANIC CARIBBEAN.

Hispanic enclaves frequently exist in many specific New Jersey locations. For example, it is widely known among Hispanics that the nation's second largest Cuban community is in Union City. Colombian restaurants and shops are mainly in Paterson and Elizabeth. Perth Amboy, Vineland and Asbury Park are not merely "Puerto Rican," but further identify with specific island municipalities of origin. Overall, however, the ethnic distribution differs from the situation in most other states where Hispanics are exclusively concentrated in major metropolitan cities such as Chicago, Boston or Milwaukee.

The map of New Jersey in Figure 1.6 (see map on next page) provides an overview of the 1980 geographic distribution of Hispanics by county indicated both by total number and percentage of total population, shown in parenthesis. Additionally, the percent of Puerto Ricans of the Hispanic total is provided. The largest Hispanic populations by county in rank order were found in Hudson, Essex, Passaic, Union, Middlesex and Bergen; this pinpoints the northeastern region of the state as "heavily Hispanic". In Hudson, Bergen and Union counties, the combined total of Cubans, Dominicans and South Americans outnumbered Puerto Ricans. This was also true of the northcentral and western counties (Sussex, Warren, Morris, Somerset, and Hunterdon) although this area houses a relatively small and widely scattered Hispanic population. The percentage of Puerto Ricans was somewhat higher than average for New Jersey in Essex, Passaic and Middlesex counties as well as in Mercer, Monmouth and the remaining southern counties.

Data also showed that cities having the largest Hispanic populations were Newark (61,254), Jersey City (41,672), Paterson (39,650), Union City (35,525) and Elizabeth (28,305). It must be noted, however, that the map and the figures presented refer to 1980 and were not adjusted for error nor undercount in the census. A safe assumption is that the actual Hispanic populations were more numerous in most cases, and that by 1985 the totals may be significantly higher. FURTHER RESEARCH IS WARRANTED TO DETERMINE THE ACTUAL SIZE AND DISTRIBUTION OF THE HISPANIC POPULATION IN LOCAL AREAS OF NEW JERSEY.

1.6 Hispanic Population Totals
 (percent Hispanic in total
 population) and percent Puerto Rican
 by County, New Jersey 1980



Outlook for the Future

To provide a basis for the remainder of this report, a population assessment was completed for all Hispanics in New Jersey. This considered statistics dating from 1970 and projected state totals through 1995. Two methods were used: (1) a simple linear extrapolation of unadjusted 1970 and 1980 figures, and (2) a component model based on birth, death and net migration rates and undercount estimates. The calculation details are summarized in the Methodological Appendix. The projections produced by these assessment methods are presented in Table 1.7.

1.7 Projected Population Growth of the New Jersey Population

<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>Method</u>
491,883	665,280	838,680	1,134,330	Linear
526,100	694,330	916,350	1,183,100	Component

The 1985 total New Jersey Hispanic population is roughly 170,000 more than that of 1980, representing a substantial increase since the last census. IF THE POPULATION TRENDS OF THE RECENT PAST CONTINUES, NEW JERSEY'S HISPANIC POPULATION WILL REACH A MILLION AROUND 1992, MORE THAN TWICE THE POPULATION SIZE RECORDED IN 1980.

The implications of rapid population growth can be specified in more practical terms by likening the 5.2 percent annual increase in New Jersey's Hispanic population to a compound interest rate paid by financial institutions. In one year a \$10,000 investment would increase to \$10,520 and left on deposit, the money would total \$12,885 in five years. This resembled the situation of Hispanics at the peak age of entry to higher education. The 1980 Census counted 10,278 Hispanics 19 years of age; by 1985, this single year of age had increased to 13,275 according to the population projections just presented. In terms of school enrollment, the projections for 1985 yield 3,000 more Hispanics in each age/grade population unit. Equivalent growth projections are recorded for the age/grade units ranging from kindergarten-level through graduate levels of instruction. The impact on New Jersey's educational system must be described as swift, intense and wide-reaching.

2. Higher Education

ACCELERATING THE NUMBER OF HISPANIC COLLEGE GRADUATES QUALIFIES AS A MAJOR GOAL OF EFFORTS TO IMPROVE THE SOCIAL AND ECONOMIC SITUATION OF THIS COMMUNITY. A determination of comparative attainment levels among differing groups in New Jersey highlights this need. In addition, probing other related features such as high school transition figures, attrition, and retention and recruitment establishes the framework for policy formulation and program development. The remainder of this report undertakes these objectives.

Transition from High School

Improved recruitment from secondary schools often heads the list of means for improving college entrance. This assumes, however, that near universal enrollment in high school brings about an unreduced potential for recruitment. Table 2.2 relates a different reality for blacks and Hispanics in New Jersey:

2.2 Percent High School Graduates by Age, Gender and Racial-Ethnic Groups. New Jersey, 1980.

Age	Dates Attending	White		Black		Hispanic	
		Men	Women	Men	Women	Men	Women
19	1976-80	89	86	55	69	49	61
20-24	1971-79	87	90	69	78	63	64
25-29	1966-74	89	90	76	78	58	58
30-34	1961-69	88	88	75	74	55	52
35-39	1956-64	84	84	66	69	46	46
40 and over	Before 1959	66	58	42	44	39	34

Source: 1980 Census. Population Characteristics: Ch.D, Table 203.

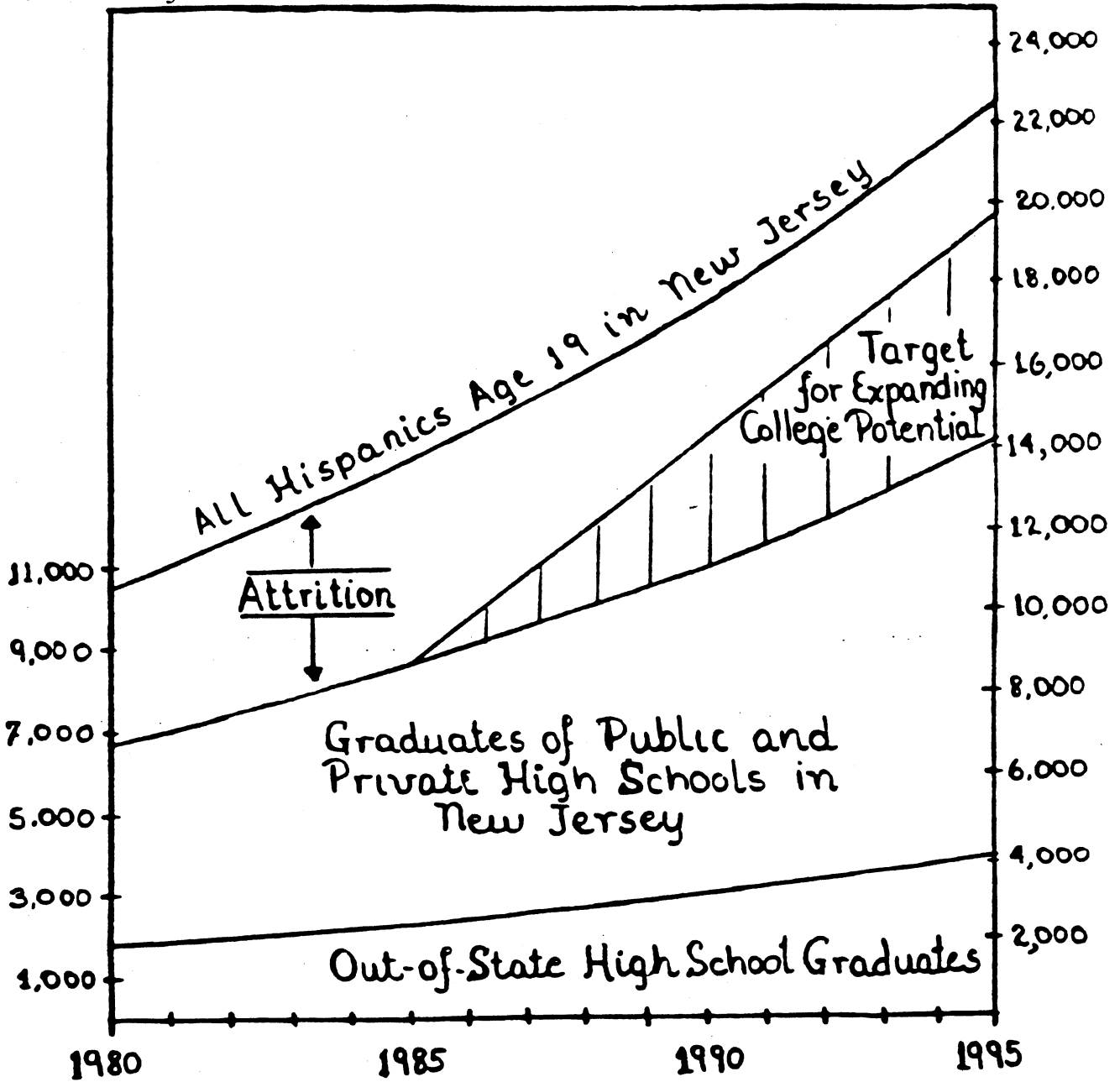
The data reflects several indicators in regard to high school completion rates. Whites, with the exception of one slight and temporary decrease among men, had continued gains reaching an over 85 percent increase rate. After experiencing a notable increase in the 1960's and early 1970's, black rates of high school graduation have declined. Hispanic men have matched the decline level of black men; Hispanic women have declined the least of the minority categories. HISPANICS, HOWEVER, HAVE THE LOWEST HIGH SCHOOL COMPLETION RATES WITH LESS THAN 65 PERCENT GRADUATING. At this rate, Hispanics will not reach the present level of white high school completion until the year 2010 nor the black level until the mid-1990's. This deficit in Hispanic college potential signifies a debilitating condition for efforts to promote higher education. Policies and programs must be instituted to generate progress for Hispanics prior to the college level. Innovative programs in postsecondary institutions that will meet the specific educational needs of Hispanics must also be encouraged.

EXPANDING COLLEGE POTENTIAL

The target population of policies and programs to reduce high school attrition can be estimated by focusing on Hispanic 19-year olds. Under academic conditions in New Jersey, this age segment includes both the annual high school graduating class and persons newly eligible for entrance to colleges and universities. Results from the general population projections presented earlier, enrollment and graduation data

from New Jersey Department of Education publications, and 1980 Census data relating Hispanic educational attainment are used to conceptualize the framework presented in Graph 2.3:

2.3 Projected Totals of Hispanics Age 19 in New Jersey, 1980-95, High School Graduates at 1980 Hispanic Completion Rates and Attrition, Target for Reaching 1980 White Completion Rate.



Sources: 1980 Census, Population Characteristics: Ch.D: Table 18; Ch.C, Tables 76, 86; Projections developed for this report, and New Jersey Department of Education, Vital Statistics, 1979-80.

Several insights useful for program planning can be synthesized from this information. Beginning with the actual figures for 1980, the number of Hispanics age 19 follows an upward trend which estimates a doubling of college eligible 19-year old Hispanics by 1995. The attrition gap at the high school level has increased from 3,865 in 1980 to 5,000 Hispanics in 1985; if current trends continue, this gap could reach 8,270 by 1995. To reduce the potential for this occurrence, programmatic efforts need to begin with the 1986 high school graduating class. If the 1990 goal is to match the 1980 black completion rate, at least 1,500 Hispanic high school graduates, in addition to the projected 11,100 in 1990, could be expected. The momentum generated by the change could further expand the number of Hispanics eligible for higher education, adding some 5,500 to the number of high school graduates by 1995; reaching this goal would signify a high school completion rate of 87.5 percent, or the white completion rate in 1980. In addition to focusing on attrition projections, it is useful to consider those based on the numbers of Hispanics graduating from high schools. This group further sub-divides into graduates of New Jersey schools and out-of-state graduates; between 1980 and 1995, their combined total would double creating a need for college entrance expansion.

Further explication of these projections pinpoints the potential increase of Hispanics in higher education. IN FALL 1984, THERE WERE 3,275 HISPANIC FULL TIME, FIRST-TIME STUDENTS ENTERING NEW JERSEY COLLEGES AND UNIVERSITIES; THIS REPRESENTED 40 PERCENT OF THE ESTIMATED 8,162 HISPANIC HIGH SCHOOL GRADUATES AGE 19 IN 1984. Maintaining this rate of entry without a reduction in high school attrition would produce 4,425 and 5,700 Hispanic first-time college students in 1990 and 1995, respectively. Furthermore, if black high school completion rates were reached in 1990 and white high school completion rates were reached in 1995 along with the maintenance of the 40 percent entry rate, Hispanic freshmen would number 5010 by 1990 and 7890 by 1995. If the proposed target were reached and the entry rate to higher education were increased to half of the Hispanic high school graduates age 19, there would be 6,260 freshmen in 1990 and 9,860 in 1995. Of these three policy options, only the last is a goal that would significantly change the Hispanic situation in New Jersey. With an annual entry of at least 10,000 in the late 1990's, Hispanics would be approaching parity with blacks and whites by present standards. Among 1983 high school graduates in New Jersey, 44 percent of blacks and 57 percent of whites entered higher education. Since these rates may increase during the projected period of time, the Hispanic enrollment totals would have to similarly expand, in order to assure the attainment of equity.

PROGRAM DIRECTIVES

Educational improvement program models cannot be readily implemented without considering the details needed for effective action. For example, the roots of high school attrition may be found in problems arising long before age 19 and require elementary school changes which would not affect college entrance for several years. Regarding curriculum and matters of school environment, further research and policy formation are needed. The following directives resulted from demographic considerations based on statistical evidence:

By the regular graduation age of 18, this attrition rate reached 50 percent: by age 20, Hispanic enrollment was a mere 30 percent. In a brief and relatively quick period of time, a severe and permanent reduction occurred.

Although documentation is scarce, factors known to influence attrition are varied. First, promotion standards tend to stiffen from the intermediate or junior high school level to senior high school and may even include "passage regulation" tests. Next, school attendance is no longer mandatory beyond age 16. Many Hispanic teenagers also experience an alien, discouraging and intimidating environment in school. This pattern is evident from the New Jersey Department of Education data on "drop out" reasons (79-83:Table X) which consistently showed the predominance of "behavioral and curricular" problems (58 percent) as an explanation for attrition. Finally, family economic difficulties motivate many Hispanic teenagers to seek employment as a means of contributing to their household support, indicated by 36 percent of the reasons for attrition.

It bears mentioning at this juncture that men and women have similar reasons for attrition as evidenced in the fertility analysis (see Methodological Appendix), which showed that only 6 percent of Hispanic women age 15-19 gave birth in a given year during the early 1980's. These considerations support the conclusion that improvements in the public school environment and strategic program innovations to offset problems encountered at this crucial level are the principal means for reducing the Hispanic attrition rate.

3. STRENGTHENING PRIVATE SCHOOL ENROLLMENT. The 1980 Census showed 12 percent of Hispanic teenagers enrolled in the private schools of New Jersey, higher in comparison to blacks (7 percent) and close to the 14 percent among whites (C:76,86). In their migration and settlement, Hispanics generally replace whites in neighborhoods traditionally "ethnic" and with long-established educational resources that are church-related. Short of financial subsidies, New Jersey could encourage the private school system to remain operative in the turnover and cooperatively develop ways of reducing attrition and expanding the Hispanic college potential.
4. ENLARGING AND REORIENTING ADULT EDUCATION. Since the 1980 Census took place in the 1979-80 spring semester, the school enrollment data could be compared with figures reported by the New Jersey Department of Education. Whereas the numbers were close for blacks and whites, the census showed a larger enrollment of Hispanics than the Department of Education totals. After accounting for private elementary and secondary schools, the remaining

number was composed of older Hispanics, reported according to their original grade of school attainment. Apparently, they were enrolled in English classes or job training, business and trade schools. This seemed to document a return to education, but not to public elementary and secondary schools. In addition to enlarging access to higher education, a well-organized adult education program oriented to Hispanics would improve economic opportunities for the parents of teenagers currently enrolled in school, thereby reducing the press for work in family support.

5. EXPANDING EDUCATIONAL OPPORTUNITIES FOR WOMEN. Evidence presented in the first section of this report established that adult women outnumbered men among Hispanic migrants and long-term residents of New Jersey. In 1980 women were the sole responsible persons for 26 percent of Hispanic households, more than twice the 12 percent proportion among whites, but less than the 41 percent of black households (B,21). The economic importance of Hispanic women is further demonstrated by the 55 percent of wives in married-couple families who were reported as working. Again, this was higher than the 49 percent of white couples, but lower than 60 percent among blacks (D,241).

In comparison with all other groups considered in this report, Hispanic women were earlier shown to be subject to the greatest discrimination in earnings for equivalent age, education and work conditions. This is partly explained by the fact that Hispanic women have also had the least progress in school attainment during the past 25 years in New Jersey. It seems imperative that this segment of the state's population should have the highest priority for special programs of educational opportunity and advancement, and that such programs provide for their particular social circumstances.

IN SUMMARY, THE RESEARCH SHOWS THAT HIGH SCHOOL ATTRITION CLAIMED A MAJOR PORTION OF THE HISPANIC POTENTIAL FOR HIGHER EDUCATION. At age 19, which represents the peak of first-time college enrollment, only 63 percent of Hispanics are currently obtaining the high school diploma compared with 72 percent of blacks and 88 percent of whites. Moreover, the Hispanic percentage reaches this level partly as a result of an influx of out-of-state high school graduates. An attrition of this magnitude is not explained within the confines of any single factor; on the contrary, it is the result of the dynamics of many interrelated, complex elements. LIKEWISE, NO ISOLATED PROGRAMMATIC EFFORT WILL SOLVE THE PROBLEM; ONLY AN INTEGRATED AND COMPREHENSIVE PLAN WILL SUFFICE.

College Enrollment

The most recent available information on the college enrollment

of Hispanics in New Jersey were tabulations prepared by the New Jersey Department of Higher Education. In 1984, 20,283 Hispanic undergraduates were attending public and private institutions of higher learning; the 1980 comparative figure was 16,415. If this increase is related to the New Jersey Hispanic population growth, relatively little gain is demonstrated. Specifically, based on the previous population projection, a 5.2 percent annual growth rate was computed. Applying this rate to the 16,415 1980 Hispanic college students, 20,108 were estimated for 1984. The actual figure of 20,283 was only 0.9 percent higher. IT FOLLOWS THAT FROM 1980 TO 1984 THE NEW JERSEY COLLEGE AND UNIVERSITY SYSTEM WAS SIMPLY MAINTAINING UNDERGRADUATE ENROLLMENT AT THE MINIMAL RATE OF EXPANSION REPRESENTED BY HISPANIC POPULATION GROWTH.

The relative lack of Hispanic progress in higher education was previously noted (Table 2.1). Since the 1960's only 2 percentage points were added to the Hispanic college attainment, leaving Hispanics behind black and whites. Linked with the findings just presented, these results show that the goal of improving the higher education attainment of New Jersey's Hispanic population is still far from being met. Much more effective recruitment and retention efforts, therefore, remain a clearly indicated need.

Recruitment

How to attract and engage Hispanics in higher education is a question demanding a much more detailed answer than is possible in this report. As in other forthcoming issues, it is recommended that further research be conducted on this topic. It is further recommended that periodical meetings of Hispanic educators focusing on action agendas and follow-up evaluations be scheduled. Consultants versed in these issues could also be employed to help develop strategies to orient promising students toward college and to streamline a better sense of direction for the Hispanic community regarding the value of higher education, the choice of college and the availability of financial assistance. Publicity-oriented mentor-type programs could be encouraged to demonstrate that Hispanics have graduated from college and are pursuing careers of importance.

Presently, Hispanic migration to New Jersey provides another recruitment vehicle for higher education. The facts show that migrants make up 21 percent of high-school age Hispanics (15-19 in Table 1.1), and furthermore, there are 28 percent migrants among college-age Hispanics (20-24 in Table 1.1) and 35 percent out-of-state high school graduates among Hispanic full-time, first time college students from 1981 to 1984 (for calculations see Methodological Appendix, item 2.5). Although it may be argued that some of these are only temporary residents or "foreign students," gaining a college education in the United States has become one of the principal motives for documented immigration, and overstaying a student visa is a step in the process of eventual documentation as a fully legal resident (Time 1985). Also, "stateside" migration to New Jersey allows for college enrollment by "out-of-state" high school graduates. Since graduates of New Jersey high schools are much less represented among first-time college students than expected from their

share in the state's Hispanic population, state government should allocate sufficient resources to strengthen the drive toward higher education for local Hispanics, at least to the extent readily visible among the newly-arrived.

Delayed Entry

Regardless of their place of origin, ONLY 55 PERCENT OF THE 1981-84 HISPANIC FIRST-TIME COLLEGE STUDENTS IN NEW JERSEY HAD GRADUATED IN THE PRECEDING ACADEMIC YEAR (DEPARTMENT OF HIGHER EDUCATION). THE 45 PERCENT REMAINDER INCLUDED MANY STUDENTS RESUMING THEIR EDUCATION AFTER AN INTERMITTENT PERIOD DUE TO WORK, MILITARY SERVICE, MARRIAGE AND CHILDBIRTH, OR MIGRATORY DISRUPTIONS. This delayed entry was confirmed by 1980 Census data which showed that 44 percent of Hispanics enrolled in the first year of college were 21 years or older. These results support a basic directive that recruitment efforts be divided between the current high school graduating class and the many (potentially more) who later seek to return to education.

Information reviewed for this report did not measure the average length of time in which Hispanics complete their undergraduate education in New Jersey. A recent survey of Hispanic college students in Chicago found a typical stretch of six years between entry and graduation (Hispanic Alliance 1983:81-84,92-96). The length of time was even longer in the "stop out" cases of students' alternating periods of attendance with full-time work and family responsibilities. If this pattern also prevails in New Jersey, the delayed entry of Hispanics may be the start of a longer-than-average college experience. As a result, Hispanic college graduates may enter the professional labor force at much older ages than most people are accustomed to imagine as the typical life stage of entry to a career.

The Competition

In the earlier recommendation for encouraging and reorienting adult education it was noted that Hispanics with less than a high school diploma who seek education tend to enroll in programs other than those sponsored by traditional institutions of secondary learning. The same pattern seems to exist among Hispanic high school graduates in regard to postsecondary programs of learning in "proprietary" organizations: primarily included are technical, trade and business institutes as well as English as a Second Language Institutes. These proprietary schools are rapidly expanding and provide an attractive alternative to enrollment at traditional institutions of higher learning.

The 1980 Census did not distinguish between proprietary and traditional institutions in reporting enrollment in postsecondary education. For Hispanics in New Jersey, the census enrollment figure was 150 percent of the total recorded in the State Department of Higher Education tabulations for enrollment in traditional colleges and universities. A comparable figure of 145 percent was found among

blacks. Previous research on minority youth supports the conclusion that the "excess" was largely attributable to the proprietary schools. (Hernandez 1983: 51-52, 64-65, 72-73)

The proprietary trend can be briefly described. As a result of the massive unemployment following the economic recessions of the past decade, minority youth have shown a strong disposition for specialized training directly related to new employment opportunities in an extremely competitive job market. Examples of this phenomenon are wordprocessing and computer operation institutes which have gained a substantial minority enrollment. IN MANY INSTANCES, PROPRIETARY SCHOOLS HAVE ACTIVATED APPROPRIATE LEARNING ENVIRONMENTS BY USING BOTH THE NATIVE AND SECOND LANGUAGES AS VEHICLES OF INSTRUCTION; EMPLOYMENT OF MINORITY INSTRUCTORS HAS REINFORCED THIS DIRECTION. Perhaps the most appealing feature for minority youth, however, is the perceived savings of time and money compared with at least six years of attendance, tuition and other costs at a traditional college or university.

Community and State Colleges

A related development concerns enrollment in community colleges. Data for the entire United States from 1976 to 1982 document an increase in Hispanics, blacks and whites attending these two-year institutions (U.S. National Center for Educational Statistics 1984:76). Based on the most recent total of undergraduates in each group, national community college enrollment was 56 percent among Hispanic students, 44 percent among blacks, and 37 percent among whites. The high and increasing rate of Hispanic enrollment in community colleges has generally persuaded educational researchers to stress access to four-year colleges and universities (Latino Institute, 1984).

Based on New Jersey Department of Higher Education data on undergraduate enrollment, the comparative picture was:

Table 2.6: Racial-Ethnic Comparison of New Jersey Community College Attendance

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Hispanic	41%	45%	46%	46%
Black	46	47	48	46
White	41	42	43	42

While black community college enrollment parallels the national pattern, white and Hispanic figures differ: more whites and less Hispanics in New Jersey attend community colleges than their national counterparts. In New Jersey, community college enrollment evidenced a close resemblance among the three groups.

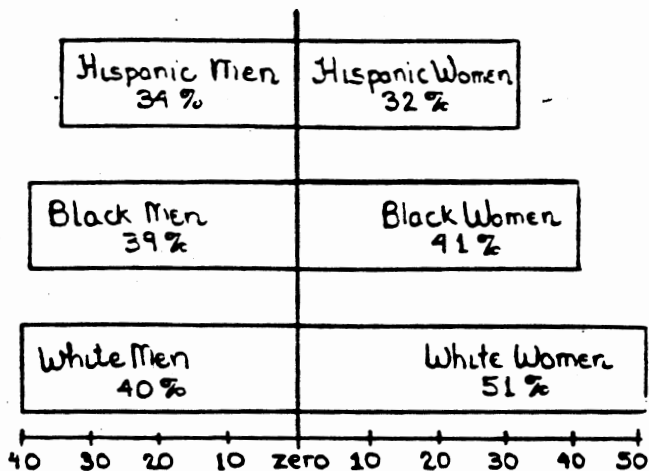
HISPANICS WERE THE ONLY GROUP TO GENERATE A MODERATE INCREASE IN NEW JERSEY COMMUNITY COLLEGE ENROLLMENT. THIS INCREASE CORRESPONDS WITH A

SIMULTANEOUS ENROLLMENT DECLINE IN OTHER INSTITUTIONS OF HIGHER EDUCATION. An example is the erosion signaled at the three campuses of Rutgers University, which slipped from 13 percent of the state's Hispanic undergraduate enrollment in 1981 to 11 percent in 1984 (Department of Higher Education tabulations). CERTAINLY, A MAJOR NEED FOR HISPANIC EXPANSION IN HIGHER EDUCATION CENTERS ON THE FOUR-YEAR COLLEGES AND UNIVERSITIES. Such efforts would be especially crucial in the six state colleges close to Hispanic communities: Glassboro, Jersey City, Kean, Montclair, Trenton and William Patterson.

Part-time Enrollment

As illustrated in Graph 2.7, Hispanics had the lowest rate of part-time undergraduate enrollment when compared with blacks and whites.

2.7 Percent Part-time Enrollment of Undergraduate Students in New Jersey Colleges and Universities, According to Gender and Racial-Ethnic Group, 1984.



Source: New Jersey State Department of Higher Education Computer Tabulations

This characteristic was consistently found among men and women at all ages and in each New Jersey higher education sector. In a population of limited economic means, this may signify slim enrollment opportunities for persons without financial aid or sufficient means to afford full-time registration. Given a pattern of delayed entry and completion, part-time enrollment may not make sense to many Hispanic students.

In addition, the low rate of Hispanic part-time enrollment may result from a lack of information and facilities for using local colleges and universities as a learning resource. The fact is that every other Hispanic is not a high school graduate; those who are may perceive traditional higher education as an alien environment--either because of their previous experience in American schools or because of feelings of cultural distance. The notable success of the proprietary schools partly derives from their image as institutions in which Hispanics are not only more welcome than in conventional schools, but also have a reasonable chance to improve or acquire knowledge and skills. A major avenue to increase the enrollment of Hispanics at New Jersey colleges and universities would be to offer learning opportunities in a socially inviting format that can be easily translated into students' economic circumstances and preconceived realities. INDEED, PART-TIME ENROLLMENT MAY BE A CATALYST FOR INCREASED HISPANIC ACCESS TO HIGHER EDUCATION PRECISELY BECAUSE OF ITS MANAGEABILITY AS AN ALTERNATIVE.

Women at all Ages

This report initially noted that women outnumbered men in the Hispanic adult population (Table 1.1). Further, the enrollment information for New Jersey colleges and universities also consistently showed a larger number of women than men at all ages and in such major categories as full/part-time, state/community colleges and the universities. The strength of women's participation in higher education is readily demonstrated by their percentage in the Hispanic student population: 57 percent as compared with 51 percent in the New Jersey Hispanic population at all ages. Perhaps the most important finding is that the percentage of female students increased with age; among Hispanic students age 35 and older, women made up 68 percent of full-time students and 63 percent of part-time students. The 1980 Census revealed that in this age category Hispanic women had the highest percentage after white women of enrollment in higher education among the racial-ethnic and gender groups compared in this report (D,201).

These results provide a clear directive for educational planning, especially since Hispanic women have the least attainment in higher education (Table 2.1) and the lowest distribution in income (Table 1.2). Efforts in reconciling these patterns should be accelerated with emphasis placed on such non-traditional fields as business administration, the sciences and engineering, and the professional schools of law, medicine, dentistry and pharmacy.

Retention

THE DISPARITY BETWEEN HISPANIC STUDENTS ENTERING NEW JERSEY COLLEGES AND UNIVERSITIES AND THOSE GRADUATING FROM SUCH INSTITUTIONS CLEARLY REMAINS THE MOST CRUCIAL ASPECT OF THE RESEARCH CONDUCTED FOR THIS REPORT. Nevertheless, except for the information to be presently discussed, the data needed for an adequate evaluation are not currently

available. Comprehensive and detailed research is needed to monitor not only the Hispanic college completion rate, but also to generate hypotheses useful for strategic planning to prevent attrition and to develop effective solutions.

A rudimentary measurement of retention was possible from data in the New Jersey Department of Higher Education Chancellor's Report for 1984. Table 2.8 provides the graduating percentages from two- and four-year institutions by racial-ethnic groups:

Table 2.8 Percentages of Graduates among Undergraduate Students Enrolled in New Jersey Colleges, by Racial-Ethnic Group, 1981 and 1983.

Degrees/ Enrollment	Hispanic		Black		White	
	1981	1983	1981	1983	1981	1983
Certificates and Associates/ Community Colleges	5%	5%	7%	6%	9%	10%
Bachelor's/4-Year Colleges and Universities	11	12	11	12	16	18

Source: New Jersey State Department of Higher Education, 1984 Chancellor's Report

Assuming consistent year-to-year student entry and advancement, the Bachelor's degrees conferred by four-year colleges and universities should approach 20 percent of the undergraduate enrollment. Allowance must be made for attrition in the original 25 percent because of failures, transfers and other inevitable drop-out events. The 18 percent for whites in 1983 shows that this group came close to a measure indicative of efficiency. When compared with other racial-ethnic groups, however, this measure pinpoints a serious retention problem among minority students. Hispanic degree acquisition rates equaled blacks, but were much lower than the white rates.

Affirmative Action

The literature on Hispanics in higher education (see references) stresses the hiring and advancement of Hispanic workers as a partial solution to this retention problem. For this reason, the New Jersey State Department of Higher Education's 1984 Affirmative Action Status Report warranted review. The data supplied for 1979-83 showed a very stable situation that can be summarized as follows. Whereas Hispanics made up seven percent of the state's population, the major higher education employment categories reflected their percentages as:

-
- 1.3% State College faculty
 - 1.5% All tenured faculty
 - 1.7% Community College faculty
 - 1.8% All full-time faculty
 - 2.1% Executives, administrators and managers
 - 3.6% Nonfaculty professionals
 - 4.4% Nonprofessional employees
-

WITHOUT EXCEPTION, THESE NUMBERS DEMONSTRATE THAT HISPANICS WERE FAR BELOW EQUITY IN TERMS OF THEIR SEVEN PERCENTAGE IN THE NEW JERSEY POPULATION. Deficiencies were especially striking in the faculty categories which structures daily and direct teacher-student contact.

The following figures represent the number of Hispanic college students for each Hispanic faculty member or administrator over a six-year period:

$\frac{1977}{40}$	$\frac{1979}{58}$	$\frac{1981}{60}$	$\frac{1983}{74}$
-------------------	-------------------	-------------------	-------------------

THE RATIO OF HISPANIC STUDENTS TO HISPANIC EMPLOYEES ALMOST DOUBLED, ILLUSTRATING THE LAG CREATED BY POPULATION GROWTH. Comparative data for 1983 evidence 38 black students for each black employee and 22 white students for each white employee. Thus, during the early 1980's, there were twice ^{the number} or more ^{of} Hispanic students per Hispanic faculty or administrator than for the other groups considered.

When matters of affirmative action are discussed, the alleged scarcity of qualified Hispanic professionals often surfaces as an easy explanation for their absence among administrators and faculty in colleges and universities. For 1983, the Affirmative Action report showed a total of only 177 Hispanic administrators and full-time faculty in the New Jersey public institutions of higher education. In contrast, the 1980 Census showed a total of 2,663 Hispanic residents of New Jersey having a postgraduate education (D,201). In several academic fields, qualified individuals range into the tens of thousands in the neighboring state of New York. WHEN IT IS CONSIDERED THAT COLLEGE AND UNIVERSITY POSITIONS ARE COMMONLY FILLED AS A RESULT OF NATIONAL ADVERTISEMENT AND SEARCHES, THE ARGUMENT BASED ON SCARCITY OF TALENT IS NOT JUSTIFIED.

Graduate Education

Ideally, New Jersey Hispanics should be filling a substantial portion of the positions filled by Hispanics in their state's higher education system. Since college and university employment typically requires an advanced degree, access to graduate programs is a crucial factor in the long-term improvement of educational opportunities for Hispanics in New Jersey. In this regard, the State Department of Higher Education data on total post-baccalaureate enrollment of Hispanics showed a stable situation:

1980	1981	1982	1983	1984
<u>1,227</u>	<u>1,273</u>	<u>1,322</u>	<u>1,338</u>	<u>1,268</u>

However, as in the employment of Hispanics in higher education, these numbers indicate that access to graduate education lags behind the needs created by population growth. The resulting deterioration can be observed in relation to the graduate Hispanic enrollment at colleges and universities. DURING THE YEARS PRESENTED, THE PERCENTAGE OF GRADUATE STUDENTS DECLINED FROM NINE TO SIX AMONG ALL HISPANIC STUDENTS IN THE NEW JERSEY HIGHER EDUCATION SYSTEM.

The 1984 New Jersey Department of Higher Education Chancellor's Report also showed that only 1.5 percent of the Master's degrees conferred in New Jersey from 1977 to 1983 were received by Hispanics. Although the number has slightly increased, the completion rate is far below the growth rates of the potential Hispanic college population as well as of the Hispanic elementary and secondary school population. More crucial is the steady decline in the annual number of Hispanic doctorates from 1977 to 1983 which has ended in less than half of the initial figure. Since the doctorate is required for faculty appointments and many administrative positions in higher education, this downtrend poses a severe limitation in the improvement of human resources for the education of Hispanics.

As widely known among educators in the United States, federal sources of financial support for graduate education have sharply declined during the period covered in this report. A significant increase in state allocations to finance not only Hispanic graduate students, but to facilitate the training of Hispanic educators should be created. A comprehensive development plan is also needed to assure efficient use of scarce resources to turn around the Hispanic educational situation.

Conclusions

This report has identified the following policy-implicating issues for Hispanics in higher education:

1. The attrition level of Hispanics at the secondary level is greater than that of blacks and whites and shows no significant improvement in recent years.
2. The resulting shrinkage of the Hispanic college potential means that, at best, only half of Hispanic children will have access to higher education in the future.
3. Expanding the Hispanic college potential calls for a thorough reform of the elementary and intermediate school education of Hispanic children in order to curtail the attrition rate at the secondary level.
4. Similar reform is a requisite for the preparation of Hispanic high school students for college. Presently, only a small proportion make the transition to higher education.
5. Hispanic recruitment and retention strategies should be cooperatively developed with private schools.
6. Adult education programs must reorient and expand in order to assist the parents of Hispanic children to improve their economic situation.
7. In view of the crucial economic importance of women in the New Jersey Hispanic community and their situation as the most underprivileged among the groups considered, a special effort is necessary to assure them the availability of educational opportunities.
8. At the undergraduate level, the enrollment of Hispanics merely reflects the population growth during recent years; this signals no genuine improvement in Hispanic access to higher education at this level.
9. Effective recruitment efforts are needed especially for Hispanic students from local New Jersey high schools. In addition to the conventional approach which focuses on high school graduates, strategies are needed for the many Hispanics who delay college entrance.
10. Much of the desire and talent for higher education among Hispanics is being chanelled toward the "proprietary" schools which offer job-related training, often in a bilingual and friendly environment. In response to this challenge, vocational education could be revitalized to respond more directly to the job market in the 1990s, and community colleges could expand completion of certificate programs of study in specific job areas.

11. Few Hispanics graduate with two-year Certificates or Associate Degrees at the community colleges although these institutions claim almost half of the Hispanic enrollment in higher education.
12. Six of the state colleges are located close to Hispanic communities, but their Hispanic enrollments remain far below levels expected on the basis of the vicinity's population -- Glassboro, Jersey City, Kean, Montclair, Trenton State College and William Paterson State College.
13. As a group, Hispanics had the least participation in part-time college enrollment which could offer an attractive alternative to non-attendance, and attendance at proprietary schools.
14. Hispanic women outnumbered men in all major categories of higher education, in part due to their numbers in the population. Moreover, their participation shows a strong desire to succeed in higher education. Special programs could maximize this potential especially in business, science and the applied professions.
15. The attrition problem that exists among Hispanic college students was found to be similar to that at the secondary level. This debilitating condition creates a pressing need for improvement in student services and counseling, effective instruction and innovative ways of securing financial aid.
16. The employment of Hispanic faculty and administrators has stagnated during recent years at public institutions of higher education, and remains at a very minimal level especially in regard to the proportion of Hispanics in the New Jersey population.
17. A sufficient number of Hispanics with advanced degrees was documented in answer to the possible objection that no qualified candidates can be found for affirmative action placement in New Jersey colleges and universities.
18. An expansion in the enrollment of Hispanics in graduate programs is a clearly documented need in filling the positions that must become available in higher education if an improvement in human resources is to take place.
19. An increase in the funding of specially-designed programs should be initiated to solve identified problems and implement effective solutions in collaboration with the New Jersey Hispanic communities.
20. The New Jersey state government is advised to organize and implement a comprehensive development plan for improving the education of Hispanics from kindergarten through graduate school. While this report serves to identify and measure the problems, educators and representatives of the Hispanic community in New Jersey should be consulted to launch subsequent improvement efforts.

REFERENCES

Note: Text notations are given by surname of author and date of publication. U.S. Bureau of Census publications are signaled by year (70 or 80), the volume or chapter letter and table number.

American Council on Education

1985 Access to Higher Education: The Experience of Blacks, Hispanics and Low Socio-Economic Status Whites, by Valerie Lee. Washington, D.C.

ASPIRA of America, INC.

1976 Social Factors in Educational Attainment Among Puerto Ricans in U.S. Metropolitan Areas, 1970. New York, N.Y.

Bogue, Donald

1969 Principles of Demography. New York, N.Y.: Wiley.

Carnegie Quarterly

1984 "Renegotiating Society's Contract with Public Schools: The National Commission on Secondary Education for Hispanics and the National Board of Inquiry into Schools." 29:4,30:1(Fall, Winter):1-12.

Centro de Estudios Puertorriquenos

1979 Puerto Ricans in United States Higher Education, by Josephine Nieves. New York, N.Y.

Commission on Hispanic Underrepresentation

1985 Hispanics and Higher Education: A CSU Imperative. Long Beach, CA.

Ford Foundation

1984 Hispanics: Challenges and Opportunities. New York, NY.

Hernandez, Jose

1983 Puerto Rican Youth Employment. Maplewood, NJ: Waterfront.

Hispanic Alliance of DePaul University, Loyola University of Chicago & Mundelein College

1983 Developing Resources for Leadership: Hispanics and Higher Education, A Report to the Ford Foundation. Chicago.

Hispanic Policy Development Project, Inc.

1984a Make Something Happen: Hispanics and Urban School Reform.

1984b The Hispanic Almanac. Washington, D.C.

Hodgkinson, Harold L.

- 1985 All One System: Demographics of Education - Kindergarten through Graduate School. Institute for Educational Leadership. Washington, D.C.

Latino Institute

- 1984 Latino Higher Education in Illinois: A Stratified Pattern of Access. LIDER 4(Spring):1-3.

Miller, Scott

- 1985 The Demographic Shift and Higher Education. A paper presented to the New Jersey Department of Higher Education. Trenton, NJ.

National Action Council for Minorities in Engineering, Inc.

- 1983 The Retention of Minority Engineering Students, by Benson E. Penick and Carole Manning. New York, N.Y.

New Jersey State Department of Education

- 1979-83 Vital Educational Statistics, Volume I. Trenton, N.J.

New Jersey State Department of Higher Education

- 1976-84 Computer Print-Outs on Enrollment Tabulations.

- 1984 Going to College in New Jersey, A Guide to Undergraduate Opportunities. Trenton, New Jersey

- 1984 Duplicated reports: "Enrollment Trends." "Chancellor's Report." "Affirmative Action Status Report, New Jersey Public Colleges and Universities."

Time

- 1985 Special Issue: Immigrants, The Changing Face of America. July 8; 126,1:24-101.

U.S. Bureau of the Census

- 1970 Census of Population. Subject Report on Persons of Spanish Origin.

- 1971 The Methods and Materials of Demography, by Henry S. Shryock, Jacob S. Siegel and Associates.

- 1980 Census of Population. Volume 1, Characteristics, Ch. D. Detailed Population Characteristics. Supplementary Report on Persons of Spanish Origin, Ancestry of the Population by State.

- 1983 Condition of Hispanics in America Today. Washington, D.C.

U.S. Commission on Civil Rights

- 1978 Social Indications of Equality for Minorities and Women. Washington, D.C.

U.S. National Center for Educational Statistics

- 1979-84 The Condition of Education, (Annual Statistical Report.)

- 1982 Projections of Education Statistics to 1990-91. Volume II: Analytical Report, II: Methodological Report, by Martin M. Frankel and Debra E. Gerald. Washington, D.C.

U.S. National Center for Educational Statistics and LULAC National
1980 Educational Service Centers, Inc.
The Condition of Education for Hispanic Americans, by George
H. Brown, Nan L. Rosen, Susan T. Hill and Michael A. Olivas.
Washington, D.C.

The University of Texas at Austin
1982 Hispanics in Higher Education: Leadership and Vision for the
Next Twenty Five Years, Edited by Leonard A. Valverde and
Shernaz B. Garcia, Office of Advanced Research in Hispanic
Education. Austin, Texas.

fertility levels in the peak age categories (18-19 and 20-24), the estimates produced by the black-Hispanic ratios seemed more credible. Using the Bogue and Census Bureau conversion methods, the estimated Hispanic age-specific fertility rates yielded a general fertility rate of 61.7 and a crude birth rate of 18.1 per 1000 population.

For documentation, the age-specific fertility rates are reported as follows:

New Jersey, 1980

Age	Hispanic	Black	White
15-19	.0642	.0980	.0246
20-24	.1287	.1379	.0796
25-29	.0997	.0958	.1125
30-34	.0589	.0572	.0685
35-39	.0208	.0209	.0195
40-44	.0044	.0047	.0030
45-49	.0002	.0002	.0001

An attempt was made to validate the general results of this analysis, using cumulative fertility rates from the 1980 Census (C:99), and various conversion formulas. This yielded a crude birth rate for Hispanics in the vicinity of 19 or slightly higher than the estimate accepted. However, 18.1 and 19 seemed close enough for confidence and resembled what little is known about the fertility of Hispanic women in the United States.

B. Death rates: In addition to the absence of mortality information for Hispanics in New Jersey, deaths were not classified by the combination of race, gender and age in the published tables available from 1979 to 1982. This made the production of estimates a matter of speculation, at least to the extent of applicability to the life table kind of analysis ideally used in population projections. New Jersey death rates were averaged for 1979, 1980 and 1981 in the separate categories of male, female, white, and nonwhite, and then applied to Hispanics in the equivalent age categories. This yielded an average crude death rate of 9.1 per 1000 Hispanic population. For the population projection the "natural" growth function was estimated by subtracting this figure from the crude birth rate of 18.1, which produced an annual rate of 9.0 per 1000 or .009 as a multiplication factor.

C. Migration Rates: 1980 Census information on place of residence in 1975 by gender and age (D:200) was used to obtain 5-year migration rates indicative of the cumulative entry to New Jersey for Hispanics 5 years and older. Part of the results are summarized in Table 1.1 of the text. These figures were analyzed by methods commonly used in the measurement of fertility as a contributing factor in population growth. The age-specific in-migration rates were found to signify an annual growth rate of 52.6 per 1000 population or 5.3 percent. In conjunction with the 9.0 per 1000 "natural" growth factor, this served as a basis for reconstructing the population from 1970 to 1980, year-by-year. The resulting population for 1980 was 527,255 or 35,422 more than the 491,888

recorded in the Census. This margin was assumed to represent the unrecorded out-migration of Hispanics from New Jersey during the 1970-80 decade. An adjustment was made to obtain a net (in minus out) migration rate, 42.6 per 1000 population or 4.3 percent. The combination of this net migration and the 9.0 per 1000 or 0.9 percent birth/death factor yielded the comprehensive 5.2 percent annual growth rate mentioned in the text at the end of section 1.

D. Undercount: As generally known among demographic researchers, the underenumeration of Hispanics in the Census is greater than average for other major segments of the nation's population. Except for a partial and indirect measurement of the undercount in the 1970 enumeration (U.S. Census Bureau, Coverage of the Hispanic Population of the United States in the 1970 Census. Current Population Reports, Special Studies P-23, No.82, 1979), no attempt has been made to determine the margin of error for Hispanics. In the projection prepared for this report, the initial undercount was assumed to be 10 percent of the New Jersey Hispanic total reported for 1970. This seemed reasonable, in view of the large proportion of Puerto Ricans in the population and a nation-wide estimate of Puerto Rican undercount at 8 percent (Jose Hernandez, "La migracion puertorriquena como factor demografico: Solucion y problema", Revista Interamericana 4 (Winter 1975):526-534). After all other change factors had been considered in the 1970-80 reconstruction of New Jersey's Hispanic population (birth, death, migration), 1980 figures were in excess of those reported in the Census publications by a margin of 6.8 to 7.2 percent. This was taken to represent the undercount for 1980.

2.5

Out-of-state high school graduates enrolled in New Jersey colleges and universities. 1981 was the first year for which data were available from the Department of Higher Education, on the subject of Hispanic full-time, first-time students. The 1981 total was only 1862. Subsequent totals were 3107 in 1982, 3316 in 1983 and 3316 in 1984. These figures seemed more consistent and indicative of recent levels. They were all higher than the annual totals of Hispanic high school graduates reported as going on to college by the New Jersey Department of Education. For the three years considered, the difference was averaged at 35 percent of the Hispanic total of full-time, first-time college students.