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**BILINGUAL EDUCATION, ENGLISH AS A SECOND LANGUAGE AND EQUITY
IN HIGHER EDUCATION**

City University of New York

Ph.D. 1985

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BILINGUAL EDUCATION, ENGLISH AS A SECOND LANGUAGE
AND EQUITY IN HIGHER EDUCATION

BY

YVONNE M. TORMES

A dissertation submitted to the Graduate Faculty in
Sociology in partial fulfillment of the requirements
for the degree of Doctor of Philosophy, The City
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1985

This manuscript has been read and accepted for the Graduate Faculty in Sociology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

BILINGUAL EDUCATION, ENGLISH AS A SECOND LANGUAGE AND EQUITY IN HIGHER EDUCATION

by

Yvonne M. Tormes

Adviser: Professor David E. Lavin

This study compared the academic performance during the first four semesters and attrition and graduation rates for Hispanic students with limited English proficiency enrolled in a transitional bilingual program (BSP) with those who received only English as a Second Language (ESL) instruction in a public community college. The study also sought to identify student characteristics that were associated with academic progress and persistence in college. The subjects for study were all full-time Hispanic students who entered the BSP and ESL Programs at Kingsborough Community College of the City University of New York between fall 1978 and fall 1980 (Ns: BSP=191, ESL=70). The major findings were that: (1) The BSP students consistently performed better on most of the criterion measures, even though to begin with their degree of disadvantagedness in many areas was greater. The BSP students significantly attempted and earned more credits,

obtained higher GPAs, and were more likely to progress satisfactorily toward the degree during the first three semesters in college. (2) There were no significant differences in graduation and attrition rates. However, BSP students who dropped out tended to stay in school for a longer period of time and were less likely to be academically dismissed than ESL dropouts. Furthermore, BSP dropouts who stayed for at least one semester in college were more likely than ESL students to be making adequate progress toward the degree and to have earned GPAs high enough to enable them to return to college should their circumstances allow. (3) Among the characteristics found to be correlated with academic progress and/or persistence in college in either group were: number of high-school college preparatory courses in English or in Spanish, attitudes toward English or Spanish, the extent to which students used English or Spanish in various social situations, the students' sociolinguistic environment, and expectations of assimilating structurally. The major conclusions were that bilingual education was superior to the ESL-only approach in fostering equity in higher education and that it appears to promote assimilation rather than retard it.

PARA MI FAMILIA:

Mami, Olga, Evelyn, Leyla, tío, Wanda, Iván,
Rey, primos, primas y todos aquellos que
vinimos en el viaje puertorriqueño del 1950.

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CHAPTER I

INTRODUCTION:

BACKGROUND AND RATIONALE FOR THE STUDY

The commission recommends: . . . That researchers seek to identify the barriers faced by college students whose command of English is limited as a result of poor education in the elementary and secondary schools or of recent migration to this country and to explore ways in which the educational achievement of these students can be facilitated. (The lack of research related to the needs and experiences of bilingual college students frustrated the commission's efforts to understand the dynamics of bilingualism at the postsecondary level.)

Final Report of the Commission on Higher Education of Minorities, 1982, p. 32.

It appears clear that much work is needed on Hispanic student characteristics and achievement. . . .

Michael Olivas, 1981a, p. 11.

This study may be considered a pioneering effort to respond to the Commission's call for research on the needs and experiences of bilingual college students and to Olivas' request for more research on Hispanic student characteristics and achievement. The study provides empirical data that will help in understanding the dynamics of bilingualism at the postsecondary level and also contains data

on Hispanic student characteristics and achievement in college. Specifically, it compares the educational outcomes for Hispanic students with limited English proficiency enrolled in a bilingual-bicultural program in a two-year public institution with outcomes for similar Hispanic students who received only English as a Second Language (ESL) instruction. In the ESL approach, students are given intensive instruction in English and attend the regular college classes. In the bilingual approach, students receive ESL instruction but part of the curriculum is in Spanish. Students in the latter program receive more individualized attention since they are provided with special Hispanic counselors. Therefore, the two approaches provide different sub-environments in addition to the difference in language of instruction.

One purpose of this study is to determine the extent to which each educational strategy increases the likelihood of Hispanic students pursuing successfully a college education, as measured by the following criterion variables:

- . attainment of the Associate degree
- . rate of progress towards the degree
- . dropout rates

A second purpose of this study is to attempt to identify which students benefit most from each approach.

Although Hispanics share some characteristics in common (the most obvious being the Spanish language), there is a great deal of intergroup and intragroup diversity manifested in many areas such as socioeconomic status, lifestyles, customs, ties to their homelands, recency of migration, English language and Spanish language communication, reading and writing skills, and the extent to which they use English in different social situations. The study, therefore, will try to identify background characteristics and students' attitudes and behaviors which are associated with particular educational outcomes in each program.

The ultimate objective of the study is to shed some light on how higher education can best serve the Hispanic community, which, in spite of its diversity and vitality, has yet to achieve educational and socioeconomic parity with the white majority population.

Profile of Hispanics in the United States

Based on the latest information provided by the U.S. Census Bureau, there are today nearly 14.6 million persons of Spanish origin or descent in the fifty states and in the District of Columbia (U.S. Census Bureau, 1981a, p. 1). This constitutes an increase of about 46% since 1975, when the official numbers were estimated at 10 million. These figures do not include the three

million inhabitants on the island of Puerto Rico, or the many undocumented aliens on the mainland, whose numbers have been estimated as more than eight million by several sources (Hernandez, 1979; Lopez, 1978). Regardless of which figures one uses, the fact remains that Hispanics constitute the second largest minority in the United States, and their rapid increase in numbers, whether by internal reproduction or migration, has led demographers to predict that by the year 2,000, Hispanics will outnumber blacks (Burke, 1981; Fitzpatrick and Travieso, 1981; Pifer, 1980).

Of the 14.6 million Hispanics, Spanish was spoken at home by 8.1 million adults (18 years old and over) and 2.9 million of those 5 to 17 years old. Thus, 75% of the Hispanic population communicate in their native tongue in their households. Of these, 25% (2.3 million of the adult population and over 472,000 of the school-age children) did not speak English well or could not speak English at all (Census Bureau, 1981c, Table P2, p. 14).¹

Although Hispanics share a common language, they do not comprise an easily identifiable ethnic cultural group, nor are they by any means a homogeneous population. Every state of the union, including Alaska and Hawaii, contains Hispanics. And virtually every Latin American country from Mexico to Argentina, the Caribbean islands of Puerto Rico

and the Dominican Republic, and the European nation, Spain, are all represented in the U.S. Hispanic population. The largest group are Mexican-Americans, who constitute 60%.² This group is largely, but not solely, concentrated in the Southwestern states and their presence in the U.S. predates the birth of this nation.

Puerto Ricans are the second largest subgroup. Nearly two million Puerto Ricans now reside on the mainland. This group is concentrated in the Northeast, particularly in New York State, New Jersey, and Massachusetts. Close to 750,000 Puerto Ricans are found in New York City alone, and they constitute about 10% of the City's population. Although Puerto Rican migration has been traced back to prior to 1898, the largest waves of migration have taken place since World War II. Unlike other Hispanic immigrants from the Caribbean or Latin America, Puerto Ricans are U.S. citizens, and a unique feature of their migration is the constant movement back and forth from the island to the mainland, which is unrestricted by law.

Cubans comprise the third largest subgroup. They are to be found mainly in Miami and other large cities in Florida. Altogether, there are over 800,000, with the majority coming to the U.S. in the early 1960s following Castro's communist revolution. An estimated 120,000 are relatively recent newcomers, coming to the U.S. in 1980

during the Flotilla incident.

The two other Hispanic subgroups on the mainland are people from Central and South America, whose numbers are about one million, and "other Spanish" which includes the older stock originating in Spain as well as more recent immigrants such as those from the Dominican Republic. The "other Spanish" are estimated to number approximately 1.6 million.

Income levels among the various Hispanic groups differ considerably. Puerto Ricans are the poorest; the median family income nationally for Puerto Ricans in 1979 was \$9,855, which was less than half the median income for families not of Spanish origin (\$19,965). Cubans enjoy the highest median income, \$17,538, but even this group was still below that for all non-Hispanic families. The median incomes reported for the other Hispanic subgroups were \$15,171 for Mexicans and \$15,470 for families from Central or South America and other Spanish origin (Census Bureau, 1981b, Table 5, p. 6).

Hispanics in the U.S. include a heavy concentration (32%) of children under 15 years of age and a small proportion (4.9%) of persons 65 years old and over. By contrast, 21.3% of the white and 28.7% of the black population were under 15 years. The proportions of 65 years old and over among whites and blacks were 12.2% and 7.9% respectively

(Census Bureau, 1981a, p. 1).

Although Hispanics as a group are considerably younger than either whites or blacks, there are substantial age differences among the various Hispanic subgroups. Cubans are the oldest; their median age of 33.5 considerably surpasses the median ages of 20.7 for Puerto Ricans (the youngest group), 21.4 for Mexicans, 25.1 for people from Central or South America, and 22.1 for persons of other Spanish origin (Census Bureau, 1981b, Table 3, p. 5).

In 1980, more than 60% of the 14.6 million Hispanics resided in three states: California, Texas, and New York. In addition, Hispanics comprised more than 10% of the total population for five states: New Mexico (36.6%), Texas (21.0%), California (19.2%), Arizona (16.2%), and Colorado (11.7%), (Census Bureau, 1981a, p. 1).

Of particular significance is the concentration of Hispanics in the central cities. As of March 1980, about 84% of Hispanic families lived in metropolitan areas, with close to half living in the central cities (Census Bureau, 1981b, Table 2, p. 5). Alan Pifer (1980), in a report to the Carnegie Foundation, summarized succinctly one implication of the youthfulness of Hispanics and their concentration in urban cities for education:

In New York City, they [Hispanics] currently comprise 30 percent of the school population; in Los Angeles 45 percent; in San Antonio 52%; in Miami 32%; in Denver 31%; in Hartford 35%. (p. 9)

It could also be added that, should Hispanics be able to overcome the hurdles of elementary and secondary education, they would potentially constitute a larger than average pool of college eligibles.

Unfortunately, Hispanic children have not fared well in the public education system. As early as 1966, the monumental Coleman study, Equality of Educational Opportunity, brought to national attention that Mexican and Puerto Rican children scored below majority students on a number of non-verbal and verbal achievement tests, including reading, writing, calculating, and problem solving and that the gap in achievement became greater as students reached the twelfth grade. More recent assessments of the educational progress of Hispanics in mainland elementary and secondary schools do not present an optimistic picture. The National Assessment of Educational Progress reported in 1977 that Hispanics aged 9, 13, and 17 consistently scored lower than the total national population and white students in social sciences, science, mathematics, career and occupational development, and reading. Other surveys have consistently reported that Hispanic students are also more likely to fall behind in school and are enrolled in grades lower than their age groups; tend to have higher dropout rates and are, by far, less likely to graduate from high school than majority students and even other minority

students (U.S. Commission on Civil Rights, 1976; 1978). Astin (1982), for example, found that about half of Chicanos and over half of Puerto Ricans never complete high school; their high-school dropout rates are about two-thirds higher than the dropout rate for blacks and three times higher than the rate for whites. The attrition toll for the two Hispanic groups begins as early as the ninth grade and continues throughout high school. Blacks and whites, on the other hand, do not begin to drop out in significant numbers until the tenth year (pp. 26-32).

The low educational attainment of Hispanics is not confined to the youth population. In 1978, it was found that, whereas only 41% of Hispanic adults held a high school diploma, 67% of adult non-Hispanics had graduated from high school. In fact, at all age levels, high-school completion rates were appreciably lower among Hispanics than among non-Hispanics. It was also found that Hispanic adults with less than five years of schooling significantly out-numbered non-Hispanics at each age level (NCES, 1980, p. 4, Tables 109 and 100, pp. 21, 22).

Hispanics in Higher Education: Current Issues

During the late 1960s and early 1970s, a period of educational expansion in higher education for both majority and minority students, Hispanics made some advances in participation in higher education. These advances, al-

though considered dramatic by some, are regarded as superficial by others, and Hispanic participation in higher education is clouded by issues of underrepresentation, limited access, and unequal outcomes.

Underrepresentation in Higher Education

Problems arise in measuring precisely the degree of participation in higher education by Hispanics. Inconsistent classifications of Hispanics by the U.S. Census Bureau and other data collection agencies, different definitions of "college" or "post-secondary education," "student," limited samples, different age cohorts, etc., make any assessment problematic.

Statistics provided by the National Center of Education Statistics (NCES, 1980), a bipartisan government agency which collects national data, give an indication of the improvement made by Hispanics in access to mainland colleges and universities. These enrollment data are based on surveys which include virtually all colleges and universities in the U.S. and are said to be essentially free of sampling errors. In addition, the data correctly distinguish between collegiate and noncollegiate post-secondary institutions, as well as enrollments in degree programs versus nondegree (e.g., adult education) programs.

Nationally, the rate of enrollment in college among Hispanics 18 to 34 years old increased from 8.3% in 1972

to 11.8% in 1977, whereas the increase among whites was less than one percentage point (from 16.0% to 16.6%). The number of full-time undergraduate Hispanic students almost doubled (from 98,453 in 1970 to 196,451 in 1978), and their percentage of total full-time undergraduate enrollment increased from 2.1% to 3.5%. At the graduate and professional level, the number of Hispanics more than doubled during the same period, from 5,680 to 13,170, and these numbers represented 1.2% and 2.2% of all full-time graduate students (Tables 3.08 and 3.09, pp. 138, 140). These numbers, on the one hand, represent significant improvement in access to higher education, particularly if one considers the historically low levels of participation prior to 1970.³ On the other hand, considering that Hispanics constituted from over 6% to 10% of the U.S. population, the increase fell far below their relative numbers in the population.

Astin's recent study (1982) on minority participation in higher education, which included Chicanos and Puerto Ricans (the two largest Hispanic groups in the nation) and which used various data sources, concluded that:

Currently, America's racial and ethnic minorities are grossly underrepresented in higher education and in almost all occupational fields that require a college education. Despite the nation's efforts to remedy its record of racial discrimination prior to

the advent of the civil rights movement in the 1950s, today minority groups continue to be underrepresented in the system as a whole and especially in those advanced fields that prepare students for positions of leadership and status in American society. (pp. 1-2)

Astin further observed that Chicanos and Puerto Ricans were more grossly underrepresented than American blacks, and that virtually no change in access has occurred since the mid-1970s (p. 51).

Limited Access

Examination by various authorities of the most recent available data concerning Hispanic access to higher education, has revealed some very disturbing but consistent enrollment patterns.

. Hispanic access to higher education has occurred largely within the two-year colleges. In 1978, 42% of Hispanic full-time undergraduates were enrolled in two-year colleges compared with 23% of whites. Of all full-time freshmen and sophomores, 55% of Hispanics, but only 35% of whites, were in two-year colleges (NCES, 1980, pp. 148, 150). Similar percentages were reported by Olivas (1979, pp. 25-27) in his analysis of 1976 ethnic enrollment data.

Dearman and Plisko's breakdown of NCES's 1978 data confirmed that the preponderance of Hispanics were in public two-year colleges. The analysis also showed that whites, on the other hand, were more likely to be enrolled

in a public university (19.7% vs. 8.6%) and in private four-year colleges and universities (21.1% vs. 13.1%, Astin, 1982, p. 131).

. Not only are Hispanics concentrated in public two-year colleges, but their participation within this tier of higher education seems to be limited to a small number of institutions. Using 1976-1977 ethnic enrollment data provided by the Office of Civil Rights, Olivas (1979) examined 150 institutions with the heaviest concentration of minority enrollment in the United States. He found that 83 urban two-year colleges in 23 states served over 43% of Hispanic two-year enrollments. These 83 urban two-year colleges represented 7% of all two-year institutions and less than 3% of the more than 3100 collegiate institutions in the country. In addition, of the 83 institutions, 35 were in the state of California (Olivas, 1979, pp. 27-28; 200-203). More recent data provided by NCES also show the concentration of Hispanics in very few institutions. In 1978, 21 institutions on the mainland in five states accounted for 24% of all Hispanic students. And among these 21 institutions were four colleges established in the 1970s specifically to serve Hispanics--Boricua College, Hostos Community College (both in New York), Colegio Cesar Chavez in Oregon, and D-Q University in California (NCES, 1980, pp. 118-119; Table 3.15, p. 152). From one perspec-

tive, the concentration of Hispanics in a small number of urban two-year institutions, most of them non-resident commuter colleges, may be viewed as a natural outcome of their geographical distribution. From another perspective, it may be viewed as a continuation of the segregation or tracking (the assignment of students into groups, ostensibly according to ability) patterns existing in K to 12 school systems. Without reviewing the extensive literature on this subject, it has been suggested that inequalities in elementary and secondary schools result in unequal opportunities and outcomes in higher education for a disproportionate number of Hispanic and other minority students.⁴ For whatever reasons, Hispanic students are overwhelmingly enrolled in the tier of higher education in which the fewest students persist and with the fewest resources available (Alba and Lavin, 1981; Astin, 1975; 1982; Karabel, 1972a; Lavin et al., 1981; Olivas, 1979; 1981a; 1981b). There are demonstrable dissimilar opportunities to be gained from access to a community college rather than to a four-year college.

Unequal Outcomes

Examination of the educational attainment level of Hispanics in higher education reveals another disturbing pattern: their disproportionately high attrition and low

graduation rates in both community and four-year colleges.

A national longitudinal study of 18,000 high-school seniors who graduated in 1972 from 1,000 public and private schools revealed that among students entering two-year institutions, attrition rates for Hispanics began to exceed those for whites even in the first year of college. By the end of the second year, the attrition rate among Hispanics had reached 47% for men and 45% for women, in contrast to 39% for white males and 37% for white females. Pertaining to graduation, twice as many white men (11%) and women (18%) had completed their Associate degrees as had their Hispanic counterparts (NCES, 1980, pp. 182, 186, 188). The differences in attrition and graduation rates between Hispanics and whites were even more pronounced among those entering four-year colleges. By the end of the fourth year of college, over half of both Hispanic men and women had dropped out, compared to about one-third of white men and women; and only 14% of Hispanic men and 18% of Hispanic women had completed their Bachelor's degree, in contrast to 36% and 46% for white men and women respectively. Even after controlling for socioeconomic status, the observed differences in the college completion rates between the two groups were extensive (Eckland and Wisenback, 1979, pp. 6-7). Among the lower SES groups, 4.0% of Hispanics but 5.7% of whites had achieved a college education or

had attended graduate or professional schools. Among the middle and high SES groups, college completion rates for Hispanics were less than one-half the rates for whites. The specific proportions of students with at least a bachelor's degree among middle and high SES groups for Hispanics were 5.3% and 13.8% and for whites were 12.9% and 32.2% respectively. It should be noted that Hispanics also trailed blacks in educational achievement at each SES level.

These same students were also followed up seven and one-half years after high school. The proportion of white men who had completed a bachelor's or advanced degree was nearly twice as high as that of Hispanic males (29% vs. 15%), and close to three times higher for white than Hispanic women (25% vs. 5%; Burkheimer and Novak, 1981, p. 7).

Another disturbing pattern is the low mobility rate from community to four-year colleges exhibited by Hispanics. Among students in the high school class of 1972 who had initially enrolled in two-year colleges following graduation, 11% of Hispanic men and 7% of Hispanic women had transferred to a four-year institution by October 1974; i.e., two years after graduating from high school. By contrast, 27% of white men and 25% of white women had done so (NCES, 1980, p. 186).

Hispanics in CUNY

Since its establishment in 1847 as the Free Academy, the major mission of the City University of New York has been the provision of public higher education to the City's urban poor. As the largest urban university in the nation, with a history of no or low tuition and an open admissions policy, CUNY is a major vehicle to higher education for Puerto Ricans and other Hispanics in the New York metropolitan area. A review of available data on Hispanic enrollees at CUNY parallels the patterns exhibited at the national level: historically low levels of representation until the implementation of the open admissions policy in 1970; heavy concentrations in the community colleges; low transfer rates from community to four-year colleges; high attrition and concomitant low graduation rates from both community and senior colleges.

In 1969, there were 5,425 Hispanics, 4% of the 135,626 undergraduate student population. By 1976, the proportion of Hispanics enrollees had nearly quadrupled, growing to 14.9% (N = 25,959) of the student body. Additional proportional and numerical gains were recorded during the following three years (in spite of a considerable decline in CUNY's total undergraduate student enrollment, which particularly affected white ethnics) and by 1979, Hispanic enrollment had reached 17.4% (N = 27,949)

of total undergraduate enrollment. This proportional gain of 2.5 percentage points from 1976 to 1979, however, represented a numerical gain of only about 2,000 students (CUNY's Ethnic Census, Fall, 1979, Table 3, p. 107).

The most comprehensive and significant study of Hispanic students at CUNY to date is that by Lavin et al. (1979, 1981) of ethnic groups that entered CUNY under open admissions. The sample consisted of over 35,000 students who entered CUNY's senior and community colleges in 1970, 1971, and 1972, and included various data sources, such as student academic and other official records maintained by the University. Lavin's study (1979) confirmed findings of other national studies on Hispanics:

- . Hispanics and Blacks were more likely to enter CUNY's community colleges than senior colleges (p. 63).

- . The graduation rates for Hispanics in the community colleges were significantly lower than those for whites, and in the senior colleges they were, in most cases, even lower than those for blacks (p. 82).

- . Hispanics were more likely to drop out from both the community and senior colleges than the other ethnic groups (p. 82).

- . When compared to national data, CUNY's senior college open admissions students compared favorably with their national counterparts, with one exception, Hispanics,

whose records "clearly" fell below the national figures (p. 84).

. Hispanics were less likely to transfer to a senior college than white ethnics either after or prior to completion of their Associate degree (pp. 76-77).

It should be noted that of all Hispanics, Puerto Ricans, who constitute the majority of students in our study, have about the lowest college completion rate of all minority groups in the nation, including Chicanos and blacks, and that Puerto Rican men fare even worse than male Native Americans (U.S. Commission on Civil Rights, 1978, p. 14).

Perceptions of Hispanic progress in access to higher education are based on the traditional perspective of the two-year community colleges as the great equalizer of opportunity in American society. Under this view, the public two-year institutions, generally with a low or no tuition policy, geographical accessibility, and flexible admission standards provide opportunities for higher education to the broad spectrum of non-traditional students who aspire to a college education, but who, because of either poor academic preparation, low income, limited ability, or different interests cannot attend the traditional four-year colleges or universities. In addition, the comprehensive curriculum developed by the community

colleges is alleged to better serve the diversified needs, abilities and interests of the new students. On the one hand, the technical career programs provide the higher level skills needed to compete more effectively in an increasingly sophisticated economic structure. On the other hand, the academic transfer programs provide the channels for mobility to four-year institutions for those who demonstrate ability and have the motivation to pursue baccalaureates or other professional degrees.

This view of community colleges as the embodiment of the realization of equal educational opportunity in higher education has not gone without challenge. As early as 1960, Burton Clark argued that a major function of the community colleges is to weed out low ability students enrolled in transfer programs. Through a variety of mechanisms employed by the colleges, students are channeled into terminal vocational programs or into dropping-out. This process, known as "cooling out," takes place without the students' awareness, and they are led to believe that achieving the associate degree is of equal value to the baccalaureate, or that dropping-out is due to their own failure.

Other social theorists go much further than Clark; they argue that the community colleges function as a major mechanism to maintain the existing stratification system

in American society. One notable exponent of this view is Jerome Karabel. In a persuasive essay (1972a), Karabel maintained that the community college is today's expression of submerged class conflict, historically represented in the educational arena by tracking based on social class origins. Karabel buttressed his view by pointing out the existing pyramidal structure of higher education, where the community colleges stand at the bottom within both public and private systems of higher education; the overrepresentation of working class students in these institutions; the low rate of transfer to four-year colleges among these students; the emphasis on vocational or other terminal degrees which prepare students only for sub-professional positions; and the resulting educational inflation which followed the expansion of higher education for the masses.

Unfortunately, existing social research data lend credence to each perspective. And sometimes, the very same hard data are used to support the conflicting theoretical views.⁵ Without adopting either point of view, the following observations made by social scientists with different ideological orientations warrant attention:

. The community colleges have been the primary channel to access for significant numbers of racial and ethnic minorities, including Hispanics (Astin, 1982; Lavin, et al., 1981; NCES, 1980; Olivas, 1979). This is true even

when ability is held constant (The Second Newman Report, 1973).

. Higher education in the public and private sectors is characterized by a hierarchical ordering of institutions. The community colleges stand at the bottom of the hierarchy; the research universities occupy the top positions and the four-year colleges are somewhere in the middle (Astin, 1982; Astin and Lee, 1972).

. Great disparities have been documented in the following institutional resources: educational expenditures, libraries, financial aid, research, endowments, physical plant, faculty salaries, and residential facilities, with the universities enjoying superior educational resources and the two-year colleges ranking the lowest in each of the above measures (Astin, 1982; Olivas, 1979).

. In addition to having a disproportionate share of ethnic minorities, the community colleges also serve predominantly academically underprepared students from poorly educated families with low incomes (Astin, 1982; Karabel, 1972a; Olivas, 1979; Lavin et al., 1981).

. The chances of obtaining a bachelor's degree are diminishing for students who attend two-year institutions. Although scholars disagree on the specific source or extent of this community college effect, it has been repeatedly demonstrated by various studies using different samples

and covering various time intervals that the effect is independent of the students' academic preparation (Astin, 1975; 1982; 1983; Astin and Cross, 1979; Alba and Lavin, 1981).

Taken altogether, the foregoing observations, the unequal and limited access to higher education for Hispanics and their low success rate, raise the question of whether Hispanics are indeed provided with equal educational opportunity regardless of whether the latter is defined as equal access, equal resources, or equal outcomes.⁶

Prior Research

In spite of the large amount of research on college students in general, our knowledge of Hispanic college students from the available literature is, at present, rudimentary. As Olivas (1981a), noted, there is a need for studies describing Hispanic students as well as institutional structural factors which may facilitate or hinder academic achievement. A similar observation had been made earlier by Platt (1977), who found that "research on college dropouts is characterized by a lack of knowledge about students who speak English as a second language" (p. 78). One major reason for the exclusion of Hispanics from traditional research studies has been their gross underrepresentation in higher education. Astin (1975) who

has devoted much research to the study of ethnic minorities in higher education, noted the following constraint in analyzing data in one of his early studies on college drop-outs:

While it might be informative to perform separate analysis for minorities other than blacks, the numbers are too small to produce stable results (266 Chicanos, 45 Puerto Ricans, 235 American Indians, and 1,120 Orientals). For simplicity, nonblack students will be called whites, although it should be kept in mind that these other minority groups account for about 4 percent of the two white samples. (p. 26)

Another reason was given by White (1971) in his study of individual and environmental factors associated with freshman attrition at a community college:

Foreign students were not included in the study since attrition on their part could largely be attributed to difficulties with learning English as a second language and problems stemming from failure to adjust to cultural differences. Their exclusion from this study facilitates achievement of a more accurate understanding of attrition patterns for the typical student. (p. 9)

Many other studies on minority populations in college, because of either methodological considerations, theoretical orientations or even expedience, also tend to group Hispanics with blacks and other ethnic minorities. Pertaining to this practice, one commentator has observed:

Although a few studies have been made of Hispanic groups, these are not sufficient to allow for any sound generalizations. Hispanics are often grouped with Blacks to construct a minority population. Given the possibility of important linguistic influences, it seems essential that more studies be made--both in prediction and in internal analysis--for groups having had substantially different linguistic

and cultural experiences. (Breland, 1979, cited in Olivas, 1981a, p. 10)

Astin's findings in his latest study (in which he made specific efforts to increase the number of Chicanos and Puerto Ricans) are consistent with Breland's observation in that most of the predictors of academic performance in college were not consistent across the different minority groups. The only exception was high school grades, which predicted college grades for all groups. This finding conforms to results of many studies on majority students (Astin, 1971, 1972, 1975; Lavin, 1965). Lavin et al. (1981), however, found that, in addition to academic background, ethnicity was important in predicting college outcomes for various groups, including Hispanics. Although Lavin et al. did not specify what ethnic characteristics led to the poor performance of Hispanic students in his cohorts, in general, the literature on the educational problems encountered by Hispanics on the U.S. mainland has attributed their poor educational achievement to their low socioeconomic status, earlier educational deficiencies, and to a multiplicity of other factors, some of which Hispanics share with other minorities. Particularly problematic for Hispanics are the English language requirements necessary for college entry and academic success. Rouche (1967), in a study of students who dropped out from junior colleges,

concluded that the degree of English language mastery may explain much of their academic under-achievement and their high dropout rates. Guerra (1970) reported that high Chicano dropout rates in college were largely due to English language problems. In 1976, the U.S. Commission on Civil Rights reported that, at Northeastern Illinois University, 90% of all Hispanic students needed English language assistance and that an estimated 85% of Puerto Rican students at Essex County Community College in Newark, New Jersey, required English as a Second Language instruction (p. 127). The same report described the Puerto Rican student attending college as "severely handicapped by earlier educational deficiencies, particularly in communication skills" (p. 123). From a student survey which included a small sample of Hispanic students, Podell (1977) projected that 18.7% of the Hispanic students at CUNY spoke primarily Spanish at home, while 71.8% spoke both Spanish and English (p. 83). Velazquez (1976), however, has observed that the verbal communicative skills of many Hispanic students at CUNY are rooted in colloquial English, which does not prepare them for the linguistic demands of academic life. Very recently (1984), a CUNY Task Force reporting on student retention and academic performance stated that throughout the University, students in English as a Second Language courses accounted for 4,730 FTEs

(full-time equivalent students), a jump of 50% from 1980 to 1982. The report also stated that "The size of the ESL endeavor, therefore, is equivalent to that of a medium-sized college, a college larger, in fact, than some of the colleges in the university" (ESL Subcommittee, pp. 3-4). Although the report did not specify the ethnicity of the students, a safe assumption is that the largest group consisted of Hispanics. Among the recommendations of the Task Force was a long term study of ESL programs, one aspect of which would be to determine whether ESL courses effectively prepare students for content they will encounter in courses offered in the college's standard curriculum" (p. 13).

By far the most common response of institutions of higher education to accommodate the English language needs of the Hispanic clientele has been to offer crash courses in English (usually in the Adult Education Division) or, as in CUNY, the teaching of English as a Second Language. Less common are bilingual-bicultural programs, even though the Vocational Educational Act of 1976 identified bilingual vocational programs, including those at the post-secondary level, as a priority. According to a document prepared by the New York State Education Department (1979), most bilingual higher education programs throughout the nation focus primarily on teacher education and these are sup-

ported by federal funds. Recognizing the need to extend the principles of bilingual education to higher education, the New York State Commissioner of Education appointed a task force (of which the author was a member) to prepare a position paper for inclusion in the 1980 Master Plan. Although a proposal was prepared, the recommendations were never implemented.

Several rationales have been advanced for the educational advantages of utilizing a bilingual-bicultural approach at the higher education level. Gaarder (1977) has identified the need to provide for bilinguals at the college level the opportunity to capitalize on their non-English language through course offerings in professional specializations such as political science, international law, and economics, related to foreign regions where that language is spoken. Fishman and Lovas (1970) see in bilingual education at all levels of the educational spectrum a primary means for cultural pluralism. In their view, the maintenance and development of linguistic and cultural diversity is of great value to the individual and to the nation. More recently, a group of experts also called for the extension of bilingual education beyond the elementary school level as a means to establish a "language-competent society" (Tucker, 1983). In their view, because of economic, political, military, and international exigencies,

the development of functional competency in at least two languages (English and another language) should be accorded the highest educational priority in the United States. Many institutions which have opted for bilingual programming see in this educational strategy a vehicle to equalize opportunity in higher education: first, by extending college access to a population which, because of prior inadequate schooling, recent migration, or other reasons, lacks the English language requirements necessary for college entry and subsequent academic success; and second, by providing instruction in the student's dominant language while simultaneously providing intensive English language instruction, the acquisition of which is necessary to function effectively in American society (Daniele, 1977; De Los Santos, 1975; Grosso, 1977; Otto & Otheguy, 1979; Velazquez, 1976).

Although some bilingual higher education programs have been in existence since the early 1970s, empirical studies in the area are virtually non-existent. An ERIC search conducted in spring 1980 revealed that the body of literature consists mainly of an assortment of articles on diversified subjects such as program development and implementation, rationale, management, and evaluation. Most doctoral dissertations on bilingual education have as subjects elementary and secondary school children.⁷ Of

studies dealing with bilingual higher education, there appear to be none which explore the relative merits of English as a Second Language instruction and bilingual education in improving the chances of Hispanics to successfully pursue a college education.

Scope of the Present Study

It was against this background of very little information on Hispanic college students and on bilingual higher education that the present study was undertaken. The study compares the educational performance of Hispanic students enrolled in a bilingual-bicultural program in a two-year public community college (Kingsborough Community College of the City University of New York) with the educational performance of Hispanic students enrolled at the same institution who received only English as a Second Language (ESL) instruction. Students in ESL received intensive English language instruction and attended the regular college classes. Students in the Bilingual Studies Program (BSP) received ESL instruction, but part of the curriculum was in Spanish.

The research aims of the study are threefold. First, the study describes the social and academic background of the two groups of students as well as their perceptions of their English and Spanish language communication, reading, and writing skills; the recency of their

migration; their ties to their homeland; their attitudes toward the English and Spanish languages; and the extent to which they use English and Spanish in a variety of social situations. To the author's knowledge, no such description, particularly in quantitative form, is available in the existing literature of Hispanic college students. Second, the study examines the role of each educational approach in increasing educational opportunity by determining the extent to which students in each program differ in rate of progress towards the degree, withdrawal and graduation rates. Third, the study attempts to identify the characteristics, attitudes, and behavior of students in each program that are associated with rate of progress towards the degree and withdrawal from college during the first and second semesters in college.

The major hypotheses to be tested are that student educational outcomes in each program will vary depending upon:

- . The student's language dominance configuration (the extent to which the student uses English or Spanish in a variety of social situations).

- . His/her sociolinguistic environment

- . The extent to which the student shares majority attitudes and behavior

- . Program characteristics

The ultimate objective of the study is to provide useful information on how existing services and educational practice can be improved to serve better the Hispanic clientele, which has yet to achieve educational and socioeconomic parity with the white majority population.

NOTES

¹The 1980 Census data pertaining to English language skills have basically two problems. First, they are based upon ratings of individuals who may not know English well themselves. Second, the question asked only about speaking ability, not reading or writing skills. If other English skills are taken into consideration, the proportion of Hispanic children aged 5 to 14 years with limited English skills has been estimated as 1.7 million or 73% of the total number of children in this age range living in households where Spanish was spoken. See M. O'Malley, Children's English and Services Study: Language Minority Children with Limited English Proficiency in the United States. (Rosslyn, Va.: National Clearinghouse for Bilingual Education, 1981), p. v.

²The figures cited are drawn from the U.S. Department of Commerce Bureau of the Census publications. The information pertaining to the distribution of Hispanics on the mainland by national origin comes from "Persons of Spanish Origin in the United States: March, 1980" (Advance Report), Current Population Reports, Series P-20, No. 361. (Washington, D.C.: U.S. Government Printing Office, May 1981). The regional distribution of Hispanics is drawn from "Age, Sex, Race, and Spanish Origin of the Population by Regions, Divisions, and States: 1980," in 1980 Census of Population Supplementary Reports, PC 80-S1-1. (Washington, D.C.: U.S. Government Printing Office, May, 1981) and 1980 Census of Population, Vol. 1; Characteristics of Population, PC80-1-B (issued by state) (Washington, D.C.: U.S. Government Printing Office). For capsule descriptions of the various Hispanic groups in the United States, see J. Fitzpatrick and L. Travieso, "Hispanic-Americans in the Eastern United States," Annals, AAPSS, 454 (March 1981): 98-110; A. Pifer, "Bilingual Education and the Hispanic Challenge," in Annual Report of the President of the Carnegie Corporation of New York. (New York: Carnegie Report, 1980); B. Robey, "Speaking of Hispanics," American Demographics (June 1983): 2-4. C. Russell, "The News About Hispanics," American Demographics (March, 1983): 15-25; and T. Schreiner, "Cover Story: Report Today Details Rapid Growth," USA Today, (July 14, 1983): 1A-2A.

³One of the earliest efforts to measure the extent of minority participation in higher education was a report to the Ford Foundation by Fred E. Crossland, Minority

Access to College (New York: Schocken, 1971). The lack of precise and consistent information on Mexican Americans and Puerto Ricans precluded him from including changes for these two groups from earlier decades to the 1970s. His statement warrants quoting: "It is likely that their enrollment figures were so small until very recently that comparisons with earlier decades would have little utility" (p. 25). Similar observations were made by The Second Newman Report: National Policy and Higher Education, Report of a Special Task Force to the Secretary of Health, Education and Welfare (Cambridge, Mass.: MIT Press, 1973).

⁴For a brief discussion of tracking and its implications including opportunities for higher education, see D. Lavin, R. D. Alba and R. Silberstein, Right Versus Privilege: The Open Admissions Experiment at the City University of New York (New York: Free Press, 1981). A good review of the literature, particularly at the elementary and secondary levels is provided by C. Persell, Education and Inequality: The Roots of Stratification in American Schools (New York: Free Press, 1977).

⁵See, for example, the data provided by C. Jencks and D. Riesman in The Academic Revolution (Chicago: University of Chicago Press, 1977) to support the view of the "meritocracy" in higher education. Exactly the same data are used by J. Karabel in "Perspectives on Open Admissions," Educational Record 33 (Winter, 1972): 33-44, to support the existence of class stratification in higher education.

⁶A discussion of the different definitions of the concept equal educational opportunity, and their implications is presented in J. S. Coleman, "The Concept of Equality of Educational Opportunity," in Equal Educational Opportunity ed. by Harvard Educational Review (Cambridge, Mass.: Harvard University Press, 1969), pp. 9-24.

⁷See, for example, Bilingual/Bicultural Education: Titles and Abstracts of Doctoral Dissertations (Los Angeles: California State University, School of Education, National Dissemination and Assessment Center-ESEA, Title VII, 1977), and the NCBE series, Outstanding Dissertations in Bilingual Education, 5 vols. (Rosslyn, Va.: National Clearinghouse for Bilingual Education, 1979-1983).

CHAPTER II

BILINGUAL EDUCATION: PERSPECTIVES AND ISSUES

Of all the educational approaches to meeting the needs of ethnolinguistic minorities, none has received so much attention or been subject to so much public debate as bilingual education. Although many definitions of bilingual education are used throughout the literature, in its most basic sense the term refers to the use of two languages as the media of instruction in all or part of the curriculum (Andersson and Boyer, 1970). In the United States, one of the languages is English, and the other is the native language of the students whose mother tongue is not English. In many instances the term bilingual-bicultural education is used, referring to the study of the history and culture of the target group in addition to the teaching and learning in two languages. When the more inclusive term is omitted for the sake of brevity (as is done in this report), it is generally understood to apply.

Both the practice of teaching in two languages and the question of which language of instruction is more effective for ethnolinguistic minorities have long histories. Lewis (1976) has traced bilingual education to antiquity

on the international scene. Spolsky (1980) viewed the choice of language-education policy as among the most critical complex issues facing, not just American society, but all modern industrial societies throughout the world:

The choice of language education policy is among the most critical and complex issues facing modern societies. In the world as a whole, it is the exception rather than the rule that a child comes to school already speaking the language, dialect, or variety that society and school consider to be ideal. Schools either teach in or teach the standard dialect of the standard language. For various reasons, this is seldom the variety spoken at home by most people. This sets up a language barrier between home and school, and leads to a conflict in values that is painful and difficult to resolve. (p. xiii)

According to Fishman (1976) there are at least 110 nations using some form of bilingual instruction in the contemporary world.

In the United States, some bilingual public schools existed before the Civil War and flourished in various places throughout the nineteenth century. States such as Pennsylvania, Ohio, and Wisconsin, which had large concentrations of German-speaking families, had schools in which part or all of the curriculum was in German. In fact, in response to the German population demands, the first public law allowing instruction in a foreign language on an equal basis with English was enacted in Pennsylvania in 1837. Other local communities went further than that. In a local district in Wisconsin, one-third of the funds for textbooks were specified to be spent for German

textbooks, and other school boards mandated that only German teachers were to be hired (Leibowitz, 1978).

The use of bilingual instruction was not confined to German communities. French was used in public schools in Louisiana and Spanish in New Mexico. Parochial schools have throughout their history used the language of their parishioners as a medium of instruction. Various ethnic groups, through community organizations or religious institutions, have also provided after-school classes in such languages as Chinese, Greek, or Hebrew, so that children who were learning only English in public schools could maintain their native language (Andersson and Boyer, 1970; Leibowitz, 1970; 1978; U.S. Comm. on Civil Rights, 1975).

Beginning in the second half of the nineteenth century, a series of events including the U.S. Civil War, the rise of European nationalism (which cultivated the idea of a national language as the touchstone of nationality and national culture) and the eugenics movement fostered by social scientists who were confidently offering "proof" that individuals who came from northern European stock were superior in intelligence and culture (Gordon 1975; Kamin, 1974; Kloss, 1977) exerted their influence on America. Several attempts were made to restrict the use of any language other than English in many spheres of public life. These attempts found their fullest expression dur-

ing the Americanization movement that gripped the nation around World War I. Federal agencies, state governments, municipalities, and a host of private organizations joined in the effort to persuade or coerce immigrants to forget their former origins and cultures and to take up English as their dominant language (Gordon, 1975; Kloss, 1977). Restrictive legislation was enacted in many states requiring that instruction in the elementary schools should be only in English. Leibowitz (1978) noted that in 1903, there were only fourteen states with some sort of provision requiring that instruction in the elementary schools should be in English. By 1913, the number of states with similar legislation had increased to seventeen, and by 1923, the number had leaped to 34 states (p. 6).

In the 1940s there was a short-lived attempt by the federal government to reintroduce bilingual education to educate native Americans. This effort, however, was quickly abandoned (Ravitch, 1978).

Interest in bilingual education reemerged during the 1960s, at a time when the civil rights movement was burgeoning and public officials were under enormous pressure to provide for programs that would improve the educational performance of disadvantaged or "culturally deprived" children. By the time President Johnson signed the Bilingual Education Act in 1968, Congress had already

enacted laws showing sensitivity to the long neglected rights and conditions of the nation's poor and many minorities. Included among these were the Civil Rights Act of 1964, the Voting Rights Act of 1965 which abolished the literacy test in English as a requirement for voting, and a spate of other legislation dealing with housing, jobs, manpower training programs and additional related areas that could significantly improve the condition of what Michael Harrington (1963) referred to as "the other America."

The Bilingual Education Act of 1968 (also known as Title VII of the Elementary and Secondary Education Act--ESEA--which Congress had passed in 1965 to help local school districts establish programs to upgrade the educational opportunities of disadvantaged students) provided funds to local agencies for the establishment of new elementary and secondary school programs specifically designed to meet the "special educational needs of the large number of children of limited English-speaking ability in the United States" (P.L. 90-247, Sec. 702). Children of limited English-speaking ability were merely defined by Congress as "children who come from environments where the dominant language is other than English." Under the Act, children to be helped were limited to those who came from families earning less than \$3,000 a year or whose families were re-

ceiving aid to dependent children.

The original Act was amended in 1974 (P.L. 93-380) and again in 1978 (P.L. 95-561). P.L. 93-380 addressed problems that the 1969 law did not anticipate. It provided a definition of bilingual education as a program where "there is instruction given in, and study of, English and, to the extent necessary to allow a child to progress effectively through the educational system, the native language of the children. . . ." (Sec. 703). Although the 1974 Act eliminated the income ceiling as a condition for participation in the programs, it empowered the Commissioner of Education to use as a criterion in the dissemination of grants, the number of families with poverty level incomes to be served in the programs (Sec. 721). In addition, Section 703 prohibited the use of bilingual programs for the purpose of teaching a foreign language to English-speaking children. It was thus made clear that bilingual education, as viewed by Congress, was just another compensatory program for the poor and that these programs were to be transitional in nature; i.e., the native language was allowed only until English language skills were sufficiently developed. P.L. 93-380 also provided a more explicit definition of the term "limited English ability," and, among other things, it increased appropriations (Sec. 702), authorized teacher training programs and research

(Sec. 721), and established an Office of Bilingual Education within the Office of Education (Sec. 731).

The 1978 Amendments changed the term "limited English-speaking ability" to "limited English proficiency," which was defined as individuals who, because of foreign birth, or coming from environments where a language other than English was dominant, or some other specified reason, "have sufficient difficulty speaking, reading, writing, or understanding the English language" to progress successfully through the educational system (Sec. 703). It also placed greater restrictions on the use of bilingual instruction in the classroom. Section 703 specified that the native language is to be used "to the extent necessary to allow a child to achieve competence in the English language." In addition, for the first time, a limit of two years was placed as the length of time a student could stay in a bilingual program, at the end of which the student should be subjected to an evaluation establishing the need for continued services (Sec. 721).

The 1978 law authorized funds only through fiscal year 1983. In 1983, P.L. 98-139, appropriated funds (\$139.3 million) for fiscal year 1984.

At this writing (summer 1984), several Congressional bills are pending on bilingual education. One bill, H.R. 2682, would totally eliminate the 1978 law require-

ments of native language instruction. Another bill, H.R. 5231, would continue as an option transitional bilingual education but encourage school districts to use alternative instructional methods, such as ESL (Perkins, 1984).

Although federal legislation provided the seeds for the growth of bilingual education, the major impetus for the spread of bilingual programs came from judicial rulings.¹ The most notable of these was Lau v. Nichols (414 U.S. 563, 1974), in which the Supreme Court stated that ". . . there is not equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education." According to its custom, the Supreme Court did not specify a remedy, but remanded the case to the lower court "for the fashioning of appropriate relief." The decision stated that "Teaching English to the students of Chinese ancestry who do not speak the language is one choice. Giving instruction to this group in Chinese is another. There may be others."

Thus, the ruling in the Lau case did not mandate bilingual education. And several efforts made by administrative or executive branches of the federal government to mandate bilingual education met with a great deal of resistance.² At present, the thrust is to change exist-

ing legislation to "allow the Department [of Education] to fund whatever educational approach a school district believed warranted, as long as that approach is designed to meet the special educational needs of the target population and can be justified as appropriate by the school's district" (U.S. Department of Education, 1982, p. 48).

In New York City, momentum for bilingual education in the public schools came from a lawsuit brought in 1972 by ASPIRA. ASPIRA is a national organization dedicated to the educational advancement of Puerto Ricans. The class action suit charged the New York City Board of Education with having failed to provide equal educational opportunity to its Puerto Rican and other Spanish students by not providing bilingual education. ASPIRA argued that the high truancy and dropout rates, low reading achievement levels, underrepresentation in academic high schools, overrepresentation in vocational high schools, and the low high school graduation and college enrollment rates among Puerto Rican students were consequences of the lack of bilingual education (ASPIRA v. Board of Education, Civ. No. 4002). The case was settled by a consent agreement (S.D. N.Y., August 29, 1974), of which one critical aspect was the establishment of a transitional bilingual program for Hispanic students with English language deficiencies.³

Although the agreement was of enormous significance

for Spanish-speaking students in New York City, settlements do not serve as precedents in other court cases. In addition, the settlement applied only to Hispanic students; it did not extend to other national origin students with limited English language skills. Furthermore, in spite of the fact that the settlement is legally binding on the parties, its terms have been difficult to implement fully. As recently as 1982, ASPIRA had to go to court again charging violation of the consent agreement by the Board of Education.⁴

The enactment of the Bilingual Education Act and the judicial decisions spawned programs throughout the country and encouraged state legislatures and local municipalities to enact legislation enabling the establishment of bilingual educational programs. According to a report from the Secretary of Education to the President and Congress (1982), by 1981, thirty states had enacted bilingual education legislation, with twenty-two of these providing their own funds. The same report indicated that there were approximately 3.6 million school-age children, aged four to eighteen, whose home language backgrounds are other than English and who are of limited English proficiency as defined by the current Bilingual Education Act. Of the 2.4 million children aged 5 to 14 in this category, nearly 60% were receiving the same instruction as the children

whose native language was English; i.e., they were not receiving any special attention. Only 23% were receiving so-called "bilingual instruction," which was very loosely defined as "instruction in the language arts of the home language and/or instruction using the home language as the medium of instruction in other content areas and instruction in the English language" (p. 33). An additional 11% received ESL without instruction through their home language.

Pertaining to adults, the U.S. Secretary of Education reported in 1982 that: "There is, as yet, no source of reliable information on limited-English proficiency adults . . . much less how many of them are in need of programs to increase their job skills and employability" (p. 13). The federal government, however, has supported vocational education and services for special populations since the 1968 Amendments to the Vocational Education Act of 1963. The first legislation specifically identifying persons with limited English-speaking ability as target populations for training was the Comprehensive Employment and Training Act of 1973 (CETA). CETA did not mandate bilingual vocational training, but did provide a broad range of employment, training, and support services for limited English-speaking enrollees. Support for bilingual education for adults was authorized through the Adult Education

Act (P.L. 91-230 as amended) and the Education Amendments of 1974 (P.L. 93-380) to the Vocational Education Act of 1963. The bilingual instruction provided under both Acts was again transitional and compensatory in nature. The services allowed by the Adult Education Act were limited to programs that would enable adults to acquire basic skills, to continue their education to at least the high-school completion level, and to secure training to enable them to become more employable, productive, and responsible citizens. Part "J" of the 1974 Education Amendments authorized the Commissioner to provide bilingual vocational training to persons of limited English-speaking ability who were unemployed or underemployed and were unable to benefit from English language vocational training because of their language handicap. The Education Amendments of 1976 (P.L. 94-482) extended provisions beyond bilingual vocational training to include bilingual vocational-instructor training and the development of bilingual vocational-instructional materials, methods, and techniques. The 1976 Amendments also specified that each fiscal year 20% of the State's allotment for vocational education must be set aside to train disadvantaged persons (defined as those who have academic or economic handicaps) and persons with limited English ability. Of this 20%, a "minimum portion" (defined as the ratio of the limited

English-speaking population of the State, aged 15 to 24 to the total population of the State, aged 15 to 24) must be used for persons with limited English-speaking ability (Part A, Sect. 110 [b] [1], Sect. 102 [a]). In addition, Section 110 (c) of the Act specified that at least 15% of the State's allotment for vocational education be used to pay up to half the cost of vocational education for persons who had completed or left high school and were enrolled in educational programs below the bachelor's degree level, or persons who had entered the labor market, were unemployed, or enrolled in educational programs for which credit towards a degree was not provided.

Hence, any institution of higher education can provide assistance to persons of limited English-speaking ability through adult vocational bilingual programs, whereas two-year community colleges can also do so through the regular career degree granting programs. But as indicated earlier, higher education has been reluctant to utilize this option. This reluctance is undoubtedly due to the many issues surrounding bilingual education.

Issues

The bilingual education that reemerged in the decade of the 1960s has produced a large number of varied programs and a vast literature. In spite of the large number

of programs throughout the nation, countless numbers of evaluations, and even some hard data, there is no consensus among theorists or practitioners in the field, let alone among school administrators, politicians, legislators, and the general population on the merits of bilingual education.

The debate over bilingual education involves a wide range of issues, some of them educational; others are social and political in nature, and others extend beyond these areas.⁵ The educational issues involve both theory and practice, and tend to cluster around a few overlapping themes. Paramount among these themes are questions concerning the causes of the academic retardation found among Hispanic children; whether schools can be expected to improve substantially the academic performance of such children, and if so, through what types of curricular experiences. There are also questions about the nature and goals of bilingual educational programs; the role of the federal government and the local community, as well as about the assumptions, approaches, and criteria used in the evaluation of these programs. Since the educational system reflects in microcosm the values, goals, and power constellation of the larger society, social and political questions tend to merge with the educational debate.

The focus of bilingual education nationwide has

been on the primary schools. There has been little discussion in the literature of issues surrounding bilingual education and ESL in higher education. The literature on issues reviewed in the following sections pertain largely to elementary school children. However, in many respects, they are equally applicable to higher education students.

Causality

At the time of the resurgence of interest in bilingual education two major competing theories prevailed in explaining the progressive retardation and gross academic failure of Hispanic and other minority students: the cultural deprivation (also known as the cultural deficit) and the cultural relativism hypotheses. A third theory, that of genetic inferiority, had been acceptable only to a tiny minority of social scientists but was revived in the late 1960s (see Jensen, 1969).

The cultural deprivation hypothesis focuses on the characteristics of children and their families as the basic source of academic retardation. According to this view, students come to school with a set of values, skills, cognitive styles, motivations, and behaviors brought about by particular types of socialization which predispose them towards failure in school. The other perspective, that of cultural relativism, held by a number of

sociologists and critics of the educational system, attributes student failure to serious dysfunctional characteristics of the schools. Advocates of this view maintain that minority children and their families do not have deficient cultures; they are neither dull nor stupid; they are well prepared to cope with the life experiences that they encounter in their environment. It is only when mainstream values and standards are used, such as those prevalent in the schools, that these children seem inadequate. From this perspective, only substantial changes in the structure, content and goals of school systems would improve academic achievement among lower class and minority children. Among the immediate targets for change were the prevailing middle-class cultural ethos of the schools, the imposition of mainstream values and standards of behavior, and the recognition of cultural diversity in the schools.

Most of the special educational programs established in the 1960s were based on the cultural deprivation theory. These efforts, as stated by Gordon and Jablonsky (1968), were directed at "overcoming or circumventing assumed deficiencies in the background, functioning, and current experience of children from economically deprived, culturally isolated, and/or ethnically segregated families" (p. 268). Although their intent was still the successful assimilation of the poor and the culturally differ-

ent into American society, efforts were made to bridge the gap between the culture of the home and the culture of the school.

Parallel with the emphasis on culture and the need for changes within the school system, attention was drawn to the language barrier created by the schools with the English-only education policy.⁶ Although the problem as it affected Mexican Americans in Arizona was recognized as early as 1917 by a survey commission from the U.S. Bureau of Education (Sanchez, 1934) and for Puerto Ricans in New York in 1938 by the first book published by a mainland author (Chenault) on this ethnic group, no comprehensive effort was made to meet the needs of ethnolinguistic minorities until the tumultuous '60s (Cordasco, 1973; Spolsky, 1972).⁷ Drawing from socio-psychological, linguistic, developmental and cognitive theories of learning, pedagogical and other rationales were advanced for introducing the child's native language as the medium of instruction in American classrooms.⁸ Basically, the theories stipulated that children whose native language is not English learn best through bilingual instruction because of the positive effect this has on the affective and cognitive domains. The use of the child's native language and culture in teaching formally supports and validates the child's own cultural traditions and values. This formal

recognition enhances the child's self-concept and promotes positive attitudes towards learning. The child will be more motivated to learn because he/she will approach learning tasks with confidence rather than fear and anxiety which inhibit intellectual growth.

On the cognitive side, the arguments posited vary, beginning with the very simple common-sense premise that children learn best and progress more effectively through school if they are taught in the language they understand. A variation of this argument is succinctly put by Spolsky (1972):

Learning in school depends on interaction--interaction of the pupil with his teachers, with his books, with his peers--and all these interactions are mediated by language. School is not just a place that teaches language; most of its teaching takes place through language, and most of its learning depends on pupil's ability to understand what his teacher says and what is in his books. Without communication between teachers and pupils, there is little chance of effective education. (p. 3)

A more complex linguistic theory posits that language is part of the total conceptual framework for viewing the world; learning a new language entails learning a new conceptualizing construct. This imposes a nearly impossible double task on the non-native English speaking child attempting to learn basic skills. Another perspective stipulates that children learn basic skills in a certain unchangeable order; each successive skill is based

upon preceding skills. For example, the skill of reading must be preceded by the skills of aural and visual discrimination, comprehension of a wide range of vocabulary, and knowledge of sentence structure and exposure to the language. Non-English native speakers generally have these skills developed to some extent in their own language to which they have been exposed for the first five or six years prior to entering school and are "ready" to begin and learn to read in their native tongue. To attempt to teach reading or any other subject in a language for which the child has no tools will only result in increasing retardation. Finally there is the view held by many educators that a person learns to read and write more rapidly in a second language if he/she is first taught to read and write in his/her native language.

It is to be noted that some of the foregoing rationales for bilingual education had been advanced as early as 1951, when a group of specialists from all parts of the world, after an investigation on a worldwide scale, commissioned by the General Assembly of the United Nations, recommended to UNESCO that "pupils should begin their schooling through the medium of the mother tongue" . . . and that "the use of the mother tongue be extended to as late a stage as possible" (UNESCO, 1951, pp. 689, 671). Mother (or native) tongue was defined by the specialists as "the

language which a person acquires in his early years and which normally becomes his natural instrument of thought and communication." Pertaining to the teaching of a second language, the committee recommended that "it should be at least postponed for as long as possible," and that it should be approached through the mother tongue. The goal of learning to think, speak, and read in the second language can best be achieved by "two short jumps (that is, from illiteracy to literacy in the mother tongue, and from literacy in the mother tongue to literacy in the second language)" (p. 699). A similar conclusion had been reached in 1945 by Cebollero (1975) after a review of research dealing with the language of instruction in most of the bilingual and multilingual areas of the world, including Puerto Rico.

Why then, do Hispanic children not learn in school? Is it because of deficits the child brings to school as a result of early socialization practices in the home influenced by the child's culture or conditions of poverty which affect his intellectual, cognitive, psychological, psychomotor and linguistic development? Is it because of the negative attitudes that teachers and other school personnel hold about the educability of these children or other dysfunctional practices within schools that retard the children's progress? To what extent are the difficul-

ties the result of linguistic and cultural differences or of socioeconomic differences or both? How are these elements to be disentangled? All of these issues remain unresolved, and even advocates of bilingual schooling see different implications in these etiological issues. To Spolsky (1972), for example, it makes no difference that the child's cognitive and affective development may have been stunted as a consequence of early environmental factors:

There are a large number of children, it is clear, who bring many of their disadvantages from home. Whatever their inherited capacity may have been, early malnutrition and the poverty of their home experiences seriously reduce their chances of development. But it is just as clear that the school itself, when it fails to recognize the implications of the language problem, creates many more disadvantaged children. Inadequate and prejudiced views of the language spoken by their pupils provide excuses for lazy teachers and incompetent education systems, who try to explain away their failures by references to nonlingual children of inferior vernaculars or sub-standard dialects. (p. 3)

Frank Angel (1972) feels that too much attention has been paid to cultural and linguistic differences. In his view, the fundamental disadvantage of ethnolinguistic minorities is attributed to their low socioeconomic status. Isolating the linguistic and cultural problems from social class membership is, however, by no means an easy task:

There are a number of troublesome questions involved in this analysis. One relates to the fact that each culture has an economic system and that the social system has a stratification system and therefore a lower social class. One of the characteristics of the lower class is poverty, which under the culture-society categorization belongs in the culture category. Another relates to the problem whether one should conceive of culture as encompassing all social groups and whether there are then social class variations of the dominant culture. Finally, there is the conceptualization of "the culture of poverty" which incorporates elements of social class and culture. (p. 43)

Fishman (1976), one of the most ardent advocates of bilingual education, feels that:

. . . on the whole, bilingual education is too frail a device, in and of itself, to significantly alter the learning experiences of the minority-mother-tongue poor in general or their majority-language-learning success in particular. It is of course true that foisting a language other than their own upon such children is equivalent to imposing an extra burden upon those least capable of carrying it. However, precisely because there are so many pervasive reasons why such children achieve poorly the goals of majority-oriented and -dominated schools (and societies), removing this extra burden above--and leaving all else as it was--does not usually do the trick, particularly when the teachers, curricula, and materials for bilingual education are as non-optimal as they currently usually are. My own feelings are that just as there is no simple school-based solution to the learning problems of the alienated in general, we cannot and should not expect bilingual education to provide such a solution for the non-English-mother-tongue-alienated-poor in particular. (p. 28)

Fishman feels that the rationale for bilingual education should be found in reasons other than "overcoming the diseases of the poor."

Paulston (1975, 1980) sees language only as an in-

tervening variable. The roots of the problem are social and economic in nature, mainly the power relationships between the ethnic/racial groups in contact. Paulston's works suggest that these in turn determine the goals, structure, quality, and content of schooling as well as the attitudes, motivations and psychological development of learners.

Cummins (1982), although agreeing with Paulston, believes that one specific pattern in the behavior of minority groups, "bicultural ambivalence," accounts for the differential achievement of ethnolinguistic minorities in the United States and in other contexts. This pattern of behavior is characterized by ambivalence and hostility towards the majority group and culture and insecurity and shame about one's native language and culture. It is brought about not by family socialization patterns, but rather by a long tradition of consistent discrimination against the minority group, including sometimes overt violence, by the majority. For Cummins, then, the patterns of relationship between majority and minority groups must be changed if educational intervention is to be effective, "since one of the major causes of minority children's school failure lies in a historically-engendered caste system . . ." (p. 19). Although language and cultural differences between home and school are important, Cummins

says, "they are not the most fundamental causes of minority students' academic failure" (p. 14). And, neither is socioeconomic status.

To summarize, the important question of why Hispanics achieve less academically than other ethnic groups is still unanswered. Different theoretical explanations have been advanced to explain this phenomenon. They range from explanations focusing on students and their families to those focusing on the schools and the context within which students learn, including the culture of the school and the medium of instruction.

It is clear that many more studies of the educational attainment process are necessary for a real understanding of the functioning of the educational system as it affects Hispanics, and the extent to which bilingual education can alter the Hispanic low school achievement pattern. Although more research is certainly needed before definitive answers can be found, studies of Hispanic college students and of bilingual higher education (such as the present study) are clearly one important key to understanding patterns of success or failure exhibited by Hispanics in higher education.

Reversibility. The different points of view on the causes of the low academic performance of Hispanic children correspond closely to the controversy pertaining to

reversibility. Can the schools overcome the educational handicap exhibited by Hispanic and other lower-class minority children when they first enter school, and if so, to what extent? To genetic determinists, the answer, of course, unequivocally is "No." No educational program, however enriched, can push the child beyond his innate potential (Jensen, 1969).

But even among those who see the academic gap between majority and minority children as a result of environmental factors, there are different opinions as to whether appropriate educational programs can exert any influence on the educational achievement of minority children. Some experts hold the view that minority students, regardless of whatever handicaps they bring to school are educable; all that is needed is appropriate curricula, adequate teachers, and adequate support services and teaching strategies. The immediate target of change, for these advocates, is the school. This view, interestingly enough, has been extended to higher education and is implicit in the many higher education special programs for disadvantaged students that emerged throughout the nation in the 1960s (Astin, 1972) and in open admission policies. Cross (1974, 1976) argued that the many non-traditional college students who flooded the universities under open admissions are educable, provided the students are given

instruction that is appropriate and relevant to their needs and that they are given the necessary support services to overcome their learning difficulties. The study by Lavin et al. (1981) provides evidence that these students can succeed in higher education.

Doubts, however, pertaining to the ability of schools to reverse or mitigate the educational handicaps of minority students were expressed in the Coleman report (1966). Coleman's task was to assess the relative impact of a series of family background measure and school characteristics on the academic achievement of students from six ethnic groups: whites, blacks, Puerto Ricans, Mexican-Americans, Orientals, and native-Americans. His major conclusions were:

. . . schools bring little influence to bear on a child's achievement that is independent of his background and general social context; and that this very lack of an independent effect means that the inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront adult life at the end of school. (p. 325)

Subsequent reanalyses or close examination of the original Coleman data have exposed serious methodological weaknesses in the survey (Levin, 1976; Spady, 1976; Wiley, 1976) and concluded that, contrary to popular belief, the EEO survey has not established that schools cannot exert an influence on the achievement of minority children. In

fact, studies using different methodological models have demonstrated the opposite (e.g., Heyns, 1978; Levin, 1976). Schools do exercise powerful effects on students' achievement but these effects are found within schools. Coleman's design was sensitive to differences between schools.

Implicit in the Congressional legislation providing for bilingual education is the assumption that appropriate educational programs can compensate for the original deficiencies that Hispanic children bring to school. But, as indicated earlier, even advocates of bilingual education differ in their opinion as to whether the schools, through the implementation of bilingual programs, can significantly alter the achievement of the students. Unfortunately, actual research evaluations of bilingual education programs existing throughout the nation have not resolved the issue. Some studies have revealed significant improvement among elementary school children in English reading and language arts, science, math, and social studies as well as in non-cognitive aspects of behavior, such as self-concept, whereas other studies, in particular national evaluations, have reported no significant improvement. Although the nature and validity of these evaluations have become in themselves another issue (to be discussed later), there still remain sharp differences over whether

bilingual education programs can reverse or arrest the sub-standard academic performance of ethnolinguistic minorities.

Curriculum

The term curriculum is used here very narrowly and refers to those activities in the classroom that affect what students learn. Perhaps the major curricular issue (as evidenced by pending Congressional legislation) is still between those who favor bilingual education as the most effective educational approach to meet the needs of ethnolinguistic minorities and those who advocate some form of special English instruction (without bilingual education), such as English as a Second Language (ESL). English as a Second Language is a formal instructional method designed to teach English to non-native speakers of the language. Although the specific ESL methodology and techniques may vary according to different theories of language learning, the age of the students and other factors (Finocchiaro, 1972; Ney, 1978), the method generally emphasizes the development of listening comprehension and speaking skills as a prerequisite for reading and writing skills.

Among the proponents of the ESL-only approach are teachers, school administrators, local educational board

members, and public officials, who believe that the greatest need students of limited English ability have is to learn English as quickly as possible so that they can profit from regular instruction and ultimately participate fully in all aspects of American life. This is best accomplished through immersing the student in an all-English environment, with subject-matter instruction in English and special instruction in English through ESL. Although a major function of bilingual education as generally practiced in the United States is to teach English, many of those who support ESL believe that bilingual education only retards the learning of English, and in some instances, may even preclude it. What the students need is more English, not less. The following comment from a federal government official is illustrative of this attitude:

Bilingual vocational training was provided by some projects, but the view underlying most CETA training was that English should be used as much as possible and the native language only when necessary. Based on years of experience, most program staff were convinced that vocational training was not enough; to get and hold good jobs and to advance on the job, the participants must learn to communicate in English. (Joint Report, 1982, p. 61)

Other educators expressed their views this way:

. . . prolonged dependence on the primary language and delayed transition to English instruction only handicaps the child in gaining the skills necessary to succeed in American society. (American Teacher, October 1980, p. 2)

In school, . . . they attend most of their bilingual classes surrounded by other non-English-speaking children, while getting most of their instruction in their native tongue. After school, they return to a neighborhood where once again little if any English is spoken. The burden of teaching them English falls on a minute portion of their day. Since they are given to understand that bilingual instruction will prevent them from falling behind in their academic subjects, there is little incentive for them to speed their mastery of English. (Hechinger, 1981, p. C4)

Many school administrators, although sympathetic to bilingual education, favor ESL for fiscal and practical reasons. In school districts, where the immigrant population keeps on shifting and where the native languages are many, separate bilingual programs are extremely costly. In addition, competent teachers in some or all of these languages are simply not available; even less available are adequate textbooks or teaching materials. A competently trained ESL teacher, on the other hand, they argue, can handle many different languages in one class.

Others object to bilingual education because they see it as a political movement, concerned with jobs and power rather than with the education of children; they also criticize the use of tax monies to support these movements, as the following remarks show:

Another important point to bear in mind is that in many schools the bilingual program has become in effect a political and ethnic power base, not primarily concerned with teaching children English and moving them into the mainstream as soon as possible. Such programs function as permanent ethnic and na-

tional enclaves in the school, behaving as if it were more desirable for our country to become multilingual than for the children to adjust to the country. This approach is very damaging to the children and must not be permitted--certainly not with public funds. (Shanker, 1978, p. E7)

There is no question that bilingual-bicultural education policy has been governed in large measure by the Hispanic American quest for more political and economic power and prestige. The policy has, in fact, become perhaps the largest federally funded expression in this country of the ethnic political wave that has swept the globe over the past 20 years or so, a phenomenon which has been preoccupying many scholars. (Epstein, 1977, p. 38)

Many people within educational systems and among the public at large believe that recognition and acceptance of non-English languages and cultural diversity in the schools will expand to other areas of public life, undermining or replacing English as the national language. In addition, since language and culture serve the double function of bringing members of ethnic groups closer together and shutting out members of other groups, they believe that bilingual education, with its emphasis on language and culture maintenance, may foment negative attitudes towards the majority group and culture leading to political divisiveness and social strife.

Others hold the opinion that the federal government should not be "pushing" any educational technique, least of all any "unproven" technique, such as bilingual education. Historically, they say, the choice of educational

programs has been the function of the local community, according to local conditions, resources, and needs. The federal government oversteps its bounds by proposing regulations that would force local school districts to offer bilingual education. When the Department of Education under its first Secretary (Shirley Hufstedler) issued a set of proposed regulations in 1980 mandating bilingual education for compliance with Lau v. Nichols, statements such as the following were common:

While the court demanded that something special be done, it left open the question of the specific program to be used. It was to be left to educators to decide what was the best educational method . . . and to local school boards, elected by the people in their communities to oversee the schools. It was appropriate for the federal government to state and define the law, right for qualified, professional educators to find the best educational methods and within the political province of local school boards to adapt programs to local conditions and needs

Should the U.S. government impose particular educational programs? Can it mandate programs that are still experimental and whose superiority has not been demonstrated? Can it override professional judgment and local control? Should it impose huge new costs on hard-pressed local school districts? (Shanker, 1980, p. 6)

There are, also, those who question the need for any kind of special help to Hispanic or any other non-native English speakers. In their view, no such help was available to earlier immigrant groups; yet, they were able to assimilate successfully into the American culture.

The perpetuation of federally mandated bilingual programs is educationally and socially untenable. . . .

Before the advent of bilingual education rationales, numerous immigrant groups succeeded in both absorbing this country's culture and in reaffirming their own ethnic identity. (Stoller, 1981, p. 32)

To these and several other charges, supporters of bilingual education respond that many of these arguments are based on misconceptions of the nature and purpose of bilingual education and/or other historical facts.

In an extensive discussion of the issues, Otheguy (1982) clarified some of the misconceptions. It is a fallacy, he said, to compare the new Hispanic groups to earlier European immigrants. Besides obvious differences in the culture, language, history, and racial composition of the groups involved, there are also differences in the political, economic, and social climate of the nation, in the requirements of schooling for social mobility, and in the role played by the federal government in the history of these groups. Similarly, it is erroneous to believe that the quest for the preservation of language and culture by some language minority groups tends to lead to the elimination of English as the national language or to social and political strife. Historically, religious and economic differences have accounted for more social unrest than language differences. Although there are many differences in the nature and goals of bilingual educational

programs in the United States, a major purpose is to teach English, and an English as a Second Language component is usually an integral part of these programs. Rather than promoting social strife, bilingual education is more likely to promote the integration of ethnolinguistic minorities into American society by improving their academic achievement, encouraging parental and student participation in the educational process, and recognizing their language and culture.

Andersson and Boyer (1970), Fishman (1976), Lewis (1980), Parker (1977), Tucker (1983), and Da Mota (1983), to mention but a few, have tried to dispel the notion that social fragmentation is an inevitable outcome of bilingual schooling. Parker (1977), for example, observed that language is often a symbol used as a rallying point, whenever there are other social tensions caused by economic, political, or other social factors. Tucker (1983) brings out a point often overlooked: that the policy to encourage bilingualism through bilingual instruction in Quebec was specifically intended to lessen the probability of separation. In addition, they have pointed out that there is ample evidence documenting that two or more languages can peacefully coexist within any given society, with each language assuming a different function.

More straightforward counterattacks, sometimes made

with a degree of objectivity (Andersson and Boyer, 1970; Gaarder, 1977, 1978; Fishman, 1976, 1977; Otheguy, 1982; Paulston, 1980; Willard von Maltiz, 1975) state that:

- . It was precisely the failure that resulted from immersing non-English speaking students in a monolingual school system (with or without ESL) that prompted the revival of bilingual education;

- . Parents have a right to educate and rear their children in their own image, language, and culture;

- . The preservation of minority languages and cultures is an asset to the individual, to the ethnic group, and to the nation;

- . When implemented properly, bilingual education is an excellent device for second language teaching; it has the additional advantage that students can progress "normally" through the curriculum without retardation in content areas;

- . Bilingual education can foster national unity and dissipate sociopolitical tensions by enhancing the functioning of ethnolinguistic individuals and groups (who had hitherto felt alienated and excluded from participation in major areas of American society, including the school system) and by promoting understanding, tolerance, and respect for ethnic and cultural diversity;

- . The role of the federal government in education

is not a static one and has changed with shifting political and other social factors. In addition, there are no criteria by which to assess whether bilingual education should be supported by public or private funds.

. English is not, nor has it ever been, the exclusive language of education in the United States, nor of the federal government or its agencies.

. Many objections to bilingual education stem from self-interest and the desire for certain groups to maintain political and economic gains. Those who have power would prefer to depoliticize bilingual education or to banish it from the American scene.

Parker (1977) and others (Paulston, 1977, 1980) have observed that implicit in the bilingual education versus ESL debate is the assumption that one technique must naturally be better than the other and that it works for all students in all settings and situations. Yet the available evidence on academic achievement or second language learning indicates that method or technique by itself does not explain the enormous variation within or between groups. Many other factors play a role, i.e., personal characteristics of the students, and social, cultural, and situational factors.⁹ In a discussion of different approaches used to teach second languages, Chastain (1970) summarized this view as follows:

Certainly the evidence at present lends little support to a continued search for the one way to teach. Teachers, students, and the many components of language itself are too varied to justify insistence upon one particular method. The better question would be to ask which approach should be used with which students by which teachers and for which aspects of the language. (p. 233)

The bilingual education versus the ESL debate is often obfuscated by a lack of consensus among practitioners themselves or supporters on program goals, program design, or methodologies to be used. Pertaining to the goals of bilingual education programs, federal policy has clearly evolved towards a unified consensus: to provide equal educational opportunity among students who have little or no command of English and to promote the learning of English. Although many supporters of bilingual education tend to concur that federal goals are too narrow, great disagreement exists among them. Gonzalez (1978), for example, after interviewing administrators, teachers and support staff in bilingual programs in several midwestern cities, found at least seven major goals of bilingual education, each associated with a different ideological orientation. Ferguson et al. (1977) listed ten. The greatest disagreement, however, is between those who favor bilingual education in order to achieve social, moral, and political goals and those who would prefer to leave it only for educational purposes, whether of majority, minority or both. One ar-

dent exponent of the former view is Gaarder (1977, 1978) who sees in bilingual education a means to achieve "cultural autonomy" and social justice for those language minority groups (Chicanos, Puerto Ricans, and native-Americans) who have been subjected to "compulsory bilingualism." Fishman (1976), although recognizing social and political goals as viable aims of bilingual education, would prefer to leave it to pursue educational goals, such as personal or cultural enrichment, second language learning, and international understanding. Lewis (1980) sees as the major task of bilingual education the maintenance of traditional ethnic subcultures while simultaneously promoting the development of the national culture by providing the conditions whereby each type of subculture reinforces and supports the other. Parker (1977) sees the central task to be the education of children, but Paulston (1980) views non-educational goals as perfectly legitimate and justifiable.

Dissent also exists over the design of the programs. Although there are many models of bilingual education programs and several classifications have been suggested (Fishman, 1976; Mackey, 1978), the greatest controversy surrounds those classified as "transitional" versus "maintenance" programs. In transitional programs, the bilingual component of the student's education is considered temporary until the student is ready to assume regular Eng-

lish instruction, at which point, he is mainstreamed into the regular classroom. At present, federal policy and many states support only this type of program. In maintenance programs, the bilingual-bicultural instruction is established as a permanent part of the education of language minority (or language majority) students, and theoretically, should continue throughout the educational life histories of individuals, including higher education, as currently practiced in Wales. Bilingual education advocates generally tend to support only the latter programs.

At the heart of the controversy over transitional versus maintenance programs is the issue of what function schools should pursue: ethnic assimilation or cultural pluralism. Different definitions of these concepts by advocates and opponents of bilingual education tend to compound the problem.¹⁰

Other persistent curricular issues are: When should the native language or second language be introduced? In which language should each subject be taught? Should some or all be taught in both? How much time should be devoted to each language? In the earliest stages? In the later stages? What are the pros and cons of using only one bilingual teacher? Team teaching (one for each language)? Should the teacher be of the same ethnic group as the target population? Which are the most effective methodologies

and for which groups? To these and many other curricular questions, answers are still being sought.

Research and Evaluation

Many policy makers, school administrators and the public at large look upon research and evaluation for clarification of the issues. Many scholars, however, have observed that by and large, research on bilingual education has been unplanned, uncoordinated, and fragmented.¹¹ Furthermore, because of the diversity of programs and sociocultural contexts, it is difficult to generalize from one study to another (De Avila and Duncan, 1980; Fishman, 1977; Paulston, 1980). One main issue, however, which has received research attention both in the United States and abroad, has been the major theoretical rationale on which bilingual education in the United States was established: the native language hypothesis first postulated by the UNESCO specialists in 1951, and embodied in several documents supporting the use of bilingual education (see, for example, U.S. Commission on Civil Rights, 1975). These studies have been reviewed by several commentators (Baral, 1980, 1983; Engle, 1975; Paulston, 1977; 1980; Tucker, 1977; Troike, 1978). Baral (1983) has summarized the studies as falling broadly into two categories: (a) studies that test the negative version of the hypothesis, which

postulates that students receiving instruction in a second language will perform poorly; (b) those testing the positive version of the hypothesis which posits that students receiving instruction in their native language will achieve greater mastery of a second language and of content subjects. The studies, as acknowledged by the reviewers themselves, reflect different political and sociocultural contexts in different nations and settings. They also differ in methodological quality, theoretical orientation, nature and length of bilingual instruction, and subjects for study, among other critical dimensions. Therefore, it is not surprising that the studies and the reviews tend to reach divergent conclusions.

Engle (1975), after examining 24 reports from nations including the United States, Mexico, Uganda, the Philippines, South Africa, and Ireland, concluded that most studies did not provide substantial evidence as to whether learning first in the native language or in the second language was better. Engle, however, conceded that there were many flaws in the studies reviewed. Tucker (1977) examined a small number of carefully implemented longitudinal evaluations of bilingual education projects in Canada, the United States, and the Philippines. Drawing from his examination and other more extensive reviews, he concluded:

The data reviewed to date do not permit us to conclude categorically that children introduced to schooling bilingually or in their vernacular language will ultimately develop greater academic, cognitive or linguistic proficiency than those children who are introduced to schooling exclusively via the second language (provided that they remain in school for comparable periods of time). This statement should not, in any way, be interpreted to imply that programs of bilingual education are undesirable or that they may not, over the long run, enhance the child's academic or social development. (p. 29)

Paulston (1977, 1980), on the other hand, feels that studies in Sweden (Skutnabb-Kangas and Toukomaa, 1976) provide "solid evidence" that teaching first in the native language is beneficial. Pertaining to the evidence in the United States, after examining twelve Ph.D. dissertations she concluded that "in general . . . bilingual education shows rather favorable effects on pupils' achievement, attitudes, self-concept, etc." (1977, p. 125). Her conclusions, however, were modified because of many weaknesses in research designs, researchers' biases, and "halo" effects which could have accounted for these findings.

Dulay and Burt (1979) found "fairly substantial research evidence" documenting the effectiveness of bilingual education in the United States in improving the academic performance of non-English dominant students in English reading and language arts, science, mathematics, and social studies. They initially examined 38 research projects and 175 evaluations of programs that were in operation dur-

ing the first ten years that bilingual education was in operation in the United States. After eliminating those which did not meet minimum research design standards, they found that more than half of the findings of the studies which survived the selection process indicated that bilingual education worked significantly better than monolingual instruction in improving the academic performance of non-English-speaking students or students of limited English-speaking ability.

A federal evaluation of bilingual programs funded under Title VII, conducted by the American Institute for Research (AIR, 1978), reached a different conclusion. The study examined 38 projects in the United States and included over 11,500 students. It found that students in Title VII bilingual programs performed at a lower level in English language arts than non-Title VII students and about the same level in Mathematics. More recently, from a literature review, Baker and de Kanter (1981) of the Office of Planning, Budget and Evaluation of the U.S. Office of Education concluded that "there is no firm empirical evidence that TBE [transitional bilingual education] is uniquely effective in raising language-minority students' performance in English or in non-language subject areas" (p. 16). Both the AIR study and the Baker and de Kanter report have received severe criticisms on methodological

grounds and for unwarranted conclusions (Dulay and Burt, 1979; Campbell and Gray, 1981; O'Malley, 1978).

The most recent review (Baral, 1983) of studies in the United States and abroad testing the native language hypothesis concluded the following:

Both the positive and negative versions of the native language hypothesis appear to have considerable explanatory power when applied to minority language students. The benefits of the native language approach may not be detected in the early grades, but appears to be cumulative if the students remain in bilingual programs throughout the elementary years. However, the positive results of the immersion programs with middle-class speakers of dominant languages directly contradict these findings and demonstrate that there are limits to the generality of the native language hypothesis. (p. 10)

The immersion programs referred to by Baral in the above quotation are those bilingual programs which now exist in virtually every province in Canada (Cohen, 1976; Cohen and Swain, 1976; Derevensky and Petrushka, 1978; Swain and Lapkin, 1981; Tucker, 1977, 1980). Their primary aim is to produce "functional bilinguals," (ability to function in two languages, in this instance, English and French). In these programs, English Canadian students are generally initially taught only in French and after a specified period of time they are then given instruction in their native language. Sometimes a distinction is made between "early" versus "late" immersion programs, and this refers to the grade level at which the second language is

introduced. In other instances, a distinction is made between "total" versus "partial" immersion and this refers to the proportion of teaching done in the first language.

Perhaps the most widely known of all the Canadian immersion programs is the St. Lambert Experiment, the success of which gave impetus to the proliferation of immersion programs throughout Canada. The project was initiated in 1965 with an experimental group of native, English-speaking children who began kindergarten in an English Canadian elementary school. From the very first day, the entire curriculum throughout kindergarten and the first grade was in French. In the second grade, English was introduced as a subject for the first time. Students received approximately one hour of instruction per day in English language arts. Gradually, instruction in English was increased, so that by the end of the fourth grade (the last grade covered by the original report [Lambert and Tucker, 1972]) about 40% of the total instruction was in English (mostly in non-cognitive subjects such as art, music, physical education and the library period), and the remainder in French. During the entire course of the original project, the students received no special instruction in French as a second language and the curriculum was in no way modified to allow for any specific problems which might have arisen due to difficulties with the French language.

The program was subjected to an intensive longitudinal evaluation beginning in 1966, when the first experimental group started the first grade. Lambert and Tucker were interested in finding out whether the home-school language switch resulted in native language or subject-matter deficiencies as well as determining the impact of the all-French curriculum on second language development. The progress of the experimental group was compared each year with carefully selected control classes consisting of native English speakers and native speakers of French who followed a traditional curriculum in their respective native languages. The children in the experimental and control groups were equated in intelligence and socioeconomic status. Results showed that pupils in the first experimental and follow-up groups showed a lag in English language and French language skills by the end of the first year. This initial disadvantage, particularly in English language skills, disappeared. By the end of the fifth year, the experimental groups had developed academically, cognitively, and linguistically at par with the English speaking students who had followed the conventional curriculum in their native language. In addition, the experimental groups developed a competence in French listening, comprehension and speaking skills that was deemed to be far superior to that of the English control group who followed

the traditional French as a Second Language program, and also demonstrated a greater awareness and empathy towards French-Canadian culture without any adverse effect on their ethnic identity. When compared to the French controls, however, the French language skills of the experimental group, although good, lagged behind in several speaking and decoding measures.

Several reports have described the St. Lambert students' progress after the fourth grade (Lambert, Tucker and d'Anglejan, 1973; Bruck, Lambert and Tucker, 1974, 1975). Summarizing research on these students, Tucker (1977) stated the following:

Thus far, after 11 years, we are satisfied that this novel program of second language teaching has not resulted in any native language (i.e., English) deficit, and that the pupils have developed an ability to understand, speak, read and write French in a way that English Canadian pupils who follow a traditional FSL (French as a Second Language) program never do. (p. 10)

The pupils' speaking and writing performance in French, however, although good, still remained distinguishable from native speakers of French.

The superiority of immersion education over other traditional methods of teaching a second language has been reported in many other studies throughout Canada (Cohen, 1976; Cohen and Swain, 1976; Tucker, 1977, 1980; Swain and Lapkin, 1981).

Several efforts have been made to draw parallels between the Canadian experience and the "sink or swim" situation (sometimes referred to as "submersion" education) to which many language minority students are exposed in the United States. Many scholars, however, have warned against these efforts (Lambert and Tucker, 1972; Cohen, 1976; Cummins, 1979, 1982; Baral, 1983; Paulston, 1977, 1980; Tucker, 1977, 1979). Cohen (1976) listed eight important pedagogical differences in the experiences of language minority students (not in bilingual education programs) in the U.S. and those of students in immersion programs. In addition, there are important differences embodying sociolinguistic and sociocultural dimensions. It is possible, as Baral (1983) has suggested, that differences in instructional patterns or conditions, and in parental, teacher, and interethnic attitudes, either in specific combinations or altogether, can account for the observed differences in student achievement. It is also possible, as Paulston (1977) and Cummins (1979, 1982) have suggested, that the roots of the problem are fundamentally social in nature, although they may be manifested in personality patterns or in group processes and structures within the Hispanic community itself or in interaction with other groups.

In sum, it is clear that there has been no resolution of the basic issues surrounding Hispanic low school achievement. From causality to solutions the controversies continue. This may be partly because the issues are in many respects confounded by ideological positions. It is also likely that perspectives on academic achievement developed in different historical periods and partially tested on majority or minority groups with different languages or vocabularies, lifestyles, values, and skills in interpersonal relations are not applicable to Hispanics. One must be careful not to use data on one ethnic group to generalize about other groups.

Altogether, we do not dare to assume a clear-cut relationship between language and Hispanic academic achievement. Many forces seem to be at work: the personality or characteristics of the students (of which language is only one aspect), the social context within which students learn, and the American society at large, with its egalitarian values of opportunity and achievement, on the one hand, and its long tradition of prejudice and discrimination against minorities, on the other. A full understanding of academic achievement will require maximum information on all three levels and their interaction with one another. Although scientific investigations from a variety of disciplines aimed at explaining academic

achievement among majority populations, and to some extent, blacks, have been slowly accumulating, no such endeavors have been directed at Hispanics. At best, the evidence that is available is mostly descriptive, and although it does document the enormous disparities in educational achievement between Hispanics and white ethnics, more research is needed to understand the problem in all its dimensions, so that adequate prescriptions can be formulated. This study, although limited in scope, is a preliminary effort to begin to fill the gaps in our knowledge of Hispanic achievement in higher education.

NOTES

¹Two summaries of various legal decisions affecting bilingual education in the United States are H. Teitelbaum and R. J. Hiller, "Trends in Bilingual Education and the Law," in Bilingual Education, ed. by H. LaFontaine, B. Persky and L. H. Golubchick (Wayne, N.J.: Avery, 1978), pp. 43-47 and P. A. Zirkel, "The Legal Vicissitudes of Bilingual Education," also in LaFontaine, Persky and Zirkel, pp. 48-51. In-depth discussions of the various legal issues in bilingual education are H. Teitelbaum and R. J. Hiller, "The Legal Perspective," in Bilingual Education: Current Perspectives: Law (Arlington, Va.: Center for Applied Linguistics, 1977), and U.S. Commission on Civil Rights, A Better Chance to Learn. U.S. Commission on Civil Rights Clearinghouse Publication No. 51, May 1975, Appendix A.

²The latest efforts to mandate bilingual education were made by the newly created Department of Education under President Carter's administration. See F. M. Hechinger, "About Education: U.S. Ruling Fuels Controversy Over Bilingual Teaching," The New York Times, January 20, 1981, p. C4; G. I. Maeroff, "U.S. Plan on Bilingual Education Facing Criticism Over Approach," The New York Times, September 21, 1980; H. Rainie, "Scrap Carter's Bilingual Education Rules," The Daily News, February 3, 1981, p. 4. For earlier efforts, see J. M. Gonzalez, "Bilingual Education: Ideologies of the Past Decade," in LaFontaine, Persky and Golubchick, pp. 24-32; J. C. Molina, "National Policy on Bilingual Education: An Historical View of the Federal Role," in LaFontaine, Persky and Golubchick, pp. 16-32; U.S. Commission on Civil Rights (1975), pp. 176-179.

³The full text of the Consent Decree (the agreement resulting from ASPIRA v. Board of Education of the City of New York) appears in I. Santiago, ASPIRA versus Board of Education of the City of New York: A History (N.Y.: ASPIRA of N.Y., 1977), pp. 80-91.

⁴ASPIRA charged the Board of Education with violating the Consent Agreement because of actions that would result in reducing the number of students in the bilingual programs through changes in eligibility criteria, alteration of the process established for informing parents of the availability of bilingual classes, and other arbitrary deviations from the terms of the settlement. The Court decided that the Board of Education had erred and ordered

negotiations between the parties, which resulted in reaffirmation of the original process. See El Pitirre (Winter, 1982-1983): 1, 3.

⁵Literally hundreds of pages have been devoted to discussions of issues in bilingual education. In addition to the literature cited in this section, see: Center for Applied Linguistics, Bilingual Education: Current Perspectives, 5 vols. (Arlington, Va.: Center for Applied Linguistics, 1977); Georgetown University Round Table on Language and Linguistics: 1980. ed. by J. E. Alatis (Washington, D.C.: Georgetown University Press, 1980); N. Epstein, Language, Ethnicity and the Schools: Policy Alternatives for Bilingual-Bicultural Education. (Washington, D.C.: George Washington University Institute for Educational Leadership, 1977); R. V. Padilla, ed., Theory, Technology and Public Policy on Bilingual Education (Rosslyn, Va.: NCBE, 1983); A. Simoes, Jr., ed., The Bilingual Child: Research and Analysis of Existing Educational Themes (New York: Academic Press, 1976); M. D. Stent, W. R. Hazard and N. Rivlin, eds., Cultural Pluralism in Education: A Mandate for Change (New York: Apple-Century-Crofts, 1973).

⁶The issue of language policy in the educational system had a long history in Puerto Rico going back to the annexation of the island to the U.S. in 1898 and was not resolved until 1948. See P. Cebollero, A School Language Policy for Puerto Rico (New York: Arno Press, 1975); E. H. Epstein, ed., Politics and Education in Puerto Rico: A Documentary Survey of the Language Issue (Metuchen, N.J.: Scarecrow, 1970); Language Policy Task Force, Language Policy and the Puerto Rican Community, Centro Working Papers # 1 (New York: Centro de Estudios Puertorriquenos, 1977); L. M. Suffront, El Problema del Idioma en Puerto Rico (San Juan, P.R.: Biblioteca de Autores Puertorriquenos, 1950).

⁷Of interest also is the fact that in spite of the intricate connection between language, culture, and society implicit in the works of Durkheim, Levi-Strauss, Franz Boas and George Herbert Mead, among others, the topic did not become a central issue until the 1960s. See B. G. Blount, ed., Language, Culture and Society: A Book of Readings. (Cambridge, Mass.: Winthrop, 1974).

⁸This summary is basically obtained from the excellent document prepared by the U.S. Commission on Civil Rights (1975). For other rationales, see T. Andersson and M. Boyer, Bilingual Schooling in the United States (Austin, Tex.: Southwest Educational Development Laboratory, 1970);

D. P. Baral, "Second Language Acquisition Theories Relevant to Bilingual Education," in R. V. Padilla, ed. Theory, Technology and Public Policy on Bilingual Education (Rosslyn, Va.: National Clearinghouse for Bilingual Education, 1983); J. Cummins, "Linguistic Interdependence and the Educational Development of Bilingual Children," Review of Educational Research, 49, No. 2 (Spring 1979): 222-251; J. Cummins, Interdependence and Bicultural Ambivalence: Regarding the Pedagogical Rationale for Bilingual Education (Rosslyn, Va.: NCBE, 1982); J. Fishman, Bilingual Education: An International Sociological Perspective (Rowley, Mass.: Newbury House, 1976); B. A. Gaarder, Bilingual Schooling and the Survival of Spanish in the United States (Rowley, Mass.: Newbury House, 1977); B. A. Gaarder, "Bilingual Education: Central Issues and Concern," in LaFontaine, Persky and Golubchick, pp. 33-38; E. G. Lewis, Bilingualism and Bilingual Education: A Comparative Study (Albuquerque: University of New Mexico Press, 1980); M. Ramirez and A. Castaneda, Cultural Democracy, Biconognitive Development and Education (New York: Academic Press, 1974); G. R. Tucker, "Integrative Remarks," in NCBE, Exploring Strategies for Developing a Cohesive National Direction Toward Language Education in the United States (Arlington, Va.: NCBE, 1983).

⁹For a recent review of numerous studies attempting to link one factor or another to second language learning, see S. Izzo, Second Language Learning: A Review of Related Studies (Rosslyn, Va.: NCBE, 1981).

¹⁰Excellent discussions of the "new" versus the "old" cultural pluralism ideologies and the political, social, economic and educational implications are found in M. M. Tumim and W. Plotch, eds., Pluralism in a Democratic Society (New York: Praeger, 1977). For the various theories of assimilation prevalent in the U.S., see M. M. Gordon, Assimilation in American Life (New York: Oxford University Press, 1964); "Toward a General Theory of Racial and Ethnic Group Relations," in Ethnicity: Theory and Experience, ed. by N. Glazer and D. P. Moynihan (Cambridge, Mass.: Harvard University Press, 1975), pp. 84-100.

¹¹Although some funds for bilingual education research were provided by Congress as early as 1974, the main research thrust did not begin until after the 1978 Amendments to the Bilingual Education Act. For a summary of completed studies or research in progress under federal legislation, see the two recent publications by the U.S. Department of Education, The Condition of Bilingual Education in the Nation, 1982 (A Report from the Secretary of

Education to the President and the Congress), and The Condition of Bilingual Education, 1984; U.S. Department of Labor and U.S. Department of Education, The Status of Bilingual Vocational Training: Fiscal Years 1979 to 1981 (A Joint Report from the Secretary of Labor and the Secretary of Education to the President and to the Congress).

CHAPTER III

METHODS AND PROCEDURES

In view of the increasing number of Hispanics in the nation, the limited knowledge available on Hispanic college students, their persistent problems in higher education, and the existing controversies surrounding bilingual education, attention should be focused on the role of this educational approach in expanding opportunity. Broadly speaking, the main research questions are twofold: How do Hispanic students in a bilingual higher education program compare academically to those exposed only to ESL instruction? What characteristics are associated with success or failure in each program?

As noted in Chapter I, the site of the present study is Kingsborough Community College (KCC) of the City University of New York. KCC is a comprehensive community college offering several curricular programs leading to three degrees: Associate in Arts (A.A.), which is the traditional liberal arts program for students interested in transferring to four-year institutions; Associate in Science (A.S.) for majors in Science, Math, Music, Fine Arts, or Theatre

Arts; and Associate in Applied Science (A.A.S.) for students interested in pursuing careers in business, health, or social service. Non-degree courses are also offered through the Continuing Education Division.

The college serves predominantly a white ethnic student body whose income is generally above that of students in many other of CUNY's community colleges.¹ As with most CUNY colleges, however, KCC is committed to serve diverse student types and has attempted to meet the educational needs of the many students whose native language is not English through the Bilingual Studies Program (BSP) and ESL instruction.

There are differences in admission criteria, curricula and services for the two groups of students. The academic requirements for maintaining matriculation and for graduation, however, are identical. A description of BSP and ESL follows.²

KCC's Bilingual Studies Program and ESL Instruction

The Bilingual Studies Program was established in Spring 1970 and has operated under the umbrella of the College Discovery Program (CUNY's special program for financially pressed and academically underprepared students in the community colleges) since fall 1970. Since its inception, a major goal of the program has been to provide op-

portunities for postsecondary education to financially disadvantaged Spanish-speaking high school graduates who could not benefit from regular instruction due to their limited English language skills. Other major general objectives of the program have been: to increase their ability to function within American society; to encourage appreciation of their native language and culture, and to help them maintain their identity as Puerto Ricans or other Hispanic-Americans.

Students entering the BSP were recruited from high schools or from community agencies with which the BSP staff maintained ongoing liaison throughout the years. In order to be accepted into BSP, students had to meet the following eligibility requirements.

- . Applicants had to apply to the Bilingual Studies Program.
- . Applicants had to be Spanish-speaking and of limited English proficiency as demonstrated by a battery of tests administered prior to admission.
- . Applicants had to meet the financial and academic eligibility requirements of the College Discovery Program of the City University of New York.
- . Applicants could not have attended any institution of higher education, except for veterans, who were

allowed to have earned a maximum of 18 college credits prior to service.

- . Applicants must have earned a high school diploma or received a High School Equivalency Diploma. Foreign country equivalency certification was evaluated by CUNY's International Student Office.
- . Applicants had to be willing to submit to a battery of tests for placement purposes.

Hispanic students with limited English language skills who applied to BSP but did not meet the criteria were assigned to ESL instruction.

BSP was multifaceted, offering a special curriculum, counseling and cultural activities. The curricular approach in BSP involved the teaching of English to students via ESL instruction while the students were also enrolled in basic content courses which were taught in Spanish by bilingual teachers, many of whom were native Spanish-speakers. All of the bilingual teachers were faculty members of the various KCC Departments. Altogether from 30 to 33 credits (about half of the credits required for a degree) were in courses taught in Spanish. Students usually took these courses during the first three semesters in college. As students moved on through their educational careers, greater emphasis was placed on English as the medium

of instruction. The program thus was transitional in nature in that students were eventually mainstreamed into courses where the medium of instruction was only English. It was different from programs funded under the Vocational Education Act in that students could enroll in any of the curriculum offered at KCC, including the Liberal Arts program.

The BSP ESL component included three two-credit pre-freshman English courses specifically designed for students whose native language was Spanish. The first course, English 15 (English I for Students Whose Native Language is Spanish), emphasized intensive work on basic English grammar and structures with development of elementary reading and writing skills. Six weekly hours of classroom instruction and six hours of laboratory sessions were required in this course. The second prefreshman English course in the sequence was English 16 (English II for Students Whose Native Language is Spanish). This course was designed for intermediate students. It focused on advanced English grammar with increasing emphasis on reading and writing skills. The course required four weekly hours of classroom instruction and six hours of laboratory sessions. English 17 (English III for Students Whose Native Language is Spanish) was the third course in the BSP ESL sequence. The course provided intensive practice in listening, speak-

ing, reading, and writing skills necessary prior to enrolling in college level English courses. Six hours of classroom instruction and two laboratory hours were required.

Upon successful completion of English 17, students were phased out of the ESL component specifically designed for BSP students and went into other language arts courses (if necessary) or to a first semester English freshman course.

Initial placement into English 15-17 was based on the students' scores on a series of tests administered prior to admission to KCC.³ Placement into the first semester English freshman course was determined by the students' scores on the CUNY's Writing Assessment and Reading Tests.

All ESL instruction given to BSP students was provided by ESL teachers who were members of the English Department at KCC.

In addition to the special instructional and ESL components, BSP provided, on an individual or group basis, on-going academic advisement, preregistration counseling, career and vocational guidance, financial aid advisement, and personal counseling. These activities were performed by a full-time counselor and the Director of the Program, both of whom were bilingual. Tutorial services in Spanish for students were also available through the college's Institute of Tutorial Services, the English Skills Lab, and

the Math Skills Lab.

Students in ESL generally applied for admission to KCC via CUNY's University Application Processing Center (which processed all applications to CUNY's colleges). After admission to KCC, but before registration, non-native English speakers were assigned to ESL on the basis of scores on CUNY's university-wide reading and writing proficiency tests, which were administered by KCC.

Students in ESL were exposed to English language instruction through a series of non-credit courses in developmental skills including communication, reading and writing skills. The first in the series was English 07 (considered to be the equivalent course in content to English 15 in BSP). This course required four classroom and six laboratory hours. The second course, English 08 (the equivalent in content to English 16 in BSP), also required four classroom hours of instruction but only two laboratory hours. The other three courses in the series were Basic Reading Skills, Analytical Reading, and Basic Writing Skills. These three courses emphasized English Language Arts and further development in reading and writing skills, and were opened to Bilingual Program students after completion of English 17, if necessary.

A score of 2-2 or below on CUNY's Writing Assessment Test and evaluation of the writing test papers and reading

scores on CUNY's Reading Test by ESL faculty determined initial placement into English 07 or English 08. The remaining students were recommended for placement according to the following criteria: Students who scored below the equivalent of the 8.5 reading grade level were required to take Basic Reading Skills, while attaining the equivalent of the 8.5 reading grade level but lower than the passing grade on the reading test indicated placement on Analytical Reading. Students who scored below 3-3 on the CUNY Writing Assessment Test were also required to take Basic Writing Skills regardless of the score on the reading test.

It is to be noted that Hispanic students assigned to ESL took these courses with other non-native English speakers. While being exposed to English language instruction, student in ESL took the regular college content courses, which were taught in English. Preregistration, orientation, academic advisement, career and personal counseling and other related counseling services were provided by KCC's Department of Student Services. Tutoring in Spanish was available through KCC's Institute of Tutorial Services.

It should be emphasized that, apart from the pre-freshman English language art courses, all of the courses offered BSP students were regular college level courses, with the only difference being that they used Spanish in

varying degrees as a medium of instruction or learning. There was no relaxation of academic standards within the classroom setting. Bilingual Program students had to adhere to all college policies pertaining to attendance, academic standing, graduation, etc. Although tests used for placement purposes in English and Math were different from tests used for other students, at some point within their college career BSP students had to demonstrate the minimum proficiency levels required in English writing and reading and in Math as measured by the CUNY Tests.

Subjects

Hispanic students who entered the Bilingual Studies Program or were assigned to ESL instruction from fall 1978 through fall 1980 were the subjects of this study. All of them were first-time entering freshmen. The year 1978 was chosen as the cut-off date, since by this time, the effects of the fiscal crisis which had so severely affected CUNY's colleges and programs had become more or less stabilized. Identification of the BSP students who entered from fall 1978 through fall 1980 was done from a list provided by KCC containing the names, social security number, address and telephone number (if any) on admission to the college, date the student entered KCC and other basic demographic data.

The college also provided a similar list for all

students who were assigned to ESL English classes on admission to KCC during the same period. The list did not contain the student's ethnicity, since the college does not keep this information in its computer files.

Identification of Hispanic students in ESL was by no means an easy matter.⁴ Several methods were used in identifying the Hispanic population in ESL. These involved checking the student's Application for Admission for any information pertaining to the student's ethnicity; telephone calls to the students' households, and mailing of a letter in Spanish and in English along with the questionnaire, explaining the purpose of the study and requesting cooperation. The letter also requested that, if the student was not Hispanic, the blank questionnaire be returned with the notation "Not Hispanic." (A stamped, self-addressed, return envelope was enclosed.)

Altogether we were able to identify 70 Hispanic students using the following criteria:

- a. Student's native language was Spanish
- b. Student or parents' surname was of Spanish origin
- c. Student or parents were born in a Hispanic country
- d. Students or members of the household identified themselves as Hispanics

Table 3.1 shows, for each entering class, the number and percentage of students in each group.

TABLE 3.1

NUMBER AND PERCENTAGE OF STUDENTS IN BSP AND ESL
BY ENTERING CLASS: FALL 1978-FALL 1980

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Fall 1978	52	27.2	12	17.1
Spring 1979	35	18.3	17	24.3
Fall 1979	39	20.4	8	11.4
Spring 1980	17	8.9	10	14.3
Fall 1980	48	25.1	23	32.9
Total	191	(100.0)	70	(100.0)

Data Sets and Sources

The study utilized several sources that provided data on the students' educational background, academic performance while in college, language usage, and their social origins and demographic characteristics.

Educational Background

Collad Data. On application for admission to CUNY, students were required to furnish a copy of their high school transcript. The information on the transcript was processed and maintained in a centralized student data file. From this file, the following measures of the student's academic background were obtained:

. High school from which student graduated. This measure indicated whether a student graduated from a mainland or foreign high school, or whether the student took the High School Equivalency Diploma (GED).

. High-school average (CAA). This measure was the average of the student's grades in all academic courses (English, foreign languages, science, math and social studies) deemed by CUNY to be college preparatory in nature.

. Total number of academic units. This measure referred to the sum of all the units taken in high school college preparatory courses, i.e., English, foreign languages, science, math, and social studies. One unit was considered to be equivalent to two semesters work. Students who came to CUNY with a GED were considered to have earned four units in English, one unit in social studies and one unit in science for a total of 6 academic units. The maximum amount of academic units that a foreign applicant was deemed to have earned was four in English, six in

foreign languages, four in math, four in science and four in social studies, for a total of 24 units. These were evaluated by CUNY's International Office.

In addition to obtaining the total number of academic units, we also obtained the number of units completed by each student in high school in each of the college preparatory courses.

Not all students in our sample were in Collad. For those who were not, copies of the high school transcript (or GED tests) from the BSP Central File or KCC's Registrar were obtained. The Collad system was used as the primary basis for classifying the academic background data. Personnel from the University Application Processing Center and CUNY's International Office assisted in the classification of these data.

Placement Level in English Reading, Writing and Math

From a master computer list kept in KCC Computer Office, the student's placement level in English reading, writing and Math was obtained. These measures provide an indication of the student's academic preparation on entering college in each of these skills as assessed by the CUNY tests. The information was available on admission and for subsequent retests through November 1981.

With one exception, all ESL students had taken the

CUNY tests at least once, generally on admission to KCC. Data for BSP students on admission were not available from this source. As indicated earlier, since the tests are not geared for non-English native speakers, BSP students were exempted from taking the CUNY tests on entry, although they were required to attain a minimum level of proficiency as measured by the CUNY tests before enrolling in college-level English courses and before graduation.

Measures of BSP students' academic skills in English reading and writing and in Math were obtained from lists provided by the BSP office, which contained actual courses recommended for each student on admission in each of the skills.

The foregoing data were used only for predictive purposes.

College Performance

The college transcripts provided the raw data from which the measures of students' academic performance were developed.

At KCC, each semester consisted of a 12-week session and a six-week module. All matriculated students were required to attend both 12-week sessions to maintain their status. Attendance during the six-week modules was optional.

Copies of the student college transcripts containing data through the summer 1981 were furnished by KCC. From the transcript, the following information was obtained for each session or module the student attended:

- a) number of courses (credit or non-credit) in which the student registered (courses attempted)
- b) number of courses which the student passed with a D or better
- c) number of credits attempted
- d) number of credits earned
- e) number of credits that went into the computation of the student's grade-point average (GPA)
- f) number of quality points (Quality points refer to the numerical value assigned to each grade in the computation of the grade-point average. The sum of these values constitute the number of quality points.
- g) the student's GPA. In computing the student's GPA, KCC assigned the following numerical values to each grade as follows:

A (Excellent)	= 4
B (Good)	= 3
C (Fair or Average)	= 2
D (Below average but passing)	= 1
F (Failure)	= 0

WF (Withdrew failing) = 0

WU (Withdrew unofficially) = 0

The grades "R" (given in remedial courses to students who did not meet the level of proficiency required), "W" (withdrawal without penalty), and "INC" (the term's work was incomplete) were not considered in the computation of the grade-point average. Incomplete grades, however, were counted as a failure if the term's work was not completed within six months.

The above data were converted into summary measures which described cumulatively the student's academic performance by the end of each semester the student was in attendance. Each semester included data for the required 12-week session and the winter or summer 6-week modules for students attending these sessions.

In addition, from the above data, a basic outcome measure used in this study--student's progress towards the degree (PTD)--was developed. The formula in Figure 1, derived from a 1976 resolution by the Board of Higher Education (which governs all CUNY colleges), was used to develop the measure PTD. The measure takes into consideration cumulatively the proportion of courses passed of courses attempted; or the proportion of credits earned of credits attempted; and the student's GPA.⁵ As Figure 1 shows, required completion rates and required GPAs were progres-

sively increased as students moved on through their college careers. Thus, for the first four to seven courses or 12 to 23 1/2 credits in which the student enrolled, he had to complete at least 50% with a GPA of at least 1.5. By the time the student took 12 or more courses or 36 and more credits, he/she had to complete at least 75% and maintain a cumulative GPA of at least 2.0. In this study, students who did not complete the proportion of courses or credits attempted with the GPA indicated were deemed to be making unsatisfactory progress towards the degree.

FIGURE 1
PROGRESS TOWARDS THE DEGREE

<u>Required Completion Rate*</u>	<u>of</u>	<u>Courses Attempted</u>	<u>or</u>	<u>Credits Attempted</u>	<u>and</u>	<u>Required GPA</u>
50%		4 to 7		12 to 23 1/2		1.50
66%		8 to 11		24 to 35 1/2		1.75
75%		12 and over		36 and over		2.00

*Students who did not complete the proportion of courses or credits attempted with the GPA indicated were deemed to be making unsatisfactory progress towards the degree.

Other outcome measures obtained from the transcript were:

Graduation data. The transcript indicated whether

the student had graduated by summer 1981, type of degree obtained, and the date when the degree was granted.

Withdrawal data. Official withdrawals from the college (students who filed a required form in the Registrar's Office) were indicated in the transcript through an annotation of the date in which the form was filed. Unofficial withdrawals (students who did not file the required form) were based on the student's failure to enroll in courses after a give session or module. Usually in these cases, grades recorded were "F," "WF," "WU" or "INC." Also annotated in the transcript were academic dismissals (students who were dropped from the college for failing to maintain KCC's scholastic standards),⁶ the semester when the student was academically dismissed, readmissions (students who on appeal were reinstated or students who withdrew officially and reapplied for admission) and date when student was readmitted.

In addition to providing outcome measures, student transcripts were the basic source of information for the following independent variables:

- . Curriculum on entering KCC and changes. The curriculum in which the student enrolled (i.e., liberal arts or career programs) on initial registration and subsequent changes were shown in the transcripts.

- . Courses in English and in Math. Remedial, compen-

satory, and college level courses in English and in Math taken by students during the first academic year were also obtained from the transcripts. For these courses, the following information was obtained: course number, credits (if any), semester when student took the course, and grade obtained.

Social Background and Language Usage: Student Questionnaire

A questionnaire in Spanish (Appendix A), specifically developed for this study, was another source of data.

The questionnaire elicited from students a wide range of information. It included two major categories of variables used extensively throughout this report.⁷ One category pertained to the student's social background and demographic characteristics while the other pertained to the student's language usage and attitudes toward his native and majority languages.

The social and demographic characteristics included the following:

- . Age at entry to CUNY
- . Gender
- . Student's and parents' place of birth
- . Language spoken in the home during childhood and adolescence
- . Length of time in the United States

- . Family income
- . Source(s) of family income
- . Composition of the household while the students were attending college; i.e., whether they lived alone, with parents, with spouse, with children, other relatives, or friends.

For students who did not complete the questionnaire, social background information was obtained from college or university-wide records.

The variables pertaining to language usage and the students' attitudes toward the majority or native language and culture were as follows:

. The student's language-dominance configuration.
Several questions were intended to measure the extent to which students used Spanish or English in a variety of social and other types of situations. These included:

- a. Self-assessments of English and Spanish language skills (understanding, speaking, reading, and writing).
- b. Ratings on how often students spoke Spanish or English in his/her household, with relatives not in household, friends in school, friends outside school, college teachers, college counselors, brothers and sisters, spouse, children, and at work.

- c. Ratings on how often the student engaged in a variety of activities involving the English or Spanish languages; e.g., reading newspapers, listening to the radio, watching television, etc.
- d. Whether the student thought mainly in English or Spanish (thinking mode).

. Attitudes and feelings toward the English and Spanish languages. In measuring the student's attitudes and feelings toward the English and Spanish languages, an adaptation of one of Lambert and Tucker's (1972) instruments was used. For each language, students were asked to rate the extent to which they agreed or disagreed with a series of statements. The statements were of two types. One type attempted to assess whether the student viewed the language as having "instrumental" value (e.g., necessary to get a job, necessary to pursue an educational or vocational goal, etc.). The other type sought to determine whether the student viewed the language as having "integrative" value; e.g., serving social or cultural purposes.

. Homeland Ties. Students were asked to indicate how often they had visited a Hispanic country within the last five years, and if so, which country(ies); how often they would like to visit a Hispanic country, and if so, which country(ies); whether they expected to live permanently in a Hispanic country; whether they expected to be-

come American citizens; and whether they expected to live permanently in the U.S.

Equivalent versions of the questionnaire in Spanish and English were developed. In order to avoid contamination of the study population, pretests were conducted on students in a bilingual program at The City College and students in an ESL class at Hostos Community College. During pretests it was found that all of the students at Hostos and 19 of 23 students at City College chose the Spanish version. (Students were instructed to select whichever form they preferred.) In addition, without exception, all students described themselves as reading, writing, understanding and speaking Spanish "very well" or "quite well," whereas their self-assessment of their English language skills ranged from "poor" to "fairly well." Therefore, the English version was eliminated.

After analysis of pretest responses, some questions were eliminated and others were revised to obtain a better spread of answers on the scales.

A second pretest of the revised questionnaire was administered to freshmen and sophomores in a different class of bilingual program students at The City College. The questionnaire was found to be satisfactory in length, comprehension, and suitability of items.

Administration of the questionnaire to students in

the present study took place from spring 1981 through fall 1981. In order to secure a maximum number of responses from the students, several methods were used. For students who were still enrolled at the college during spring 1981, the questionnaire was administered in group sessions in their regular classes with permission of the instructor. Most of the completed questionnaires were, in fact, through this method.

For students who were no longer enrolled at KCC by spring 1981, a mail survey was used. The first mailing took place in June 1981. This was followed up by two other mailings, each at three week intervals. In every case, a new questionnaire and a stamped, self-addressed return envelope was enclosed.

Many of the mailed questionnaires were returned by the post office as "moved, left no address," or addressee "unknown." However, there were a number of students who had not returned the completed questionnaire, nor had the questionnaire been returned by the post office. At least one home visit was made to the last known address of students living in Brooklyn (where most of the students were concentrated) and Manhattan.

While making these visits, the author was deeply affected by the absolute poverty in which many of the students lived. The effort or even the desire to try to

achieve a college education under these conditions was interpreted by the investigator as a credit to the student. Others, however, may deem this to be evidence only of unrealistic aspirations.

The home visits were conducted in August during dinner hours; i.e., from 6:00 P.M. to about 8:30 P.M. Because the neighborhoods were unsafe, it was necessary to conduct visits in the fall on weekends during daylight hours.

There were only two instances in which the student was at home at the time the investigator called. Both students agreed to complete the questionnaire on the spot.

In the few cases where the student or family still lived at the same address but no one was at home, a sealed envelope containing a letter, another questionnaire, and a stamped self-addressed return envelope was put under the door. A similar procedure was followed where the investigator could not gain access to buildings.

Where neighbors, grocery store owners, and other shopkeepers who were friendly with the family said that family had moved but that from time to time the student or other family member came by, the envelope was given to them.

In cases where parents or other close relatives said that the student had moved and his/her whereabouts were

unknown, if the circumstances allowed, social background data on the student was obtained in informal conversation. The information was recorded soon after leaving the home.

In the few instances where a new address was obtained, questionnaires were mailed to the new address.

In addition to home visits, two other efforts were made to locate the students. These involved: (a) checking the university-wide Admission Application or the BSP files for possible new leads and (b) checking the Brooklyn and Manhattan telephone directories.

Table 3.2 shows the total number and percentage of students in each group who completed the questionnaire by their enrollment status as of summer 1981. Whereas about 90% of BSP and over three-fourths of ESL students still enrolled at KCC responded to the questionnaire, the response rate for non-enrolled students was low, 40% for BSP and 35% for ESL. Most of the students no longer enrolled who did not respond to the questionnaire had moved and could not be reached. Additionally, two ESL students were found to be deceased.

Data Analyses

Throughout this study, two types of data analysis were made. When comparing the two groups of students on personal, family, and academic measures, either t tests or

TABLE 3.2

NUMBER AND PERCENTAGE OF BSP AND ESL STUDENTS
RESPONDING TO QUESTIONNAIRE BY ENROLLMENT
STATUS AS OF SUMMER 1981

	BSP			ESL		
	Total	Enrolled	Not Enrolled	Total	Enrolled	Not Enrolled
Number asked to complete questionnaire	191	75	116	70	21	49
Number Responding	113	67	46	33	16	17
Percentage Responding	59%	89%	40%	47%	76%	35%

chi squares were used, as appropriate.

The second type consisted of correlational analyses. Two separate zero-order correlational matrices (one for each group) were run on 85 variables to determine interrelationships among the independent variables, the dependent variables, and between dependent and independent variables. Partial correlation was used to isolate the influence of selected independent variables on outcome variables.

In interpreting the statistical findings, we have been very conservative. Only comparisons or correlations which were significant at the .05 level or below have been brought to attention. The exception to this rule was with findings pertaining to the questionnaire data. Due to the small sample sizes, most particularly the ESL cohort, differences or correlations had to be extremely large to reach the .05 significance level. Trends of substantive significance, therefore, have been discussed.

NOTES

¹From 1978 through 1980, approximately two-thirds of KCC's first time entering freshmen were white, about one-fifth were black, and the proportion of Hispanics ranged from seven to nine percent. During the same period, KCC's students came from families whose income was generally higher than that of students attending other CUNY's community colleges. For example, in 1978 31% of KCC's students declared family incomes of less than \$8,000 and 33% had family incomes of \$16,000 or over. In contrast, the corresponding figures for all undergraduates at CUNY's community colleges were 48% and 21% respectively. Similar differences were recorded for 1979 and 1980. See the following publications by the City University of New York: Ethnic Census: Fall 1979, Table II, p. 106; Ethnic Census: Fall, 1980, Table II, p. 104; Data Book: 1978-1979, Table I, p. 118 and Table II, p. 119; Data Book: 1979-1980, Tables I and II, p. 115.

²The description of BSP and ESL programs was obtained from interviews with administrators, coordinators, faculty members and other personnel in each program during the planning phase of the study and while the research was in progress. In addition, the following documents submitted to the New York State Board of Regents and the Commissioner of Education by CUNY were also utilized: The City University of New York Office of Special Programs, General Plan for the College Discovery Program, 1975-1976; The City University of New York Office of Special Programs, Amendments (1978-1979) to the 1975-1976 General Plan for the College Discovery Program; and The City University of New York Office of Student Affairs and Special Programs, General Plan: 1980-1981.

³The English skills placement tests used were: The Davis Diagnostic Test of English Proficiency (Grammar), The Metropolitan Achievement Test (Reading), the ESL Composition Test (devised by the KCC ESL staff) and the National Association of Foreign Student Affairs (English Composition) test. See Note 2.

⁴The problem of identifying Hispanics can be documented by the many different definitions used by the U.S. Census Bureau since 1850, methods of identification, and the persistent criticisms thereof. See J. F. Guyot, "The Puerto Rican Population of New York City: Who Counts De-

pende on How You Count," New York City Perspective 2, No. 2 (1975): 1-8; J. Hernandez, L. Estrada, and D. Alvarez, "Census Data and the Problem of Conceptually Defining the Mexican American Population," Social Science Quarterly, 53 (1973): 671-687; NCES, The Condition of Education for Hispanic Americans (Washington, D.C.: U.S. Government Printing Office, 1980) pp. 1-2; U.S. Commission on Civil Rights, Counting the Forgotten: The 1970 Census Count of Persons of Spanish Speaking Background in the United States (Washington, D.C.: U.S. Government Printing Office, 1974).

⁵The first criterion is generally emphasized during the first or second semester when students are taking remedial courses.

⁶KCC makes a distinction between CUNY's definition of satisfactory progress towards the degree and the college "scholastic" or "academic" standing. In determining "scholastic" or "academic" standing (the two terms are used synonymously in the catalogues) credits and/or equated credits taken and the grades received are considered. This is done cumulatively at the end of every six-week module. At the end of each semester, the computer office generates a list of students who fail to achieve KCC's scholastic standards. The student's record is reviewed by the Registrar's Office, which then determines whether the student should be placed on probation.

⁷The questionnaire included more variables than are listed in this section. Only items particularly germane to theoretical aspects of the study or items which played some role in influencing academic outcomes are discussed in this section.

CHAPTER IV

BILINGUAL EDUCATION PROGRAM STUDENTS:

WHO ARE THEY?

Behind much of the controversy underlying bilingual education as the most appropriate strategy to improve the academic achievement of Hispanics and other ethnolinguistic minorities on the mainland, are several assumptions. First, there is an oversimplified notion of achievement as a unidimensional process, linked in a particular causal connection to either deficits in the students or their families, on the one hand, or at the other extreme to the social contexts in which students learn. Second, there is the assumption that students exposed to bilingual schooling will inevitably develop negative attitudes and behavior towards the majority language and culture.

That student characteristics and social origins are importantly connected to academic achievement was clearly suggested by some of the research evidence reviewed in Chapter II (e.g., Astin, 1982; Lavin, Alba, and Silberstein, 1981). The evidence reviewed, however, also suggested that when the learning context is altered (as

with the introduction of intervention techniques intended to maximize student learning, such as using bilingual education as the medium of instruction) the educational outcomes of ethnolinguistic minorities can be greatly enhanced under certain conditions. Both sets of factors are clearly important. The research task then becomes one of trying to identify the conditions under which the intervention technique operates to achieve intended outcomes, beginning with a description of the subjects.

This Chapter will be devoted to a comparison of the characteristics which BSP and ESL students bring to school. The comparison will focus first on the family background and selected demographic characteristics of the students. Second, the educational background of the students will be discussed. Finally, the student's language usage, attitudes and behavior towards the majority and his/her own culture will be described. The primary purpose of this Chapter is to provide a framework within which later findings can be interpreted. It is also hoped that the review of language usage and attitudes will shed some light on the issue of whether bilingual schooling generates negative attitudes and behavior towards the majority language and culture.

Personal Characteristics and Family Background

Ethnicity, Language Spoken in the Home, and Gender.

Tables 4.1 and 4.2 show the distribution of BSP and ESL students by personal and family background characteristics.

TABLE 4.1

DISTRIBUTION OF BSP AND ESL STUDENTS BY PERSONAL AND
FAMILY BACKGROUND CHARACTERISTICS

	<u>BSP</u>		<u>ESL</u>	
	(191)		(70)	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>Student's Place of Birth*</u>				
Puerto Rico	105	54.9	14	20.0
Dominican Republic	24	12.6	15	21.4
Other Hispanic country	45	23.6	36	51.4
U.S. mainland	17	8.9	5	7.1
<u>Language Spoken in the Home</u> <u>when Student was 16 Years</u> <u>Old and Younger</u>				
Spanish only	156	81.7	49	70.0
Mostly Spanish	23	12.0	10	14.3
Spanish and English	11	5.8	7	10.0
Mostly English	-	-	1	1.4
Missing	1	0.5	3	4.3

Table 4.1 (continued)

	<u>BSP</u> (191)		<u>ESL</u> (70)	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>Gender</u>				
Male	68	35.6	30	42.9
Female	123	64.4	40	57.1
<u>Student Lived with***</u>				
Alone	18	9.4	2	2.6
Parents/Siblings*	50	26.3	41	58.6
Spouse	33	17.3	10	14.3
Children*	59	30.9	11	15.7
Other Relatives	35	18.3	11	15.7
Friends	10	5.2	2	2.9
<u>Family Income*</u>				
Less than \$4,000	105	55.0	19	27.1
\$4,000 - \$7,999	73	38.2	33	47.1
\$8,000 and over	13	6.8	18	25.7
<u>Public Assistance</u> (Fully or partly)				
No	109	57.1	47	67.1
Yes	81	42.4	21	30.0
Missing	1	.5	2	2.9

*Statistically significant at the .05 level or below.

**Percentages may not total 100% due to rounding.

***Percentages may add up to more than 100% since some respondents lived with more than one person.

TABLE 4.2
AGE OF ENTRY TO U.S. AND TO KCC;
LENGTH OF TIME IN U.S.

	<u>BSP</u>			<u>ESL</u>		
	<u>N</u>	<u>X</u>	<u>S.D.</u>	<u>N</u>	<u>X</u>	<u>S.D.</u>
Age Entry to KCC*	(190)	26.6	7.64	(70)	22.5	5.35
Age Entry to U.S.*	(184)	20.2	6.34	(67)	17.0	6.15
Length of Time U.S.	(185)	7.6	5.89	(67)	6.6	5.07

*Statistically significant at the .05 level or below.

In ethnicity, BSP students were significantly more homogeneous (Table 4.1). Over half of BSP students were born in Puerto Rico, 13% in the Dominican Republic, 26% in other Hispanic countries,¹ and 9% on the U.S. mainland. By contrast, almost three-fourths of ESL students came in small numbers from various Hispanic countries² and only 20% were born in Puerto Rico. When ethnic origin of students born on the mainland was considered, the proportion of Puerto Rican students increased to 64% for BSP and to 26% for ESL, making Puerto Ricans the largest population in each of the two groups.

For the vast majority of students in both groups (82% of BSP and 70% of ESL), Spanish was the only language spoken in the home during childhood and well into the student's high school years. Additionally, in 12% of BSP and

14% of ESL students' homes, Spanish was "mostly" spoken rather than English. Relatively small percentages in either group were exposed to English in their homes, with only 6% of BSP and 10% of ESL students saying that both Spanish and English were spoken with about the same degree of frequency. Thus, the imputed advantage of early exposure to English for second language learning was absent in the two groups.³

With regard to gender, females outnumbered men in both groups. The relative proportion of males to females among BSP students was 36% to 64%; for ESL 43% to 57%. This finding is consistent with a trend appearing in earlier CUNY studies. Dispenzieri et al. (1969) found that among Puerto Rican students entering CUNY's College Discovery Program in 1968 there were more females (55%) than males (45%). This was a marked reversal from previous years. Lavin et al. (1981) found that, whereas among open admission Hispanic students entering the community colleges in 1970 females entered in about the same proportion as males, in 1971 and in 1972 they slightly outnumbered men (55% and 52% respectively). This changing sex ratio parallels the trend in CUNY's community colleges toward higher female enrollment, confirming Cross's 1974 prediction of greater female participation in college under open admission policies.

Composition of the Household, Family Income, and Public Assistance as Source of Income. BSP students were significantly less likely to live with parents (26% vs. 59%) and more likely to live with their own children (31% vs. 16%) or alone (9% vs. 3%). Since similar percentages of students in the two groups lived with their spouse (17% for BSP, 14% for ESL), the finding pertaining to children indicates that there were many more single parents among BSP students, a condition which may militate against their academic success.

In income, students in the two groups came from relatively low-income families in comparison with the average income of students at Kingsborough, which as indicated in Chapter III, tends to be higher than that of students attending other community colleges at CUNY. Moreover, BSP draws students from the poorest families, since over half had incomes of less than \$4,000 annually. Only 27% of ESL students were this poor.⁴ ESL students' income, however, was only marginally higher, since almost half had incomes ranging from \$4,000 to less than \$8,000. These data are generally consistent with university-wide statistics which show that Hispanic students have the lowest income of all entering freshmen to the community colleges. Among students entering in 1978, 1979, and 1980, approximately one-third of Hispanic students had incomes

of less than \$4,000 compared to about one-fourth of blacks and 10% of whites. At Hostos Community College, which is from 75% to 80% Hispanic, over 50% of its entering freshmen stated they had annual incomes of less than \$4,000 (CUNY Data Book: 1978-1979; 1979-1980; 1980-1981).

The relative poverty of the two groups of students is also suggested by the large percentages (42% of BSP, 30% of ESL) who relied on public assistance as the major or supplementary source of income.

The significance of the low income of students in the two cohorts cannot be easily disregarded. Although sociologists disagree on the extent to which income influences academic success,⁵ there is general agreement that to enroll and to remain in college require financial resources for educational and personal expenses. Furthermore, as Lee Rainwater (1970) and Miller and Roby (1970) have persuasively argued, minority students need financial resources not only for their educational expenses but also to supplement their families' meager incomes. It might be hypothesized, therefore, that for these groups of Hispanic college students, of whom a significant number are heads of households, their low income may have an adverse effect on their academic progress and persistence in college.

Length of time in the U.S., Age U.S., Age KCC.

Prior to admission to Kingsborough, students in the two groups had been in the United States for approximately the same number of years. The mean number of years on the U.S. mainland for BSP students was 7.6 and for ESL 6.6 (Table 3.2). ESL students, however, came to the United States at a younger age. On the average, they were 17.0 years old, while BSP students were 20.2. Concomitantly, ESL students were also significantly younger on admission to KCC, although both groups of students, on the average, were older than students of traditional college entry age (17 to 19). The mean age on entering Kingsborough for ESL students was 22.5 in contrast to 26.6 for BSP students.

In sum, the review of personal and family background characteristics has revealed that the BSP and ESL students fit what has now become the classical portrait of the "new type" of students who flocked to the community colleges with the extension of higher education to the masses. Most of them were non-native born and were not exposed to English until their adolescent years or later. The majority were women, and a significant number had multiple home responsibilities, such as caring for their young children (in many instances, without the benefit of another breadwinner). In age, they were older than the typical college student, and their income seemed barely

enough to meet the daily necessities of living. Overall, however, the students who entered KCC via the Bilingual Studies Program were at an even greater disadvantage in many of these characteristics. The BSP students were older when they came to the United States and older when they entered Kingsborough. They were more likely to be single-parent heads of households and less likely to live with their own parents. They also had lower incomes than ESL students. These differences between the two groups must be taken into account in assessing their educational performance.

Academic Background

Next to the family, no other institution may exert a greater impact on the student's future than the schools. Schools are the major mechanism in modern societies by which students are selected and socialized for different occupational slots. Although there are questions in American society pertaining to the impartiality of the selection process,⁶ most sociologists would agree that the quality and content of early educational experiences determine to some extent (how much scholars disagree) a student's expectations for the future, whether he/she will seek postsecondary education, and ultimately his/her fate in college.

Cross-cultural studies indicate that educational systems vary widely in their organizational structures, pedagogical practices, and philosophical and cultural orientations (Boocock, 1980; Chesler and Cave, 1981; Parelius and Parelius, 1978). The issues of the content of schooling (what is to be learned), the process of learning (how is learning to occur), the length of the educational process (how much schooling is required), and the process of selection and allocation are to a great extent a function of the particular society in question. What factors within a society dictate the form and content of schooling? Some scholars emphasize historical antecedents, some pay primary attention to the economic or sociopolitical structures, some emphasize the prevailing ideologies of the society in question, while others assert that the major division is between industrially developed affluent societies of the world and the poor developing nations.

This sample includes Hispanic students from nations with varying degrees of economic development, different political and economic structures, and different ideological and cultural orientations. In order to assess the influence of these diverse backgrounds, data were collected on where students had graduated from high school, their academic preparation on entering college, their educational aspirations, and some behavior patterns associated with

the student role.

High School Graduation. The high school from which students graduated is shown in Table 4.3. There are marked differences in where and how the BSP and ESL stu-

TABLE 4.3
HIGH SCHOOL FROM WHICH STUDENT GRADUATED

<u>High School*</u>	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
GED	92	48.2	24	34.3
PR/Foreign	62	32.4	12	17.1
U.S. Mainland	36	18.9	34	48.6
Missing	<u>1</u>	<u>.5</u>	<u>-</u>	<u>-</u>
Total	191	100.0	70	100.0

*Statistically significant at the .05 level or below.

dents obtained their high-school diplomas. First, nearly half (48%) of BSP but only one-third of ESL students came to college via the high-school equivalency diploma (GED) route. If we regard the GED as a measure of inability to adapt to traditional school environments, then the fact that so many students in both groups, but most particularly in BSP, did not receive their high-school diplomas through conventional schools is an indication of earlier difficulties either because of family or personal circum-

stances, academic performance, or structural factors within the schools. An interesting question which emerges is whether similar difficulties will recur at the college level. We will return to this question in subsequent chapters. Another question, which unfortunately our data cannot answer, is whether the last school attended by the student prior to obtaining the GED was a mainland or a Hispanic school.

A second interesting difference shown in Table 3.3 is that proportionally twice as many BSP as ESL students obtained their high-school diplomas in their native countries; conversely, ESL students were two-and-a-half times more likely to have graduated from a mainland high school. This finding is partly due to the fact that BSP students, on the average, were older than ESL students when they came to the mainland. Nevertheless, the findings that BSP students were more likely to remain in their native countries for a longer period of time and to complete high school there do suggest that they had much more opportunity to develop greater literacy skills in their native language and to establish a stronger identity with their native culture. The Bilingual Studies Program at KCC capitalizes on the student's native language resource through course offerings in Spanish. Additionally, the Program is intended to reinforce the student's pride in

his native language and culture. Therefore, from the bilingual schooling perspective, we would expect that native language development and identity with the native culture will operate to the BSP students' advantage and to the detriment of ESL students insofar as their academic performance is concerned. On the other hand, from the more popular perspective which argues that what non-English speaking students need is greater exposure to English, it could be postulated that the ESL student is at a greater advantage since he/she has had greater formal exposure to English and to the American culture through mainland schools. Again, we will return to these issues later throughout the report.

Academic Preparation. In spite of the diversity of countries in which students attended schools and of where they ultimately graduated from high school, the academic preparation which students brought to college seemed remarkably similar. Table 4.4 reports for each group the average number of academic units in college preparatory courses earned in high school and the grade-point average (college admissions average) obtained in these courses. As noted in Chapter III, one academic

TABLE 4.4
COLLEGE ADMISSIONS AVERAGE AND HIGH SCHOOL
ACADEMIC UNITS IN COLLEGE PREPARATORY
COURSES BY PROGRAM

	<u>BSP</u> (N=180)		<u>ESL</u> (N=66)	
	X	S.D.	X	S.D.
College Admissions Average	74.40	5.53	73.50	5.71
Total Academic Units	8.16	3.10	7.96	2.87
English	3.19	1.09	2.96	1.35
1st foreign language	1.41	1.59	1.46	1.63
2nd foreign language	0.03	0.26	-	-
Math	0.67	1.01	0.53	0.93
Science	1.24	0.65	1.32	0.72
Social Studies	1.59	0.90	1.68	2.87

unit is equivalent to two semesters work. The most salient finding is that both groups were grossly academically underprepared. This finding is by no means unexpected. The BSP students, by virtue of their special program status, had to be academically underprepared. In addition, University policy since 1975, which is widely disseminated to high schools, community agencies, and the public at large, stipulates that the less able students (as indicated by their college admissions averages or rank in class) are to be channeled to the community colleges.

The mean CAA (college admissions average) in both groups was about 74, or the equivalent of just below a C. Considering that students can earn a maximum of 26 academic units in high school, the total number of units earned were minimal indeed, averaging about eight for each group. This is consistent with data reported by Lavin et al. (1981), which showed that, for his open admission cohorts in the community colleges, Hispanic students had earned on the average from nine to ten academic units in high school, the lowest earned by any ethnic group.

Table 4.4 also indicates that the highest number of academic units earned by both groups was in English, where the average was about three units. Social studies followed next, with each group earning slightly over one-and-a-half units. Units in the first foreign language (which for these groups generally meant their native language, Spanish) averaged close to one-and-a-half. The average number of units in Science earned by each group was slightly over one, while in Math, the average was below one. Virtually no students took a second foreign language. These findings, it should be noted, reflect the presence of the many students in each group who had GEDs and were assigned four units in English, one in Science, and one in Social Studies. Nevertheless, the strikingly inadequate foundation in Mathematics and Science implies

that the students' chances to pursue a college curriculum in these or related fields of study, where minorities are highly underrepresented and which lead to prestigious entry level occupations, are probably minimal. Thus, the students not only enter college with English as their second language, but have the additional disadvantage of deficiencies in academic areas which are essential for competing in New York City's advanced technological economy.

Additional evidence of the academic underpreparation of students is provided by the College-administered CUNY Skills Assessment Tests in Math, English reading and writing. As indicated in Chapter III, ESL students were administered these CUNY placement tests prior to registration. For most BSP students, these tests were generally deferred to a time ranging from the second half of the first semester to almost two years later. The scores attained on these tests were classified by KCC according to four placement levels, ranging from D to A, with D indicating the lowest possible level (and thus need for intensive remediation) and A the highest possible level. In the case of Math and Reading, level A means that the student passed the test. In the case of writing, students scoring at the B level were deemed to have passed the test.

Table 4.5 shows that about two-thirds of ESL students scored at the lowest possible level in Math and in

TABLE 4.5
MATH, READING, AND WRITING PLACEMENT LEVELS
OF ESL STUDENTS ON ADMISSION TO KCC

	<u>Math</u>		<u>Reading</u>		<u>Writing</u>	
<u>Placement Level</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
D (lowest)	44	64.7	44	62.9	54	79.4
C	10	14.7	11	15.7	13	19.1
B	6	8.8	8	11.4	1	1.5
A (highest)	<u>8</u>	<u>11.8</u>	<u>7</u>	<u>10.0</u>	<u>-</u>	<u>-</u>
Total	68	100.0	70	100.0	68	100.0

English reading, whereas only 12% and 10% respectively passed the tests. Writing was obviously the most difficult area for these students, with three-fourths scoring at the D level and only one student passing at the B level. Table 4.6 shows comparable information for the small number of BSP students who took the tests on admission to Kingsborough. The distributions for BSP students, particularly those scoring at the lowest possible levels are similar to those of ESL students. These data strongly suggest that exposure to mainland schools did not provide

TABLE 4.6
MATH, READING, AND WRITING PLACEMENT LEVELS
OF BSP STUDENTS ON ADMISSION TO KCC

<u>Placement Level</u>	<u>Math</u>		<u>Reading</u>		<u>Writing</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
D (lowest)	23	62.2	28	63.6	22	62.9
C	6	16.2	3	6.8	9	25.7
B	2	5.4	4	9.1	3	8.6
A (highest)	<u>6</u>	<u>16.2</u>	<u>9</u>	<u>20.5</u>	<u>1</u>	<u>2.8</u>
Total	37	100.0	44	100.0	35	100.0

ESL students any initial advantage over BSP students in English reading and writing skills as might have been expected from the popular perspective on second language learning.

Students' Expectations and Behaviors. The differences in where students attended schools and how ultimately they obtained their high-school diplomas may be reflected in students' expectations or behaviors generally associated with the student role. Several items in the questionnaire attempted to measure these characteristics. One item asked students to indicate their degree intentions. No outstanding differences between the two groups were recorded. In fact, the most noteworthy finding shown in Table 4.7 is that over 60% of the students in each

TABLE 4.7
DEGREE INTENTIONS

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
None	9	8.0	3	7.7
A.A., A.S., A.A.S.	30	26.5	12	30.8
B.A., B.S.	26	23.0	11	28.2
M.A., M.S.	24	21.2	5	12.8
Ph.D., EDD	19	16.8	3	7.7
M.D., J.D.	<u>5</u>	<u>4.4</u>	<u>5</u>	<u>12.8</u>
Total	113	99.9*	39	100.0

*Percentages do not total 100% due to rounding.

group expected to get a B.A. or higher degree. In this characteristic they resemble other community college students, many of whom aspire to degrees above the associate level (Astin, 1983; Karabel, 1972a).

Another question asked students to rate the likelihood that they would take longer than three years to complete the associate degree. To a startling degree, the vast majority of students in each group (76% of BSP and 82% of ESL) checked that there was some chance that they would take longer than three years, with 54% of BSP and 64% of ESL indicating that it would be "very likely." This finding, it should be noted, reflects a fairly real-

istic self-appraisal.

One other set of items asked students to rate the likelihood that they would take a temporary leave of absence from Kingsborough, whether they would leave Kingsborough altogether, and whether they expected to transfer. Responses to these questions were very similar. For example, over two-thirds of the students in each group said that there was "no chance" or "little chance" that they would take a temporary leave of absence (Table 4.8) and the majority of students in each group also felt that there was "no chance" or "little chance" that they would drop out or transfer (Table 4.9).

TABLE 4.8
STUDENT'S ASSESSMENT OF THE CHANCES HE/SHE WILL
TAKE A TEMPORARY LEAVE OF ABSENCE FROM
KINGSBOROUGH

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%**</u>
A very good chance	17	15.5	2	7.4
Some chance	19	17.3	7	25.9
Little chance	25	27.7	6	22.2
No chance	<u>49</u>	<u>44.5</u>	<u>12</u>	<u>44.4</u>
Total	110	100.0	27	99.9

**Percentages may not total 100% due to rounding.

TABLE 4.9

STUDENT'S ASSESSMENT OF THE CHANCES HE/SHE WILL
TRANSFER OR DROP OUT PERMANENTLY FROM
KINGSBOROUGH

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
No chance/little chance will drop out or transfer	69	65.1	14	56.0
Some chance/very good chance will transfer	32	30.2	7	28.0
Some chance/very good chance will drop out	<u>5</u>	<u>4.7</u>	<u>4</u>	<u>16.0</u>
Total	106	100.0	25	100.0

Pertaining to behaviors associated with the student role, students were asked to rate the frequency with which they had engaged in a number of activities, such as studying in the library, studying at home, not completing homework on time, or missing school because of illness or some other reason. Again, no significant differences were noted in most of the activities listed. For example, over two-thirds of the students in each group said that they had rarely or never: missed school because of illness or some other reason, failed to complete homework on time, or withdrawn from a course. In addition, most of them said that they had studied either at home or in the library with some degree of regularity. The largest dif-

ference between groups was in the proportion of students who said that they rarely or never asked a teacher for advice, with 44% of BSP and 65% of ESL checking these categories. This difference may have been due to the fact that BSP teachers spoke Spanish and BSP students may have felt much more at ease with them.

Thus, from responses to the questionnaire, it appears that both groups of students were similar in expectations and behaviors associated with the student role. A word of caution, however, is necessary. Since most students who responded to the questionnaire were still enrolled in college or had successfully completed their associate degrees, it is possible that the foregoing behaviors may have been modified by their college experience rather than reflecting previous school experiences.

In summary, although the BSP and ESL students came to college via different types of high schools in different countries, they were remarkably similar in their academic preparation, expectations, and behaviors associated with the student role. Their academic preparation was exceptionally deficient not only in English language skills, which are essential to compete successfully academically, but also in major other areas as well, such as in mathematics and science--skills which are crucial for successful integration into the American economy. In ex-

pectations and behaviors, the two groups were also very similar and in many ways seemed to have adopted the norms necessary for college survival.

Language Usage

As is frequently acknowledged, students' scores on tests are but one measure of their knowledge of any given language.⁷ In fact, some would argue that all that existing language tests measure is linguistic competence rather than communicative competence (Jacobovitz, 1970). By "linguistic competence" is meant the degree of sophistication in pronunciation, vocabulary, and manipulation of grammatical structures. Communicative competence, on the other hand, refers to the ability to use the language appropriately within its social and cultural contexts. It includes not only use of the structure and meaning of sentences, but also the use of rules that govern the socially acceptable ways of communicating. Some linguists, in fact, recommend that, in order to test a person's knowledge of a language, one should test his/her ability to function in a specified setting instead of mastery of grammar and vocabulary.

Fishman (1976) noted the importance of teaching a second language for specific contexts as follows:

It is the rare student who will need to use the target language in all the social contexts in which he

participates. Usually his requirements are far more modest. He needs the language for a restricted range of functions. He might, for example, require only a reading knowledge of the language, and, moreover, the contexts in which he needs to read it may be confined to his professional specialty. Another student may need the language for purposes of diplomatic representation. A third may be a person who needs the language primarily for routine transactions in shops, banks, and post offices. Sometimes it may not be immediately clear what purposes the students have in mind. (p. 39)

In the United States, most scholars would agree that both linguistic and communicative competence are necessary for full participation in American society and a prerequisite for further educational advancement in colleges and universities throughout the nation (Dulay and Burt, 1978a; Ney, 1978).

Many factors contribute to second language learning. One is what Jacobovits (1970) has called "opportunity to learn." "Opportunity to learn" refers to all the environmental conditions surrounding the learner (at home, at school, at work, in the community at large) which may influence language acquisition, as well as the specific time allotted in school to teach the language. Other important factors that influence second language learning are the attitudes which the student holds towards his own group and language, and toward the other (target) language and the target language group (Lambert and Gardner, 1972).

In this study, in addition to obtaining measures

of students' competence in English reading and writing skills as indicated by the CUNY Assessment Tests (discussed previously), other measures of the students' proficiency in English were obtained through a series of questions that elicited the students' self-appraisals of their English listening comprehension, speaking, reading and writing skills, and the extent to which they used English in a variety of social situations. Since we were also interested in assessing students' degree of bilingualism (which defined at its simplest, refers to the ability to either understand, speak, read, or write in two languages)⁸ parallel questions were included pertaining to their Spanish language skills and usage. Finally, questions that attempted to measure the students' attitudes toward the English and Spanish languages, and toward the U.S. mainland and their native countries, were also included. Data obtained from these questions follow.

Students' Self-Assessments of English and Spanish Language Skills

Students were asked to rate their ability to understand, speak, read, or write English. The question contained four precoded responses ranging from "not at all" to "very well." Since, at most, only two students in either group checked the "not at all" category, for purposes of analysis that category was combined with the "a little"

response. Table 4.10 reports the results of this question. It is evident from the data that in each of the

TABLE 4.10
SELF-ASSESSMENT OF ENGLISH LANGUAGE SKILLS

	<u>BSP</u> (113)		<u>ESL</u> (32)	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Read English</u>				
Not at all; a little	26	23.0	4	12.5
Fair	49	43.4	12	37.5
Very well	38	33.6	16	50.0
<u>Write English</u>				
Not at all; a little	37	32.7	8	25.0
Fair	54	47.8	14	43.7
Very well	22	19.5	10	31.3
<u>Speak English*</u>				
Not at all; a little	32	28.3	5	15.6
Fair	59	52.2	10	31.3
Very well	22	19.5	17	53.1
<u>Understand Spoken English*</u>				
Not at all; a little	16	14.2	1	3.1
Fair	53	46.9	6	18.8
Very well	44	38.9	25	78.1
*Statistically significant at the .05 level or below.				

four English language skills, BSP students reportedly experienced more difficulty than ESL students, with two of the ratings achieving statistically significant differences. These were: listening comprehension, where only 39% of BSP, but over three-fourths of ESL students reported understanding spoken English "very well"; and ability to speak English, where only 20% of BSP, but over 50% of ESL students described themselves as speaking English "very well." Pertaining to their reading skills, two-thirds of BSP and half of ESL students said that they could read English "a little," or just "fair." Writing was obviously the most difficult skill for both groups. Among BSP students, one-third said that they could write English only "a little," and nearly 50% said "fair." The percentages of ESL students who checked these categories were 25% and 44% respectively.

When asked to rate their Spanish language skills, both groups overwhelmingly rated themselves as understanding, speaking, reading, and writing Spanish "very well" (Table 4.11). The percentages, however, were somewhat higher among BSP students, which may be an indication of the greater opportunities which the BSP students had to fully develop their native language.

TABLE 4.11
SELF-ASSESSMENT OF SPANISH LANGUAGE SKILLS

	<u>BSP</u> (113)		<u>ESL</u> (32)	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Read Spanish</u>				
Not at all; a little	0	0.0	2	6.3
Fair	8	7.1	3	9.4
Very well	105	92.9	27	84.4
<u>Write Spanish</u>				
Not at all; a little	0	0.0	2	6.3
Fair	8	7.1	3	9.4
Very well	105	92.9	27	84.4
<u>Speak Spanish*</u>				
Not at all; a little	0	0.0	2	6.3
Fair	3	2.7	3	9.4
Very well	110	97.3	27	84.4
<u>Understand Spoken Spanish</u>				
Not at all; a little	0	0.0	2	6.3
Fair	1	0.9	2	6.3
Very well	112	99.1	28	87.5

*Statistically significant at the .05 level or below.
Note, however, that 20% or more of the cells have expected frequencies of less than 5.

Another question sought to determine whether students thought mainly in Spanish or in English. Over 80% in both groups said "mainly in Spanish" (Table 4.12).

TABLE 4.12
SELF-ASSESSMENT OF ENGLISH OR SPANISH
THINKING MODE

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%*</u>
Mainly in English	17	15.0	6	18.8
Mainly in Spanish	<u>96</u>	<u>83.0</u>	<u>26</u>	<u>81.3</u>
Total	113	100.0	32	100.1
*Percentages do not total 100% due to rounding.				

These findings make it clear that Spanish was the dominant language of the two groups of students. Also clear is that the ESL group reported significantly greater progress in the development of English listening comprehension and speaking ability. Since both groups had been in the United States for approximately the same number of years, it is possible that the ESL students' younger age when they came to the U.S. and their greater exposure to mainland schools may have contributed to their greater progress in these two skills, which are a minimum require-

ment for meaningful participation in the regular classroom, where English is the medium of instruction. Nevertheless, it is important to note that most of the students in the ESL group saw themselves as thinking basically in Spanish and that the CUNY Assessment tests indicated that they needed intensive remediation in English reading and writing on entering Kingsborough. Also, the fact that they were assigned to ESL suggests that their spoken English may well be of the "street" variety which does not prepare students for academic life. The significance of these findings will become evident in the next chapter, where the academic performance of the students is discussed.

Frequency of Language Usage

Students were asked to indicate whether they used Spanish or English in a variety of social situations. The results of this question, listed in Table 4.13, clearly show that Spanish was the dominant language used by both groups in intimate social relations involving the home, siblings, and relatives not living in the household, with two-thirds or more of the students responding that they spoke "only" or "mostly Spanish" in these situations. In addition, over half of BSP and 41% of ESL students said that they generally spoke Spanish to their spouses/girl-

TABLE 4.13
LANGUAGE SPOKEN IN SOCIAL SITUATIONS

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>At Home</u>	(113)		(32)	
Only or mostly Spanish	76	67.3	25	78.1
Spanish and English	31	27.4	3	9.4
Only or mostly English	6	5.3	4	12.5
<u>With Relatives Not in Household</u>	(113)		(32)	
Only or mostly Spanish	78	69.0	21	65.6
Spanish and English	20	17.7	6	18.8
Only or mostly English	15	13.3	5	15.6
<u>With Friends in School*</u>	(113)		(32)	
Only or mostly Spanish	59	52.2	2	6.3
Spanish and English	35	31.0	12	37.5
Only or mostly English	19	16.8	18	56.2
<u>With Friends Outside of School*</u>	(113)		(32)	
Only or mostly Spanish	46	40.7	7	21.9
Spanish and English	37	32.7	9	28.1
Only or mostly English	30	26.6	16	50.0
<u>With College Teachers*</u>	(113)		(32)	
Only or mostly Spanish	30	26.6	0	0.0
Spanish and English	46	40.7	4	12.5
Only or mostly English	37	32.7	28	87.5
<u>With College Counselors*</u>	(113)		(32)	
Only or mostly Spanish	53	46.9	0	0.0
Spanish and English	38	33.6	3	9.7
Only or mostly English	22	19.5	28	90.3

TABLE 4.13 (continued)

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>With Siblings</u>	(107)		(31)	
Only or mostly Spanish	75	70.1	21	67.7
Spanish and English	20	18.7	8	25.8
Only or mostly English	12	11.2	2	6.5
<u>At Work*</u>	(92)		(26)	
Only or mostly Spanish	33	35.9	4	15.4
Spanish and English	26	28.3	6	23.1
Only or mostly English	33	35.9	16	61.5
<u>With Spouse/Boyfriend/Girlfriend</u>	(89)		(27)	
Only or mostly Spanish	48	53.9	11	40.7
Spanish and English	21	23.6	10	37.0
Only or mostly English	20	22.5	6	22.2
<u>With Children</u>	(62)		(7)***	
Only or mostly Spanish	28	45.2	2	
Spanish and English	25	40.3	4	
Only or mostly English	9	14.5	1	

*Statistically significant at the .05 level or below.

**Percentages may not total 100% due to rounding.

***Too small to percentage.

friend or boyfriend. ESL students, however, were significantly more likely to speak "only" or "mostly English" to friends in school (56% vs. 17%), friends outside of school (50% vs. 27%), college teachers (88% vs. 33%), college counselors (90% vs. 20%), and at work (62% vs. 36%). This

is consistent with a finding reported earlier, that BSP students described themselves as experiencing more difficulty in speaking English than ESL students. The finding also partly reflects the social atmosphere prevailing at KCC's bilingual program, where students felt free to express themselves in the language they knew best in formal and informal conversations with teachers, counselors, and classmates, all of whom knew Spanish. ESL students, on the other hand, had to draw on their English language skills (however limited these might have been) for any social interaction in the school setting. However, it is interesting to note that, when asked which language they used in speaking to their children, the largest percentage of BSP students (40%) said that they spoke both Spanish and English, suggesting that the students were aware of the significance of transmitting bilingual skills to their children. Unfortunately, there were too few ESL students with children who responded to the questionnaire for any meaningful assessment of this group.

Another question asked students how often they engaged in a number of activities involving the use of the two languages (Table 4.14). Seventeen activities were listed, including listening to records, watching television, reading newspapers or magazines, meeting with Hispanic or non-Hispanic friends, and attending American or

TABLE 4.14
FREQUENCY OF ACTIVITIES INVOLVING THE USE
OF ENGLISH OR SPANISH

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>Read newspapers in English</u>	(113)		(32)	
Very or quite frequently	54	47.8	19	59.4
Somewhat frequently	38	33.6	5	15.6
Rarely or never	21	18.6	8	25.0
<u>Read newspapers in Spanish*</u>	(113)		(32)	
Very or quite frequently	43	38.1	9	28.1
Somewhat frequently	39	34.5	5	15.6
Rarely or never	31	27.4	18	56.3
<u>Watch TV in English</u>	(113)		(32)	
Very or quite frequently	83	73.5	24	75.0
Somewhat frequently	25	22.1	8	25.0
Rarely or never	5	4.4	0	0.0
<u>Watch TV in Spanish</u>	(113)		(32)	
Very or quite frequently	47	41.6	13	40.6
Somewhat frequently	27	23.9	10	31.3
Rarely or never	39	34.5	9	28.1
<u>Listened to radio in English*</u>	(113)		(32)	
Very or quite frequently	66	58.4	27	84.4
Somewhat frequently	28	24.8	3	9.4
Rarely or never	19	16.8	2	6.3
<u>Listened to radio in Spanish</u>	(113)		(32)	
Very or quite frequently	45	39.8	10	31.3
Somewhat frequently	28	24.8	7	21.9
Rarely or never	40	35.4	15	46.9

TABLE 4.14 (continued)

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>Listened to records in English</u>	(113)		(32)	
Very or quite frequently	71	62.8	27	84.4
Somewhat frequently	28	24.8	4	12.5
Rarely or never	14	12.4	1	3.1
<u>Listened to records in Spanish</u>	(113)		(32)	
Very or quite frequently	57	50.4	19	59.4
Somewhat frequently	33	29.2	6	18.8
Rarely or never	23	20.4	7	21.9
<u>Read magazines in English</u>	(113)		(32)	
Very or quite frequently	56	49.6	16	50.0
Somewhat frequently	29	25.7	8	25.0
Rarely or never	28	24.8	8	25.0
<u>Read magazines in Spanish</u>	(113)		(32)	
Very or quite frequently	41	36.3	14	43.8
Somewhat frequently	37	32.7	8	25.0
Rarely or never	35	31.0	10	31.2
<u>Met with Hispanic friends</u>	(113)		(32)	
Very or quite frequently	77	68.1	17	53.1
Somewhat frequently	26	23.0	8	25.0
Rarely or never	10	8.9	7	21.9
<u>Met with non-Hispanic friends</u>	(113)		(32)	
Very or quite frequently	31	27.4	13	40.6
Somewhat frequently	39	34.5	7	21.9
Rarely or never	43	38.1	12	37.5

TABLE 4.14 (continued)

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
<u>Attended Hispanic movies/plays</u>	(113)		(32)	
Very or quite frequently	28	24.8	9	28.1
Somewhat frequently	31	27.4	4	12.5
Rarely or never	54	47.8	19	59.4
<u>Attended American movies/plays</u>	(113)		(32)	
Very or quite frequently	41	36.3	18	56.3
Somewhat frequently	29	25.7	5	15.6
Rarely or never	43	38.1	9	28.1
<u>Wrote a letter, essay in Spanish</u>	(112)		(32)	
Very or quite frequently	52	46.4	17	53.1
Somewhat frequently	35	31.3	4	12.5
Rarely or never	25	22.3	11	34.4
<u>Wrote a letter, essay in English</u>	(113)		(32)	
Very or quite frequently	42	37.2	14	43.8
Somewhat frequently	31	27.4	5	15.6
Rarely or never	30	26.5	13	40.6
<u>Hispanics visited my house</u>	(113)		(32)	
Very or quite frequently	75	66.4	16	50.0
Somewhat frequently	29	25.7	10	31.2
Rarely or never	9	8.0	6	18.8

*Statistically significant at the .05 level or below.

**Percentages may not total 100% due to rounding.

Hispanic movies and plays. By and large, students in both groups engaged in most of the activities listed with about the same frequency. One exception was the extent to which students read newspapers in Spanish. Only 27% of BSP students reported that they "rarely" or "never" read newspapers in Spanish in contrast to over half of ESL students. Since approximately similar percentages of students reported reading magazines in Spanish and reading newspapers in English with some degree of regularity, the finding suggests that BSP students were more concerned about events in the Hispanic community. Another exception was the extent to which students listened to the radio in English. Although over half of BSP students said that they engaged in this activity "very" or "quite" frequently, the proportion among ESL students was substantially higher, reaching 84%. This finding, again, may be due to the fact that BSP students viewed themselves as experiencing more difficulties in understanding spoken English than ESL students. It is remarkable, however, that both groups generally reported similar frequencies of engaging in most of the activities involving the use of English or Spanish.

In summary, the foregoing data do not appear to support the widely held opinion that bilingual education leads to ethnocentrism. The similarities in the frequency of activities involving the use of English reported by the

two groups far outweigh the few differences. Furthermore, the high frequency with which BSP students exposed themselves to English, in spite of their self-perceptions of limited skills in the language, suggests a deliberate effort to improve their English language skills as well as an active interest in American culture which did not detract in any way from their interest in Hispanic culture. Although it is difficult to attribute these bicultural interests solely to their academic experiences in the bilingual program, one cannot but infer that the opportunity to attend college through the availability of the bilingual program has helped to develop the BSP students' non-ethnocentric behavior. This interpretation is reinforced by the findings that follow.

Attitudes Toward English

Students' attitudes and feelings toward the English language were gathered by three fixed alternative (pre-coded) questions. The first question listed nine statements and asked students to indicate the extent to which they agreed or disagreed. The pre-coded responses ranged from "strongly disagree" to "strongly agree." None of the items listed differentiated between the two groups of students. Results are therefore presented only in terms of the proportions of students who agreed with each of the statements (Table 4.15).

TABLE 4.15
PERCENTAGE OF STUDENTS AGREEING WITH EACH
STATEMENT CONCERNING THE ENGLISH LANGUAGE

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u> (113)	<u>%</u>	<u>N</u> (32)	<u>%</u>
English helps me understand American people and their way of life.	96	85.0	26	81.3
English is necessary to get a good job.	103	91.2	32	100.0
English enables me to think and behave the way Americans do.	50	44.2	16	50.0
A good knowledge of English is necessary to gain social recognition.	69	61.1	18	56.3
I will be using English extensively in my future job.	89	78.7	29	90.6
No one is really educated unless he has a good knowledge of English.	16	14.2	5	15.6
I need to study English for a specific educational goal.	97	85.8	28	87.5
I need to study English for a job related goal.	107	95.0	29	90.6
English enables me to make friends more easily among Americans.	93	82.3	27	84.4

Nearly eighty percent or more of the students in both groups agreed with the following statements:

English helps me understand the American people and their way of life.

English is necessary to get a good job.

English enables me to make friends more easily among Americans.

I will be using English extensively in my future job.

I need to study English for a specific educational goal.

I need to study English for a job related goal.

A majority in both groups also agreed with the statement: "A good knowledge of English is necessary to gain social recognition."

The only statements with which students disagreed were, "English enables me to think and behave the way Americans do," where half or more in both groups indicated that they disagreed, and "No one is really educated unless he has a good knowledge of English," which elicited over 80% disagreement among both groups.

The second question asked students how important the study of English was to them and contained four alternative responses ranging from "essential" to "of little importance." Responses indicated that both groups attached considerable importance to the study of English with 31% of BSP and 44% of ESL students responding "essential," and 59% of BSP and 47% of ESL students responding "very important." Nine percent in both groups said that

it was "of some importance" and only one BSP student indicated that the study of English had "little importance" (Table 4.16).

TABLE 4.16
IMPORTANCE OF ATTACHED TO THE
STUDY OF ENGLISH

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%*</u>
Essential	35	31.0	14	43.8
Very important	67	59.3	15	46.9
Of some importance	10	8.8	3	9.4
Of little importance	<u>1</u>	<u>0.9</u>	<u>0</u>	<u>0.0</u>
Total	113	100.0	32	100.1

*Percentages may not total 100% due to rounding.

The third question also contained four alternative responses and attempted to elicit how often students tried to speak English. Again, the most frequent response in both groups, checked by over 70% of the students, was that they tried to speak English every time they had a chance to do so (Table 4.17).

Thus, students in both groups seemed to share similar feelings and attitudes toward the English language and these attitudes were generally positive. These findings

TABLE 4.17
HOW OFTEN STUDENT ATTEMPTED
TO SPEAK ENGLISH

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Every opportunity	81	71.7	25	78.1
Once in awhile	12	10.6	2	6.3
Only if I have to	<u>20</u>	<u>17.7</u>	<u>5</u>	<u>15.6</u>
Total	113	100.0	32	100.0

are consistent with data presented earlier, which indicated that BSP students participated in activities involving the use of English, or majority culture, with about the same frequency as ESL students. Thus, contrary to popular belief, students in this bilingual program did not exhibit negative attitudes toward the majority language or culture.

Attitudes Toward Spanish

Attitudes toward the Spanish language were measured by two questions paralleling those used to assess attitudes toward English. Responses to the question which asked students the extent to which they agreed or disagreed with a series of statements are, again, presented only in terms of whether the student agreed (Table 4.18).

TABLE 4.18
PERCENTAGE OF STUDENTS AGREEING WITH EACH
STATEMENT CONCERNING THE SPANISH LANGUAGE

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u> (113)	<u>%</u>	<u>N</u> (33)	<u>%</u>
Spanish helps me get along with my family.	96	85.0	28	84.8
Spanish helps me understand Hispanic and their way of life.	98	86.7	27	81.8
Spanish is necessary to get a good job.	72	63.7	22	66.6
Spanish enables me to think and behave the way Hispanics do.	78	69.0	20	60.6
A good knowledge of Spanish is necessary to gain social recognition.	51	45.1	12	39.4
I will be using Spanish extensively in my future job.	62	54.9	13	39.4
No one is really educated unless he has a good knowledge of Spanish.	24	21.2	6	18.2
I need to study Spanish for a specific educational goal.*	68	60.2	12	36.4
I need to study Spanish for a job related goal.	69	61.1	16	48.5
Spanish enables me to make friends more easily among Hispanics.	88	77.9	26	81.3
*Statistically significant at the .05 level or below.				

Three statements elicited about 80% agreement or higher among the two groups. These were:

Spanish helps me to get along with my family.

Spanish helps me understand Hispanics and their way of life.

Spanish enables me to make friends more easily among Hispanics.

In addition, about two-thirds of the students in each group also agreed that:

Spanish is necessary to get a good job.

Spanish enables me to think and behave like Hispanics.

Over three-fourths of the students disagreed with the statement, "No one is really educated unless he has a good knowledge of Spanish." A majority of students in both groups also disagreed that "A good knowledge of Spanish is necessary to gain social recognition." Pertaining to this latter statement, it is interesting to note that responses from students in both groups were in the opposite direction from responses to the same statement referring to the English language. Whereas 61% of BSP and 56% of ESL students had said that "A good knowledge of English is necessary to gain social recognition," only 45% and 39% in the two groups respectively felt the same way about the Spanish language, suggesting that students felt that, on the U.S. mainland, knowledge of Spanish is not necessary to achieve social status.

Similarly, unlike responses to the same attitudinal

items concerning the English language, there was no consensus among students in their responses to the three remaining statements. Substantially more BSP than ESL students said that they will be using Spanish extensively in their future jobs (55% vs. 39%), that they needed to study Spanish for a job related goal (61% vs. 49%), and for a specific educational goal (60% vs. 36%), with the last difference achieving statistical significance.

The second question designed to tap attitudes toward Spanish asked students how important the study of Spanish was to them (Table 4.19). Slightly higher propor-

TABLE 4.19
IMPORTANCE OF THE STUDY OF SPANISH

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Essential	26	23.0	6	18.2
Very important	64	56.6	16	48.5
Some importance	21	18.6	7	21.2
Little importance	<u>2</u>	<u>1.8</u>	<u>4</u>	<u>12.1</u>
Total	113	100.0	33	100.0

tions of BSP than ESL students indicated that the study of Spanish was "essential" to them (23% vs. 18%) or "very

important" (57% vs. 49%). Conversely, ESL students were more likely than BSP students to rate the study of Spanish as "of little importance" (12% vs. 2%).

Taken together, responses to the attitudinal questions suggest that BSP students tend to have more positive attitudes toward the Spanish language than ESL students. They see the Spanish language as having both instrumental and integrative (cultural and social) value. ESL students, on the other hand, although acknowledging the integrative value of Spanish, tend to diminish its instrumental value. Whether the BSP students came to the Bilingual Program with these attitudes, or whether the Program fostered them, our data do not say. However, since an educational aim of the Bilingual Program is to develop positive attitudes towards the student's native language and culture, at the very least it can be inferred that the Program has helped to maintain if not necessarily foster them.

Another inference that can be made from the foregoing findings is that perceiving one's native language as useful for cultural, social or instrumental reasons does not detract or diminish the value of the national language. The issue is not a "zero-sum" proposition as opponents of bilingual education regard it.

Ties to Their Homeland

Questions designed to measure ties to the students' homelands elicited generally similar responses from both groups, indicating that strong ties continue. When asked, "During the last five years, how often have you visited a Spanish-speaking country," a substantial number in each group reported having visited at least once. BSP students, however, were more likely than ESL to say that they had not visited a Hispanic country during that period (35% vs. 19%, Table 4.20), which may be a function of their lower incomes.

TABLE 4.20
NUMBER OF VISITS TO A HISPANIC COUNTRY
DURING LAST FIVE YEARS

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%**</u>
None	35	31.0	6	18.8
Once	31	27.4	11	34.4
Twice	23	20.4	9	28.1
Three or more	<u>24</u>	<u>21.2</u>	<u>6</u>	<u>18.8</u>
Total	113	100.0	32	100.1

**Percentages do not total 100% due to rounding.

Among those who had visited a Hispanic country, the visits were generally to the student's or parents' country of origin (Table 4.21). Ten percent of the Bilingual Program students and 19% of ESL students reported having visited some other country in addition to their country of

TABLE 4.21
HISPANIC COUNTRIES VISITED DURING
LAST FIVE YEARS

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
Student's or parents' country of origin	71	85.5	20	76.9
Above & some other country	8	9.6	5	19.2
Some other country	<u>4</u>	<u>4.8</u>	<u>1</u>	<u>3.8</u>
Total	83	99.9	26	99.9

**Percentages do not total 100% due to rounding.

origin, and low percentages in both groups (5% BSP, 4% ESL) reported having visited only countries other than those in which they or their parents were born.

In response to the question, "How often would you like to visit a Spanish-speaking country," the most frequent answer given by both groups was "every opportunity I get," checked by 64% of BSP and 75% of ESL students

(Table 4.22). Slightly over one-fourth of BSP and close to one-fifth of ESL students indicated that they would like to visit "once in a while," and less than 10% in each group said "only when I have to."

Students were also asked to identify the Hispanic country or countries which they would like to visit. Proportionately more ESL than BSP students (42% vs. 30%) mentioned only their country or their parents' country of

TABLE 4.22

HOW OFTEN STUDENTS WOULD LIKE TO
VISIT A HISPANIC COUNTRY

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%**</u>
Only if I have to	10	8.8	2	6.3
Once in a while	31	27.4	6	18.8
Every opportunity I get	<u>72</u>	<u>63.7</u>	<u>24</u>	<u>75.0</u>
Total	113	99.9	32	100.1

**Percentages do not total 100% due to rounding.

origin, while BSP students were more likely to identify a country other than where they or their parents were born in addition to their country of origin (39% vs. 26%). Similar percentages in the two groups (32%) identified

only a country(ies) other than their country of origin (Table 4.23).

TABLE 4.23
HISPANIC COUNTRIES STUDENT WOULD LIKE TO VISIT

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%</u>
Student's or parents' country of origin	33	29.7	13	41.9
Above and some other country	43	38.7	9	25.8
Some other country	<u>35</u>	<u>31.5</u>	<u>10</u>	<u>32.3</u>
Total	111	99.9	31	100.0

**Percentages do not total 100% due to rounding.

Finally, students were asked two questions, to assess the chances (1) that they will live in a Hispanic country, and (2) that they will live permanently in the United States. Precoded responses to these two questions ranged from "a very good chance" to "no chance." Responses to the first question were not substantially different for the BSP and ESL students (Table 4.24). Among BSP students, one-third felt that there was "a very good chance," and another 40% indicated that there was "some chance." The relative proportions for ESL students were 28% and 38% respectively. A small number of students in both groups

TABLE 4.24
STUDENT'S EXPECTATIONS OF LIVING IN
A HISPANIC COUNTRY

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%**</u>	<u>N</u>	<u>%</u>
A very good chance	38	33.6	9	28.1
Some chance	45	39.8	12	37.5
Little chance	19	16.8	7	21.9
No chance	<u>11</u>	<u>9.7</u>	<u>4</u>	<u>12.5</u>
Total	113	99.9	32	100.0

**Percentages do not total 100% due to rounding.

said that there was "no chance" at all.

Pertaining to the chances that they will live permanently in the United States (Table 4.25) similar percentages of students in both groups (38% of BSP and 42% of ESL) said "a very good chance," or "no chance" (6% of BSP and 3% of ESL). However, whereas 45% of BSP also indicated that there was "some chance," only 27% of ESL gave this response. Conversely, proportionally more ESL (27%) than BSP students (12%) stated that there was "a small chance."⁹ This finding, again, strengthens the basic argument advanced throughout this section--the BSP students' positive feelings toward their homeland, language,

TABLE 4.25
STUDENT'S EXPECTATIONS OF LIVING PERMANENTLY
ON THE U.S. MAINLAND

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
A very good chance	42	37.5	14	42.4
Some chance	50	44.6	9	27.3
Little chance	13	11.6	9	27.3
No chance	<u>7</u>	<u>6.3</u>	<u>1</u>	<u>3.0</u>
Total	112	100.0	33	100.0

and culture in no way lead to devaluation of the mainland, the national language or culture.

Summary

Because the characteristics that students bring to college influence their performance and the ultimate outcome of their educational experience, the background characteristics of the BSP and ESL students included in this study have been compared.

Although the two groups were not identical on the many different measures reviewed in this chapter, they were similar in many areas which, by any standard, would place them at a very serious disadvantage in any higher

education setting. Most of them were non-native born and were not exposed to English until, or later than their adolescence. Spanish was still the dominant language spoken in the home of the vast majority of students. The majority were women and a significant number were housewives or single parents. They were older than the typical college student and they generally came from financially impoverished families.

Educationally, both groups of students were strikingly deficient not only in English language skills (as assessed by the CUNY Assessment Tests) but also in other academic areas as well, such as Math, Science, and even Social Studies. In addition, significant proportions of students in both groups had come to college via nontraditional high schools, suggesting previous difficulties in adapting to conventional educational settings.

Overall, however, the students who entered Kingsborough via the Bilingual Studies Program fared even worse than ESL students on many of the foregoing characteristics. The BSP students were older when they came to the United States and older when they entered KCC. They were more likely to be single parents and heads of households, and to come from families with incomes substantially below the poverty level. Furthermore, a significantly higher proportion of BSP students had come to college via the

high-school-equivalency-diploma route. To the extent that these characteristics influence academic success, one would say that, in the absence of intervention techniques that would help them overcome these disadvantages (such as the Bilingual Studies Program), the chances to succeed in college were even smaller for BSP than ESL students.

Since sharing a common language and Hispanic culture are two distinguishing characteristics of both groups of students, various self-assessment measures pertaining to the use of Spanish or English in a variety of social situations, attitudes toward each language, and ties to the homeland and to the U.S. were also compared. Overall, BSP students' responses tended to reflect somewhat more positive attitudes toward Spanish than did those of ESL students. The salient fact that emerged, however, was the similarity of BSP and ESL students in their positive evaluations of the English language and exposure to activities involving the use of English or Spanish. From the findings on attitudes toward English and Spanish, the general conclusion was drawn that positive attitudes toward one's native language in no way lead to devaluation of the national language. The argument was also advanced that the findings cast some doubt on the notion widely held by its opponents that bilingual education leads to ethnocentric attitudes and behavior.

NOTES

¹The other Hispanic countries of origin of BSP students, in order of frequency, were: Ecuador (n=17), Columbia (n=12), Cuba, Costa Rica, Panama, Nicaragua (each with 2 students), Guatemala, Mexico, Peru, Spain, Argentina, Honduras, El Salvador, and Venezuela (each represented by one student).

²For ESL students, the other Hispanic countries not listed in Table 4.1, in order of frequency, were: Ecuador (n=6), Columbia and Panama (each with 5 students), Guatemala (n=4), Nicaragua and Peru (each represented by 3 students), Honduras, Venezuela, Spain (each with 2 students), Costa Rica, Argentina, El Salvador, and Chile (each represented by one student).

³A notion held by many is that second languages should be taught early in childhood, at least before puberty. This hypothesis of a critical age is based on the observation that when children are exposed in a natural setting to two languages during their early childhood, they achieve a mastery of both languages that is native-like in fluency and pronunciation. In fact, some people believe that true "balanced" bilinguals (equal fluency in two languages) are produced only under these conditions of childhood learning. This view is reinforced by the neurophysiological argument that the human brain loses plasticity after puberty and language learning after that age becomes increasingly difficult. The research evidence, however, indicates that second language learning is possible at any stage in a person's life and there are advantages and disadvantages for different ages. See, S. Izzo, Second Language Learning: A Review of Related Studies (Rosslyn, Va.: NCBE, 1981), pp. 29-39.

⁴The finding adds additional documentation to the claim made by College Discovery Directors that the College Discovery Program (which historically has enrolled the largest proportion of Hispanic students of all special programs in new York State) are among the neediest students in CUNY's community colleges. See L. Bengis and C.D. Directors (under direction of Y. M. Tormes), A Proposal to Modify the Structure of the College Discovery Program (New York: The City University of New York Office of Special Programs, June, 1977).

⁵Among the studies reporting unique contributions of parental income to educational outcome measures are

A. W. Astin, Minorities in Higher Education (San Francisco: Jossey-Bass, 1982) and C. Jencks et al., Inequality: A Reassessment of the Effects of Family and Schooling in America (New York: Basic Books, 1972). Two studies reporting no independent effects are A. W. Astin, Preventing Students from Dropping Out (San Francisco: Jossey-Bass, 1975) and D. Lavin et al., Right Versus Privilege (New York: The Free Press, 1981).

⁶Broadly speaking, there are two different perspectives on the selection and allocation process. The traditional perspective, embodied in the theory of T. Parsons ("The School Class as a Social System: Some of Its Functions in American Society," Harvard Educational Review, 29, No. 4 [1959]: 129-154) views meritocratic principles as the only determinants of the process. The radical perspective, on the other hand, stipulates that ascriptive criteria, such as race, ethnicity, and social class play a very significant role. See, for example, the classical study by R. Rist, "Student Social Class and Teachers Expectations: The Self-Fulfilling Prophecy in Ghetto Education," Harvard Educational Review; 40 (August 1970): 411-451.

⁷It is commonly known that performance on any tests, whether language or any other area, is affected by many factors, such as memory, motivation, anxiety, speed, and test administration.

⁸John McNamara defines a bilingual as a person who possesses skill even to a minimal degree in at least one of the language skills (listening, speaking, reading, or writing) in the second language. "The Bilingual's Linguistic Performance--A Psychological Overview," Journal of Social Issues, 23, No. 2 (1967): 58-77. Others designate as bilinguals only those who achieve a certain level of competence in any one of the skills in the second language." See H. H. Stern, Foreign Languages in Primary Education (London: Oxford University Press, 1967).

⁹The apparent contradiction between responses to the questions pertaining to living in a Hispanic country and living permanently in the United States is due to the fact that the two items were worded differently.

CHAPTER V

ACADEMIC PERFORMANCE: A COMPARISON

The preceding section focused on comparing selected background characteristics of students in the Bilingual Studies Program with students who were assigned to ESL. This was a necessary first step before attempting to answer the main research question posed by this study: whether the two educational approaches have differential effects on the likelihood of Hispanic students successfully pursuing a college education. To answer this question, two kinds of analysis are reported. The first type, to be discussed in this chapter, involves a comparison of the semester by semester academic performance of the two groups. These comparisons are presented through the fourth semester, which was as far as meaningful sample sizes in each group were available. The second type of analysis, to be reported in Chapter VI, involves the prediction of several outcome measures on the basis of certain background characteristics that the student brings to college.

In comparing the academic performance, several

measures were used: the number of courses for which the student registered, the number of courses passed with a "D" (the minimum passing grade at all of CUNY's undergraduate colleges) or better, the number of credits attempted, the number of credits earned, and the student's grade-point average. The number of courses for which the student registers and the number of credits carried in those courses have been shown to affect the number of credits earned and the GPA in disadvantaged populations. Dispenzieri and Associates (1969, 1970) have reported that students in CUNY's College Discovery and SEEK Programs who attempt heavy credit loads during the first semester in college tend to earn more credits than students attempting lower credit loads; however, they do so at the expense of their GPA. The number of credits earned provides an indication of the length of time a student will take to complete his/her degree, while the grades obtained and the GPA provide measures of the quality of the student's academic performance. Although no one really knows what the optimal credit/non-credit course load is for disadvantaged students, many authorities believe that earning a reasonable number of credits and/or obtaining good grades during the first and second semesters in college boost the student's self-esteem and enhance his or her motivation, thus improving the chances for persisting in college.¹

Also, as part of this competition, the students' progress towards the degree is reported. As indicated in Chapter III, progress towards the degree is a summary measure which takes into consideration the proportion of courses passed of courses attempted, or the proportion of credits earned of credits attempted, and the student's GPA. At CUNY, this measure is of critical importance since University-wide policy mandates that students maintain adequate progress towards the degree to retain their matriculated status. Finally, the attrition and graduation rates as of summer 1981 are presented. To many educators, policy makers, and the public at large, these are the ultimate measures by which the success or failure of a given program or technique is assessed.

Academic Performance

Table 5.1 presents cumulatively the semester by semester academic performance of BSP and ESL students. The numbers in the cells represent group means and standard deviations of the following measures: courses for which students registered, courses passed, credits attempted, credits earned, and the grade-point average (GPA). The diminishing Ns after the second semester reflect students who have dropped out as well as those who, although still enrolled, had not been in college long

TABLE 5.1
CUMULATIVE ACADEMIC PERFORMANCE OVER FIRST
FOUR SEMESTERS BY PROGRAM

	<u>BSP</u>			<u>ESL</u>		
	<u>N</u>	<u>X</u>	<u>S.D.</u>	<u>N</u>	<u>X</u>	<u>S.D.</u>
<u>1st Semester</u>	(191)			(70)		
Courses Registered*		5.81	1.36		5.44	1.22
Courses Passed		4.31	2.29		3.91	1.69
Credits Attempted*		13.02	3.57		8.63	4.10
Credits Earned*		9.87	5.50		6.14	4.08
GPA*	(184)	2.32	1.12	(67)	1.92	0.95
<u>2nd Semester</u>	(150)			(51)		
Courses Registered*		12.02	2.10		11.18	1.76
Courses Passed*		9.05	3.30		7.51	3.10
Credits Attempted*		28.20	6.02		20.31	6.73
Credits Earned*		21.79	8.46		13.71	7.98
GPA*		2.47	0.84		1.87	0.83
<u>3rd Semester</u>	(89)			(25)		
Courses Registered		17.51	3.17		16.92	2.22
Courses Passed		13.21	4.38		11.56	4.86
Credits Attempted*		42.21	8.10		33.96	9.93
Credits Earned*		32.92	11.51		24.76	13.92
GPA*		2.48	0.77		1.99	0.85

TABLE 5.1 (continued)

	<u>BSP</u>			<u>ESL</u>		
	<u>N</u>	<u>X</u>	<u>S.D.</u>	<u>N</u>	<u>X</u>	<u>S.D.</u>
<u>4th Semester</u>	(64)			(15)		
Courses Registered		23.30	3.77		22.07	3.01
Courses Passed		17.34	4.96		16.00	6.27
Credits Attempted		57.06	8.88		49.60	13.54
Credits Earned		43.97	12.85		37.47	19.44
GPA		2.49	0.65		2.20	0.80

*Statistically significant at the .05 level or below.

Note: No statements about dropouts can be made from this table. Diminishing Ns after the second semester reflect students who have dropped out as well as those who, although still enrolled, had not been in college long enough to have entered their third or fourth semesters.

enough to have entered their third or subsequent semesters.

The most salient finding from Table 5.1 is that the Bilingual Studies Program students outperformed ESL students on almost every criterion during the first three semesters in college. It is only in the fourth semester, after the weeding-out process has taken place (with many of the weaker students withdrawing from college voluntarily or involuntarily), that ESL students performed at the same level as the BSP students.

Two of the most notable differences are in the number of credits attempted and in the number of credits earned. During the first semester, both groups of stu-

dents registered, on the average, for about the same number of courses. However, BSP students carried on the average 13.0 credits in their 5.8 courses, whereas the ESL students' credit load was, on the average, over four credits lighter for a similar number of courses registered, 5.4. Moreover, by the end of the semester, BSP students had the advantage of having earned at least four more credits, on the average, than their ESL peers.

The differences in credits attempted and credits earned is even more pronounced by the end of the first academic year, by which point the BSP students had earned 21.8 credits out of 28.2 attempted, in contrast to ESL's 13.7 credits earned out of 20.3 attempted. This means that the BSP students were close to three courses ahead, or the equivalent of almost one semester, even though both groups had been in residence for the same period of time. This advantage in credits earned persisted throughout the third and fourth semesters.

Another outstanding difference in the academic performance of the two groups is in the earned GPA. It was noted earlier that higher credit loads during the first semester in college tend to be associated with lower GPAs among academically underprepared students at CUNY and, conversely, lower credit loads tend to be associated with higher GPAs (Dispenzieri, Giniger, Tormes, et al. [1970];

Dispenzieri, Giniger, Hussein, et al. [1969])). This finding was not replicated in our data. The Bilingual Studies Program students consistently achieved higher GPAs than ESL students during the first three semesters in college, even though they had attempted and earned considerably more credits. Thus, exposure to a high credit load does not appear to affect the quality of academic performance of BSP students. In the first semester, the BSP students compiled a respectable mean GPA of 2.32, or the equivalent of a C+. The GPA steadily rose, albeit slightly, throughout the next three semesters, reaching 2.49, almost a B-, in the fourth semester. ESL students' mean GPA, on the other hand, was consistently below that of BSP students during the first three semesters by almost half a letter grade. In the fourth semester, the mean GPA of ESL students for the first time rose above the C level, but the ESL students still lagged one semester behind BSP students in credits earned.

Another index of students academic achievement is their progress towards the degree (PTD). The importance of this measure cannot be overstated. We have stated that, at CUNY, in order to maintain their matriculated status, students must maintain adequate progress towards the degree. When students do not maintain adequate progress towards the degree, they are placed on probation and

are subject to subsequent dismissal if their performance does not come up to University standards. Kingsborough Community College adheres very strictly to this CUNY policy. Although Kingsborough does provide an academic appeals procedure and may make an exception in the implementation of the guidelines in unusual circumstances, our review of the cases which had been academically dismissed revealed that very few students exercised this option. In fact, a serendipitous finding, worthwhile noting, was that mere receipt of the letter indicating that the student was being placed on probation had the effect of discouraging the student from continuing to attend classes without going through the process of withdrawing officially from the college. Either way, regardless of whether students voluntarily "fade away" after receiving the probation letter, or whether they are academically dismissed, the valid assumption may be made that their chances to continue their education within a CUNY college, or elsewhere, are considerably diminished.

As stated in Chapter III, in developing the progress towards the degree measure, CUNY's definition was followed. At this juncture, for the sake of clarity, some of the essential elements of the definition are reviewed. According to the April 5, 1976 resolution of the Board of Higher Education, a student is considered to be making

satisfactory progress towards the degree if he completes satisfactorily the following:

1. At least one half (50%) of the first four courses or twelve credits attempted with a GPA of at least 1.50;

2. At least two-thirds (67%) of the first eight courses or twenty-four credits attempted with a GPA of at least 1.75;

3. At least three quarters (75%) of the first 12 courses or 36 credits attempted with a GPA of at least 2.00;

4. At least three-quarters (75%) of all courses attempted in any subsequent semester and cumulatively by the end of each subsequent semester. In addition, in each of these semesters, students must maintain a GPA of at least 2.00.

It is obvious from the definition that the measure PTD is more comprehensive than any of the performance criteria discussed previously, since it measures several aspects of each student's academic performance simultaneously. First, it measures the pace at which the student is earning the degree; second, it takes into account the quality of the academic performance; third, the academic expectations become more rigorous as students progress through their college career; and finally, the measure is

sensitive to aspects of academic performance which the mere GPA fails to pick up, mainly performance in non-credit and compensatory courses and formal withdrawal from courses. At Kingsborough, students who do not meet the minimum level of proficiency required in remedial and compensatory courses are given the grade "R" instead of the traditional failure ("F") grade. The grade "R" does not enter into the computation of the grade-point average; however, it is reflected in the measure PTD, since it is counted as a course attempted (or the equated credits) but not completed. Similarly, credit or non-credit courses from which the student has formally withdrawn are also counted in PTD. Formal withdrawals, on the other hand, do not enter into the GPA.

Based on the measure PTD, how did the BSP students perform academically compared to ESL students? This information is shown in Table 5.2. Several interesting differences are evident here. First, beginning in the first semester and continuing through the third semester, significantly more BSP than ESL students were consistently making adequate progress towards the degree. Second, the disparity in performance is intensified in the second semester, by the end of which there is a twenty-two percentage point difference between BSP and ESL students in the

TABLE 5.2

SEMESTER BY SEMESTER PROGRESS TOWARDS THE DEGREE
OF BSP AND ESL STUDENTS AS OF SUMMER 1981

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>1st Semester^a</u>	(184)		(67)	
Satisfactory	145	78.8	45	67.2
Unsatisfactory	39	21.2	22	32.8
<u>2nd Semester*</u>	(150)		(51)	
Satisfactory	107	71.3	25	49.0
Unsatisfactory	43	28.7	26	51.0
<u>3rd Semester*</u>	(89)		(25)	
Satisfactory	63	70.8	12	48.0
Unsatisfactory	26	29.2	13	52.0
<u>4th Semester</u>	(64)		(15)	
Satisfactory	41	64.1	9	60.0
Unsatisfactory	23	35.9	6	40.0

^aSignificant at .06 level

*Statistically significant at the .05 level or below.

Note: No statements can be made from this table about dropouts. Diminishing Ns after the second semester reflect students who have dropped out as well as those who, although still enrolled, had not been in college long enough to have entered their third or fourth semesters.

proportion progressing satisfactorily. In this semester, the performance of both groups declined; however, the decline among BSP students was small, from 79% to 71%, in sharp contrast to the ESL students' drop from 67% to 49%. This large gap of twenty-two percentage points difference in performance continued through the third semester, by the end of which 71% of BSP and 48% of ESL students were still making adequate progress. The final finding of interest is that, in the fourth semester, both groups performed at the same level. The equalization of performance is brought about by another small decline (7%) in the proportion of BSP students making adequate progress and a relative improvement of 12 percentage points in performance among the small group of ESL students who had entered in Fall 1979 or prior and had remained in college.

The disparities in the academic performance among students with apparently comparable high-school records suggest that there is some truth to the dictum that students who are not native English speakers and are more proficient in their native language progress more rapidly through college when the curriculum is in their native language. Moreover, they do so without negative consequences with respect to the quality of their academic work. This interpretation is inferred from the more rapid accumulation of credits attempted and earned during the

period surveyed, the higher GPAs and the larger proportion of students progressing satisfactorily towards the degree. As indicated in Chapter III, BSP students generally take the first 30 credits of their college work in their native language, Spanish, while they are simultaneously exposed to English instruction. The availability of regular college credit courses in Spanish means that students do not have to wait to master the English language before tackling the college curriculum. ESL students, however, do not have this option. For them, it is necessary to make up the deficiencies in English language skills as soon as possible in order to compete effectively with native English language speakers in the classroom.

As plausible as the foregoing interpretation appears, however, it might be valuable to examine other possible explanations which may account for the better academic performance of BSP students. One possibility is that differences in personal characteristics and family background variables may account for differences in academic performance. However, as discussed in Chapter IV, the differences that were found between BSP and ESL students in these measures clearly suggested that, if anything, BSP students were more disadvantaged. In addition, our review of the findings on the predictor variables did indicate that several of BSP students' personal and family

characteristics militated against success in college, whereas others appeared to have no influence. These data will be presented in full subsequently.

Another plausible explanation is that the BSP student, either because of personal motivation or the structure of the program (e.g., more personal counseling), is encouraged to attend the winter and/or summer six-week module in addition to the required twelve week session in each semester. This may account for the higher number of credits attempted and earned and even, possibly, the higher GPAs. In order to clarify this issue, the distribution of students in each group attending the six-week session for each semester was examined. This information is shown in Table 5.3. The table reveals that this explanation has to be discarded. If the hypothesis were true, we would expect to find a higher proportion of BSP students attending the six-week modules. But this is not the case. Approximately equal percentages of students in each group attended each of the six-week sessions associated with the first and second semesters. In the third semester, however, a considerably higher proportion of ESL (56.0%) than BSP students (39.3%) attended the six-week session. It is only in the fourth semester that more BSP than ESL students attended the winter or summer sessions. Since the gap in credits attempted and earned was clearly evi-

TABLE 5.3
DISTRIBUTION OF BSP AND ESL STUDENTS
ATTENDING SIX-WEEK SESSIONS

	<u>BSP</u>	<u>ESL</u>
<u>First Semester</u>		
Total number registered	<u>191</u>	<u>70</u>
Number attending 6 week session	90	38
Percent attending 6 week session	47.1%	54.3%
<u>Second Semester</u>		
Total number registered	<u>150</u>	<u>51</u>
Number attending 6 week session	85	28
Percent attending 6 week session	56.7%	54.9%
<u>Third Semester</u>		
Total number registered	<u>89</u>	<u>25</u>
Number attending 6 week session	35	14
Percent attending 6 week session	39.3%	56.0%
<u>Fourth Semester</u>		
Total number registered	<u>64</u>	<u>15</u>
Number attending 6 week session	33	5
Percent attending 6 week session	51.6%	33.3%

dent in the first semester and became more pronounced in the second semester, attending the six-week session does not explain the larger number of credits attempted and earned by BSP students.

Finally, it might be valuable to examine structural features within the Bilingual Program, other than the language of instruction, which might account for the better academic performance of BSP students. One feature which might have a bearing on the credit load or credit accumulation is the fact that the special sequence of English courses offered to BSP students (English 15, English 16, and English 17) carries two credits each, whereas the ESL sequence (English 07 and English 08) is not credit-bearing. Since the usual practice in the Bilingual Program is to place students in only one of the English sequence courses per semester, the superiority of BSP students in credits attempted and earned in each semester far exceeds what might be accounted for by these courses.

Another structural component of the BSP which may contribute to the better academic performance of BSP students is financial aid. The importance of financial aid for economically and academically disadvantaged students has been a major concern of all those interested in achieving equal educational opportunity. To enroll and to remain in college require financial resources for educational and personal expenses. Furthermore, as Rainwater (1970) and others (Miller and Roby, 1970) have persuasively argued, minority students need financial assistance not only for their own personal and educational expenses, but

also to supplement their families' meager incomes.

As part of New York State's higher education opportunity programs, BSP students are entitled to a small stipend for books, transportation, and other educational expenses. At CUNY, however, this stipend is considered a component of the total financial aid amount the student may receive. Thus, although BSP students also generally receive other types of federal and state financial aid (e.g., Pell grants, Tuition Assistance Program (TAP) grants, work-study, loans), contrary to popular belief, the total amount of financial aid received by BSP students does not exceed that given to any other needy CUNY student, even though as we have shown, BSP students are among the neediest in the University, with over half living with incomes far below the poverty level (See Chapter IV). In addition, there is evidence to suggest that, during the period of this research, BSP students received fewer dollars than they were ordinarily entitled to and that the actual amount of aid received fell far short of actual assessed needs.² Therefore, the amount of financial aid received by BSP students does not appear to explain the better academic performance of these students.

Finally, one other component of the bilingual program which may contribute to the better performance of BSP students is the counseling support service. As indicated

in Chapter III, BSP has one full-time counselor who maintains close contact with the students and performs a range of services to facilitate students' academic, social, personal, and vocational development. Among the vital services provided by the counselor which may have a direct bearing on academic performance are: pre-registration and registration counseling, academic advisement, and monitoring student progress.

In the bilingual program students are carefully assigned to specific courses only after identification of the range and scope of student academic deficiencies and proficiency in Spanish. Students with fewer academic deficiencies and higher proficiency in Spanish generally carry higher credit loads and more classroom hours during the first three semesters in college than students with more academic deficiencies and lower proficiency in Spanish. The counselor makes sure that students register in the assigned courses by signing their programs. In addition, during the course of the semester, the counselor keeps in contact with the students' instructors and monitors the students' progress in each course through the use of the Academic Progress Report Form (APR). This form is sent to each instructor of students in BSP one week prior to mid-terms. The form elicits information on whether the student is attending classes regularly,³ if

the student is passing or failing, and any other relevant comments. Based on this report, the counselor meets with the student and prescribes appropriate strategies.

Other vital functions of the counselor which may also have an impact on students' academic performance are financial aid and personal and vocational counseling.

As indicated earlier, BSP students are financially among the poorest at CUNY. A major function of the counselor, therefore, is to inform students, beginning with pre-registration sessions, of the various type of aids available, requirements, and the importance of completing applications on time. In many instances, the counselor helps students complete the forms.

In addition to financial aid counseling, the counselor also assists with any personal problems students may have, or problems pertaining to budgeting, public assistance, Medicaid, child-care services, housing, and many other areas.

Finally, there is the vital function of vocational or career counseling. BSP students, like many majority or minority college populations, often come to college with unrealistic career expectations, or lack of knowledge pertaining to career possibilities. Two courses, Student Development 10 and Student Development 11 (also available in English for KCC English-language dominant students),

offered in Spanish are aimed at helping students to take a realistic and comprehensive look at current career opportunities.

Although ESL students are provided with similar services through the Department of Student Services, the existing student-counselor ratio is much higher (approximately 300:1) and the services, by and large, are not as intensive.

Data pertaining to how much the counselor's activities enhanced or contributed to the BSP students' better academic performance are not available. Although efforts were made to obtain information on this issue from the questionnaire, the selective responses obtained (most of those who responded were still enrolled or had graduated) preclude any conclusive statements. A review of the students' responses regarding their satisfaction or dissatisfaction with the various counseling services, however, may provide some hints or clues.

Table 5.4 shows the distribution of students indicating satisfaction with the various counseling services. Without exception, in every one of the services, substantially more BSP than ESL students expressed satisfaction, with the largest differences found in "counselors in general," followed by financial aid counseling, personal counseling, and registration counseling. These data suggest

that the counseling services provided BSP students cannot be ruled out as a contributing factor in their better performance. Future research should try to specify the degree of contribution of this component as opposed to the language of instruction.

TABLE 5.4
DISTRIBUTION OF BSP AND ESL STUDENTS INDICATING
SATISFACTION WITH COUNSELING SERVICES

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
	(113)		(33)	
Registration	98	86.7	23	69.7
Academic Advisement	81	71.7	21	63.6
Personal Counseling	86	76.1	19	57.6
Career Counseling	74	65.5	20	60.6
Financial Aid Counseling	87	77.0	19	57.6
Orientation for New Students	83	73.5	23	69.7
Counselors (in general)	89	78.8	19	57.6

In summary, comparison of the academic performance of the two groups revealed that, during the first three semesters, BSP students surpassed ESL students on almost every criterion, including the number of courses for which

the students registered, courses passed, credits attempted, and credits earned. In spite of their heavier workload, the BSP students also maintained higher GPAs and made better progress toward the degree throughout the first three semesters. The superior performance of BSP students appears to be due to their being able to pursue the regular college curriculum in their native language, unlike the ESL students whose progress is hampered by their level of English language skills.

Withdrawal from College, Persistence, and Graduation

Among indicators of academic success, graduation or withdrawal from college are considered by many to be the most important measures. Although graduation from a community college does not necessarily lead to the economic benefits associated with a baccalaureate (Pincus, 1980; Wilms, 1975, 1980), the skills obtained enhance the students' ability to compete more effectively in the labor market. In addition, successful completion of the community college curriculum may pave the way to other educational achievements, such as transfer to a four-year institution and eventual graduate and professional training.

But for the majority of minority students entering the community colleges, their education appears to be ter-

minal. According to Cohen (1983), nationwide, less than 5% of community college students complete two years and transfer to a university. Although the estimate may be somewhat low, based on the follow-up periods used,⁴ many authorities will agree that most students entering the community colleges, in particular, the non-traditional disadvantaged students, do not transfer to four-year institutions. The theoretical schemes advanced to explain the low transfer rate resemble the chicken and the egg argument with some emphasizing the structural processes within community colleges that slow down the educational progress of students while others insist that the major reasons are to be found in the type of students who are drawn to the community colleges. Notwithstanding the limited role the community colleges may play in providing educational opportunity, there are still some, including the critics, who maintain that many students have taken advantage of the opportunity and have benefited (Astin, 1982, 1983; Lavin, Alba, Silberstein, 1981; Olivas, 1979; Templin, 1983).

The introduction of bilingual education in the community colleges is generally viewed as another effort to equalize educational opportunity for ethnolinguistic minorities. First, it extends college access to a population which, because of prior inadequate schooling, recent

migration, or for other reasons, lacks the English language requirements necessary for college entry and subsequent academic success. Second, it provides instructions in the student's dominant language while simultaneously providing intensive English language instruction, thus enabling students to progress through the curriculum at a faster pace. Third, it reduces the incongruence between the student and the college community. From this perspective, the success of the program is determined by the extent to which the students remain in school and eventually graduate. The assumption is that the longer the student remains in school, the more likely he is to acquire the necessary skills, including the learning of English, which will lead to harmonious integration, politically, economically, and culturally into American society. Overall, our research findings have so far conformed to the prescriptions given for the use of bilingual instruction at the college level; students do tend to progress more rapidly through the curriculum without negative consequences to the quality of their academic work. But do these advantages translate into persistence and graduation from college? Table 5.5 indicates the status of students in each group as of fall 1981. Before discussing these results, it is important to understand what is reported under the various categories. The label "still enrolled"

TABLE 5.5
ENROLLMENT STATUS AS OF SUMMER 1981 BY PROGRAM

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Enrolled	75	39.3	21	30.0
Dropouts	104	54.5	43	61.4
Transfers	3	1.6	3	4.3
Graduates	<u>9</u>	<u>4.7</u>	<u>3</u>	<u>4.3</u>
Total	191	100.1*	70	100.0

*Percentages do not total 100% due to rounding

refers to all students in our cohorts who were matriculated and taking courses during the fall 1981 semester. Included in this category were one ESL and six BSP students who had temporarily withdrawn from KCC for a brief semester or two (stopouts) but had re-enrolled and were matriculated in fall 1981. The term "dropout" refers to students who had withdrawn voluntarily or involuntarily without graduating and were not registered at KCC in fall 1981. Among students classified as dropouts were eleven BSP and two ESL students who had stopped out at least once before. Transfers refer to students who had withdrawn from KCC prior to graduation but re-enrolled at another CUNY unit or other college. Since the student transcripts

do not contain information pertaining to transfers (the information was obtained from the questionnaire), it is possible that this category may have been underestimated. If so, the category "dropout" is inflated. Graduates are all those students whose college transcript indicated that the degree had been awarded prior to fall 1981.

Table 5.5 shows that there was no difference in the enrollment status of the two groups of students. Although the BSP shows proportionately slightly fewer dropouts and a slightly higher proportion of students still enrolled, the difference fell short of being statistically significant. The small number of graduates in either group (5% for BSP and 4% for ESL) is not surprising, considering that only one class in each group (those entering in fall 1978) had at most three years after admission to complete their degrees. Existing studies here at CUNY (Lavin, Alba, and Silberstein, 1981; Lavin, Murtha, Kaufman, 1984; Office of Institutional Research and Analysis, 1984) and outside of CUNY (Knoell, 1983) show that very few students graduate from community colleges within the traditional two-year period. Our data bear this out. With only one exception, all of the students in both groups took three years to obtain their Associate degrees. It should be noted, however, that many of the graduates, particularly BSP students, did complete satisfactorily most require-

ments for the degree within two and a half years but were held back at least six months because of inability to pass CUNY's Writing Proficiency Test or English 23 (the last required English course for non-native English speakers). Some of the graduates took the writing exam as many as seven times before passing. In addition, many of the students who left KCC were generally meeting CUNY's academic standards but did not remain in college, apparently because of failure to meet second-language writing requirements. These findings should not be interpreted as indicating a deficiency in students or the KCC bilingual program. It has been found that after 10 years middle-class English-Canadian children learning French under the most favorable circumstances still could not write with the same proficiency as native French speakers, even though they had mastered comprehension and reading skills to the same level as their French peers (Tucker, 1977).

Another important finding shown in Table 5.5 is that over half of the students in each group had dropped out by summer 1981. Table 5.6 shows the semester in which the students dropped out. The widespread assertion that the freshman year is a crucial one for disadvantaged and academically underprepared students (Dispenzieri, Tormes, Long, et al., 1969; Lavin, Alba, Silberstein, 1981) is also supported by our data. Close to two-thirds of the

TABLE 5.6
SEMESTER STUDENT WITHDREW FROM KINGSBOROUGH
COMMUNITY COLLEGE

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%*</u>	<u>N</u>	<u>%*</u>
<u>By the end of:</u>				
First Semester	41	39.4	19	44.2
Second Semester	28	26.9	10	23.3
Third Semester	12	11.5	7	16.3
Fourth Semester	17	16.4	7	16.3
Fifth Semester	4	3.8	-	-
Sixth Semester	<u>2</u>	<u>1.9</u>	<u>-</u>	<u>-</u>
Total	104	99.9	43	100.1

*Percentages do not total 100% due to rounding

dropouts in each group withdrew from KCC by the end of the freshman year, with 40% of them doing so within or by the end of the first semester. The BSP students, however, did tend to stay longer in school. Twenty-three percent of BSP but only 16% of the ESL students withdrew during the fourth semester or later.

Table 5.7 shows the number of students who were academically dismissed because they were not meeting CUNY's or KCC's academic standards. It should be noted that academically dismissed students were those who were

TABLE 5.7
ACADEMIC DISMISSALS AMONG DROPOUTS
BY PROGRAM

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Dropouts who were:</u>				
Academically dismissed	13	12.5	9	20.9
Not academically dismissed	<u>91</u>	<u>87.5</u>	<u>34</u>	<u>79.1</u>
Total	104	100.0	43	100.0

not discouraged after receiving the probationary letter; they attempted to upgrade their records by enrolling and completing the semester in which they were placed on probation. (Many other students, we have said, did not wait for this final judgment and withdrew unofficially from the college.) Again, the finding is that proportionally, fewer BSP (13%) than ESL students (21%) were academically dismissed.

Thus, in answer to the question, "Do group differences in credits earned, in GPA, and in progress towards the degree translate into persistence and graduation," the answer appears to be no. Despite the fact that BSP students were more likely to be still enrolled, to drop out later, to be less likely to be academically dismissed,

these differences were not reflected in graduation or dropout rates for the two groups. But do these findings indicate that the bilingual education program at Kingsborough does not enhance the chances of Hispanic students successfully completing a college education? In our judgment, the answer to this question cannot be answered conclusively from the data presented thus far for several reasons. First, our analysis provides only short-term educational results. As mentioned earlier, existing CUNY studies do indicate that most community college graduates take from three to as many as eleven years to obtain their degrees (Lavin, Murtha, Kaufman, 1984). Had we extended the study to a longer period of time after college admission, the persistence and graduation rates would undoubtedly have increased. Astin's observation (1975) pertaining to the temporary nature of most classifications, in particular, that of "dropouts," warrants quoting:

The major definitional problem is the temporariness of any classification of a student as a dropout. No categorization will be wholly satisfactory until all students either obtain their degree or die without receiving them: any former student can, in theory, go back to college at any time to complete the degree. (p. 6)

Second, in assessing the impact of any "treatment," one has to take into consideration the amount of exposure to that treatment (Wiley, 1976; see also Heyns, 1978). In the realm of educational evaluation, the effect of any

educational technique will most likely vary with the student's exposure to it. It is foolish to attempt to measure the impact of bilingual education on a student's educational performance if the student does not stay in school long enough for the program to have any effect.

Taking these two notions into consideration: (1) the likelihood that some students would have returned to school and others would have graduated had our longitudinal study covered a longer period of time; and (2) that in order to assess the effects of the bilingual program, the student had to be exposed, however minimally, to the program, we might ask the question: What is the likelihood that some students will continue their education within CUNY or outside of CUNY? One way to obtain an estimate of the probability that the student might return to school and that his/her education is not really terminal is by looking at the grade-point average and at the progress towards the degree at the time of withdrawal from Kingsborough. One assumption underlying this analysis is that students making adequate progress towards the degree at the time of withdrawal are likely to return to KCC or to any other CUNY community college, whereas those with a grade-point average of 2.00 or higher can return at some future time to a college outside CUNY. This is particularly true of bilingual program students, who, by virtue

of their special program status in New York State, are eligible for transfer to any community or four-year college Educational Opportunity Program (EOP) of New York State University at any point in their educational career, provided that they still meet the guidelines of economic disadvantagedness. Although under existing arrangements, BSP students do not necessarily have to achieve a GPA of 2.00 for transfer to a state EOP, another assumption underlying this analysis is that students achieving this kind of college grade-point average may be more motivated to continue their college education since they may feel they are able to do college level work.

Table 5.8 shows the cumulative GPA earned at Kingsborough for students in each program who withdrew by the end of the first semester and during the second semester or later. Among BSP students, only about one-third of the students who withdrew during the first semester, but about half of those who withdrew during or after the second semester had cumulative grade-point averages of 2.00 or higher. Thus, students who stayed in the Bilingual Studies Program for at least one full semester were more likely to have earned a GPA high enough to be able to continue their education outside of CUNY. In sharp contrast, among ESL students the reverse was true. Whereas over 50% of those who withdrew by the end of the first semester had cumula-

TABLE 5.8

CUMULATIVE GPAS EARNED BY BSP AND ESL DROPOUTS WHO WITHDREW BY THE END
OF FIRST SEMESTER OR LATER

Cumulative GPA	BSP						ESL					
	1st Sem DOs		Late DOs		Total		1st Sem DOs		Late DOs		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
less than 2.00	22	64.7	32	50.8	54	55.7	7	43.8	20	83.3	27	67.5
2.00 and over	12	35.3	31	49.2	43	44.3	9	56.2	4	16.7	13	32.5
Total*	34	100.0	63	100.0	97	100.0	16	100.0	24	100.0	40	100.0

*Formal withdrawals are not included.

tive grade-point averages of 2.00 or higher, only 17% of those who withdrew after the first semester did so. In total, 44% of BSP withdrawals but only 33% of ESL withdrawals had college GPAs of 2.00 or higher.

Table 5.9 shows for each program the progress towards the degree for those who withdrew by the end of the first semester and those who withdrew during or after the second semester. Overall, there was no difference in the total proportion of students in each group with a satisfactory PTD at the time of withdrawal. This suggests that approximately two out of every five dropout students in either group can return to Kingsborough or re-enroll at some other CUNY unit provided their circumstances allow. It will be recalled that CUNY's retention standards become progressively more stringent over time. This is also reflected in the findings. In both groups, dropouts who withdrew after the first semester were more likely to show unsatisfactory progress than students who withdrew during the first semester. However, BSP late withdrawals were more likely to show satisfactory progress than ESL students who were exposed to college for a similar period of time.

In summary, Tables 5.8 and 5.9 indicate that significant proportions of students in both groups, but especially in the BSP, withdrew for reasons other than aca-

TABLE 5.9

PTD OF BSP AND ESL DROPOUTS WHO WITHDREW BY THE END OF THE FIRST
SEMESTER OR LATER

	BSP						ESL					
	1st Sem DOs		Late DOs		Total		1st Sem DOs		Late DOs		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
PTD												
Satisfactory	16	47.1	25	39.7	41	42.3	11	68.8	5	20.8	16	40.0
Unsatisfactory	18	52.9	38	60.3	56	57.7	5	31.2	19	79.2	24	60.0
Total*	34	100.0	63	100.0	97	100.0	16	100.0	24	100.0	40	100.0

*Formal withdrawals are not included.

demic performance. We have argued that if we take into consideration that the process of dropping out is a very complex phenomenon involving attendance on an intermittent basis and transfers within and outside of CUNY, the Bilingual Studies Program does appear to enhance educational opportunity, particularly for those who stay at least for one full semester in college. Or, at the very least, it can be concluded that the doors to higher education remain widely open for a significant number of dropouts who may choose to try again.

Summary

The array of evidence presented in this Chapter leads us to set forth the conclusion that Kingsborough's Bilingual Studies Program opens up opportunities in higher education at least for Hispanic students with the social background and characteristics similar to those studied here. What particularly impressed us was their consistently better performance than students in ESL in most of the outcome measures, even though to begin with their degree of disadvantagedness in many areas was greater. Specifically, the BSP students attempted and earned more credits and generally earned higher GPAs during the first three semesters in college. They were also significantly more likely to progress satisfactorily toward the degree

during the first three semesters. This success was dampened only by a high attrition rate during the first year in college, which nonetheless was the same as that of students in ESL. However, even those BSP students who dropped out tended to stay in college for a longer period of time and were less likely to be academically dismissed than ESL dropouts. Furthermore, dropouts who stayed for at least one semester in college were more likely than ESL students to be making adequate progress towards their degree and to have earned GPAs high enough to enable them to return to college should their circumstances allow.

NOTES

¹For a discussion of the pros and cons of remedial courses in the early stages of academically underprivileged students' college careers, see H.S. Astin, et al., Higher Education and the Disadvantaged Student (Washington, D.C.: Human Services Press, 1972), pp. 28-30. For specific research studies, see A. Dispenzieri, S. Giniger, Y. M. Tormes, et al., First Semester Performance of College Discovery Program Students of the September 1968 Entering Class (New York: The City University of New York Research and Evaluation Unit, May 1970); A. Dispenzieri, S. Giniger, A. Hussein, et al., An Analysis of the First Semester Performance of SEEK Program Students of the September 1968 Entering Class (New York: The City University of New York Research and Evaluation Unit, November 1969).

²Beginning in 1977, a number of court cases were filed in New York City and New York State by college students, most of them in special programs for disadvantaged students, who were receiving public assistance. At issue was the arbitrary reduction by the City and State Departments of Welfare of the public assistance benefits by the amount of the financial aid award. In an effort to protect students, CUNY's Vice-Chancellor for the Executive Office, Joseph Meng, issued a directive to College Discovery and Seek Directors to reduce students' financial aid awards by the amount given by the Department of Welfare in overlapping areas, such as rent, medical expenses, etc. This prompted a legal suit in which CUNY, the NYC Human Resources Administration, the NYS Department of Social Services and officials from the NYS Budget Office and the NYC Audit Bureau were named as defendants. See Hayes v. City University of N.Y., 77 Civ. 5476 (ADS), 1978; N. R. Mudrick, The Interaction of Public Assistance and Student Financial Aid (New York: Washington Office of the College Board, 1980); Y. M. Tormes, Letter to Michael Barth, Asst. Secretary for Income Security Planning, U.S. Dept. of Health, Education and Welfare, March 21, 1978.

³At Kingsborough, students are expected to attend classes regularly and punctually. A failing grade is given to students who miss 15% of the number of contact hours that a class meets during the semester. In courses consisting of classroom lectures plus lab, a student is considered excessively absent if he or she misses 15% of either component. Kingsborough Community College, The City University of New York, Catalog 1977-1979; Catalog 1979-1981.

⁴In Right Versus Privilege (1981), Lavin, Alba and Silberstein found that only 3% of open admission students entering CUNY's community colleges in the 1970s had graduated within the traditional two-year period and 11% in five years. By the end of 11 years, the proportion of graduates had risen to 28%. (Cited in D. E. Lavin, U. Murtha and B. Kaufman, Long Term Graduation Rates of Students at the City University of New York (New York: The City University of New York, Office of Institutional Research and Analysis, March 1984), p. 9.

CHAPTER VI

ACADEMIC PERFORMANCE AND ITS CORRELATES

The first year in college is usually deemed to be a crucial year for college populations in general, and as we have shown, most particularly for these groups of Hispanic students, many of whom withdrew from KCC during the freshman year. Academically, these students were initially handicapped by a lack of basic reading and writing skills in English. They were also deficient in computational skills and in other college preparatory courses. Prior to entering KCC, many had less than favorable school experiences, as evidenced by the high proportions in both groups who came to college with high school equivalency diplomas. Psychologically, these students are often thought of as having little confidence in their ability to learn and as suffering from low self-esteem or self-concepts. In addition, their educational and psychological handicaps are compounded by economic, social, and ethnic factors.

This chapter will examine the relationships between selected family, educational and other characteristics

that students bring to college and the various educational outcomes in the first and second semesters. Determining who is likely to maintain adequate progress toward the degree and who will drop out is of critical importance to students, program personnel and institutional policy makers. To the student, knowledge of his/her chances of persisting in college may affect the decision to pursue post-secondary education, or once in college, to seek the necessary assistance to improve the chances of remaining there. Program personnel would be in a better position to develop special strategies to enhance the student's opportunity to succeed in college, while policy makers would be able to assess better policy alternatives.

The analyses that follow are based on two zero-order correlational matrices (one for each group), each involving 85 variables (Appendix B). Variables that were included in the analyses were those for which there were few missing items and those germane to theoretical aspects of the study. Following standard practice categorical variables were represented by dummy variables. Partial correlation was used to isolate the influence of selected independent variables on outcome variables.

Results are summarized below for four different categories of independent variables: student personal and family background measures, academic background, language

usage, and performance in English courses. The outcome measures include progress towards the degree during the first semester (PTD_1), progress towards the degree during the second semester (PTD_2), dropouts during the first semester (DO_1), and dropouts during the second semester (DO_2).

Family Background and Student Characteristics

A long tradition in sociological research has attempted to link academic performance to the family background and personal characteristics of the students. Underlying this effort is the theoretical notion that the family of orientation, as a primary agent of socialization, imbues the student with the necessary values, aspirations, motivations, and traits (including intelligence) necessary to implement successfully the student role. Under this notion, students' differential achievement patterns are determined by different socialization experiences within the family or immediate cultural milieu. Although the way in which the family operates to produce academically "competent" or not so "competent" students is not clearly understood (Boocock, 1980), from the emphasis on the relationship between families and students' achievements, the theory of cultural deprivation emerged. As discussed in Chapter II, this theory maintains that

students from minority groups and lower socioeconomic status enter school deficient in the academic skills, values, and motivation necessary to succeed in schools and that schools can virtually make no real impact that is independent of family, cultural, or social origins. This theory has been hotly contested by another school of thought that attributes the academic failure of minority and financially poor students to the structure and processes within schools, including the prevailing majority culture, and the emphasis on English as the only medium of instruction. From the latter perspective, programs aimed at recognizing and validating the minority student's language and culture, such as bilingual education, will do much to improve their academic performance.

Which family background and personal characteristics are closely associated with progress towards the degree or withdrawal from college during the first or second semester? The battery of variables in this group included the student's ethnicity as measured by his place of birth, age when student came to the United States, language spoken in the home from childhood through adolescence, age when student entered Kingsborough, length of time the student had lived in the United States prior to entering KCC, and the student's gender. Also included were measures of the student's social environment when he/she entered

Kingsborough, such as family income, whether the family relied on public assistance as a source of income, and the composition of the student's household, i.e., whether the student lived with parents, spouse, children, other relatives, or alone. For simplicity of presentation, only correlations that were significant at the .05 level or below are shown in the tables.

Table 6.1 shows that among BSP students, only two

TABLE 6.1
RELATIONSHIP BETWEEN SOCIAL BACKGROUND CHARACTERISTICS
AND ACADEMIC PERFORMANCE
AMONG BSP STUDENTS

	PTD ₁ N (178-183)	DO ₁ N (190-191)	DO ₂ N (150)
Time U.S.	r = -.15 p = .04	-	-
Age KCC	r = -.15 p = .03	-	-
P.R. Born	-	r = .17 p = .02	-
Gender	-	r = -.22 p = .003	-
Live with Spouse	-	r = .15 p = .04	-
Live with Relatives	-	-	r = .18 p = .02

Note: There was no significant relationship between any of the independent variables and PTD₂.

of the family background and student characteristics were found to correlate significantly with PTD_1 : length of time in the United States and age on entering Kingsborough. In both cases, the correlation was rather small and negative ($-.15$, $p = .05$). These findings indicate that the longer the BSP student had been in the United States, the more likely progress towards the degree during the first semester was unsatisfactory, and older students on admission to Kingsborough were also more likely to perform poorly academically during the first semester. Neither variable, however, was related to PTD_2 nor to withdrawal from Kingsborough, suggesting that whatever difficulties these students may have experienced during the first semester, they were able to overcome by the second semester.

None of the social background or student characteristics influenced PTD_2 among BSP students. Three measures, however, had a small influence on withdrawal during the first semester (DO_1) and one measure mildly influenced withdrawal during the second semester (DO_2). Of the measures affecting DO_1 , the largest value was obtained for gender, which produced a correlation of $-.22$ ($p = .003$), meaning that males were more likely to withdraw than females by the end of the first semester. Although some previous research has found that minority wom-

en tend to get better grades in college and also accumulate credits at a faster pace than males (Astin, 1982; Lavin et al., 1981), this is not so for this sample. Gender was not related to PTD_1 or PTD_2 , nor to credits attempted or earned, or to GPA. Therefore, the higher drop-out rate among BSP males during the first semester cannot be explained by their poorer scholastic performance.

Another item associated with DO_1 among BSP students was being born in Puerto Rico, which produced a small correlation of .17 ($p = .02$), indicating that Puerto Rican born students were more likely to withdraw during the first semester than students born elsewhere. This finding is consistent with other studies indicating that, for Hispanic groups or other minorities, Puerto Ricans have among the lowest college completion rates (Astin, 1982; U.S. Commission on Civil Rights, 1978).

The final item influencing DO_1 was living with spouse. Again, the correlation (.15, $p = .04$) was small and positive, meaning that the presence of the student's spouse in the household was more likely to lead to withdrawal during the first semester than any other living arrangements. Living with relatives, other than parents, however, was the single item of all the family background and student characteristics found to affect withdrawal during the second semester among BSP students. Thus, BSP

students living with spouse or with other relatives were more prone to drop out during the first academic year, whereas living with parents did not exert any influence on outcome. Of particular significance is that the presence of student's children in the household did not affect any of the academic performance measures. Of significance, also (although not shown in Table 6.1), was that none of the items affecting withdrawal from KCC were meaningfully related to each other, suggesting that their effect is independent of each other. Thus, the Puerto Ricans who dropped out were not necessarily males, nor were they necessarily living with spouse.

To summarize, for the BSP students, family and social background seemed to have a minimal influence on the academic performance of students and this influence was largely confined to the first semester. The largest influence was produced by gender, which explained only five percent of the variance during the first semester. All of the other characteristics found to be related either to academic progress or to withdrawal were even smaller than gender, and their influence, however small, tended to militate against the success of BSP students.

Results of the analysis of the same data for ESL students are shown in Table 6.2. One finding is immediately evident. By and large, the variables that influ-

TABLE 6.2
RELATIONSHIP BETWEEN SOCIAL BACKGROUND CHARACTERISTICS
AND ACADEMIC PERFORMANCE
AMONG ESL STUDENTS

	PTD ₁ N (65)	PTD ₂ N (48-51)	DO ₁ N (67)	DO ₂ N (48-51)
Age U.S.	-	r = .29 p = .05	-	r = -.29 p = .05
Age KCC	-	r = .41 p = .003	-	-
P.R. born	-	-	-	r = .38 p = .006
Language Spoken in the Home	-	-	r = -.24 p = .05	-
Public Assistance	r = -.25 p = .04	-	-	-
Income	-	r = .27 p = .05	-	-
Live with Parents	-	r = -.30 p = .03	-	-
Live with Spouse	-	r = .33 p = .01	-	-

enced ESL students' academic performance were rather different from those affecting the performance of BSP students and, even in the few instances where the same variables affected the performance of both groups, they behaved strikingly differently.

Whereas no association was found between income or source of income and any of the academic performance measures for BSP students, a negative relationship of $-.25$ ($p = .04$) was found for ESL students between public assistance and PTD_1 , indicating that those whose families relied on public assistance as a major or supplementary source of income on admission to KCC tended to make unsatisfactory progress toward the degree during the first semester. In addition, ESL students from lower income families were less likely to progress satisfactorily during the second semester ($r = .27$, $p = .05$). An association between income and educational performance has been reported consistently in many studies of minority or majority college populations (Astin, 1975, 1982; Astin *et al.*, 1972; Jencks *et al.*, 1972; Sewell, 1971; Sewell and Hauser, 1976; Sewell and Shah, 1967). One possible reason for the lack of correlation between income or public assistance and the measures of academic performance for BSP students is that the BSP students were much more homogeneous on the two independent measures than ESL students. For example, 82% of BSP students reported incomes of less than \$6,000 whereas only 48% of ESL students reported this low income. When the range of scores in one or both variables being correlated is narrow, the resulting coefficient is reduced. Another possibility, however, is that

since the relationship of income to academic performance is mediated by other factors, such as concern about finances (Astin, 1975), the structure and processes within the Bilingual Studies Program (e.g., greater financial aid counseling, assistance with problems dealing with public assistance agencies) may have diminished these concerns among BSP students. It is also possible, however, that both factors may be operating.

Other variables influencing ESL students' PTD_2 were how old the student was when he/she immigrated to the U.S. mainland ($r = .29$, $p = .05$), age on entering Kingsborough ($r = .41$, $p = .003$), living with parents ($r = -.30$, $p = .05$), and living with spouse ($r = .33$, $p = .01$). These findings indicate that ESL students whose progress towards the degree was satisfactory during the second semester tended to be older when they came to the United States, older when they entered Kingsborough, tended not to live with parents, but instead, tended to live with their spouse. These variables, it should be noted, are highly intercorrelated. Thus, older students on entering Kingsborough were generally those who had immigrated to the United States at an older age. These same students were also less likely to live with parents and more likely to live with their spouse. It is not clear why these relationships do not appear until the second semester. It

is possible, however, that older students having been out of school longer require a period of adjustment to student life.

Table 6.2 also shows that withdrawal during the first semester for ESL students was influenced only by one variable: language spoken in the home during childhood through adolescence, which produced a correlation of $-.24$, meaning in this instance that students who came from families where only or mostly Spanish was the general language used tended to drop out during the first semester. This association among ESL students is not surprising, just as it is not surprising not to have found this association among BSP students. The curricular programming for ESL students does require communication skills in English, whereas that for BSP students does not, at least during the first year in college. However, the correlation between language spoken and dropping out among ESL students should not be misinterpreted. It will be recalled that, in both groups, the vast majority did indicate that Spanish was the language generally used in the home while they were growing up. At best, what can be inferred from this correlation is that ESL students who had difficulty in developing English language skills by the time they entered Kingsborough tended to drop out during the first semester.

Withdrawal during the second semester showed the largest correlation with place of birth: students born in Puerto Rico were more likely to drop out than non-Puerto Rican born students ($r = .38$, $p = .006$). Although the semester in which the influence of this variable appears among ESL students is different from BSP students, the finding is consistent with findings among BSP and in previous studies. Thus, Puerto Rican born students in both groups are more prone to drop out of college during the first academic year than Hispanic students born elsewhere.

Finally, one other social background variable influenced DO_2 among ESL students: age when students came to the United States. It was mentioned earlier that this measure had a positive effect on students' academic progress during the second semester. Consistent with this finding, the measure had a negative effect on DO_2 ($r = -.29$, $p = .05$), i.e., the older the student was when he/she came to the United States, the less likely he/she was to drop out during the second semester. Several explanations, not necessarily mutually exclusive, can be advanced for this finding. Two of them are part of the intrinsic rationale for bilingual education (See Chapter II). One deals with native language development. Simply postulated, it states that older immigrant students do better be-

cause they have had greater opportunity to develop fully their own language, and thus, the better their prerequisites for mastering a second language and for mastering content subjects. The other explanation deals with the negative effects on personality development of language minority children exposed to schooling in sociocultural settings with long histories of discrimination against minorities, such as in the United States. Those students are said to develop negative self-images and ambivalence toward their own and toward the majority language and culture. The third and most obvious explanation, and one that will be explored in the present study, is that older immigrants do better because they are better academically prepared.

To summarize, results from the zero order correlations tend to indicate that family background variables influence differentially the educational performance of ESL and BSP students. But before reaching any definite conclusions pertaining to the meaning of these associations, it is necessary to examine the students' educational background and the relationship of these to the outcome measures as well as to the family and personal background measures.

Educational Background

By and large, the educational background of BSP

students had a greater influence on the students' academic progress during the first and second semesters (PTD_1 and PTD_2) than any of the family background or personal characteristic measures (Table 6.3). It did not, however,

TABLE 6.3
RELATIONSHIP BETWEEN EDUCATIONAL BACKGROUND
VARIABLES AND ACADEMIC PERFORMANCE
AMONG BSP STUDENTS

	PTD ₁ N (173-183)	PTD ₂ N (142-150)
P.R./Foreign High School	r = .20 p = .007	r = .25 p = .003
Mainland High School	-	-
GED	r = -.17 p = .02	-
CAA	r = .15 p = .05	-
FFL ₁	r = .21 p = .006	r = .17 p = .05
No. Math Units	-	r = .20 p = .01
No. Academic Units	r = .17 p = .02	r = .18 p = .02

Note: There was no significant relationship between any of the independent variables and DO_1 or DO_2 .

appear to influence withdrawal from Kingsborough during the first academic year (DO_1 and DO_2), suggesting that the family background measures affecting withdrawal for BSP students did exercise an effect that is independent of high school background.

Of the educational background measures, the variables showing the largest and most consistent influences in that they affected both PTD_1 and PTD_2 were graduation from a Puerto Rican or foreign high school ($r = .20$ and $.25$ respectively), number of academic units in the student's native language (FFL_1 , $r = .21$ and $.17$ respectively), and number of college preparatory courses (academic units) in high school ($r = .17$ and $.18$ respectively). To a lesser extent, also influencing PTD_1 were high school average (CAA, $r = .15$, $p = .05$) and obtaining a high school equivalency diploma (GED, $r = -.17$). There was a high degree of association between these variables. Students who obtained their high school diploma in their native country tended to be enrolled in college preparatory courses ($r = .71$) and also were better academically prepared in their native language ($r = .70$). Thus, the students with the greatest academic preparation in high school were the ones to benefit most from the Bilingual Studies Program during the first and second semesters.

These findings correspond to what is generally known about academic achievement in college: that there is a high degree of consistency between high school academic preparation and how well the student performs in college. On the other hand, these findings underscore the importance of taking college courses in the student's native language if the academic preparation in high school is also in the native language. In fact, the findings strongly suggest that for this Hispanic college population the assimilation of college content courses is more effective when there is congruence between the language of instruction and high school academic preparation in that language.

The effects of academic background on ESL students' college performance (Table 6.4) present, in at least one way, a paradox. There appears to be no relationship between any of the measures of high school background and academic progress in the first semester, and only one measure, obtaining the GED, influenced mildly dropping out during the first semester ($r = .24$, $p = .05$). The explanation, as shown in Table 6.5, is that differences in academic preparation among students graduating from mainland high schools and non-mainland high schools and GEDs obliterate relationships between predictors and PTD_1 . Graduates of foreign high schools showed better preparation than either mainland or GED graduates in every academic

TABLE 6.4
RELATIONSHIP BETWEEN EDUCATIONAL BACKGROUND
VARIABLES AND ACADEMIC PERFORMANCE
AMONG ESL STUDENTS

	PTD ₂ N (48-51)	DO ₁ N (70)
P.R./Foreign High School	-	-
Mainland High School	r = -.37 p = .007	-
GED	r = .28 p = .05	r = .24 p = .05
No. English Units	r = .31 p = .03	-
No. FFL ₁ Units	r = -.32 p = .03	-

Note: There was no significant relationship between any of the independent variables and PTD₁ or DO₂.

TABLE 6.5
ACADEMIC PREPARATION OF ESL STUDENTS BY
HIGH SCHOOL TYPE

	Mainland H.S. (N=66)	P.R./ Foreign H.S. (N=66)	GED (N=66)
CAA	-	-	-
# English Units	r = -.48 p = .001	-	r = .59 p = .0001
# FFL1 Units	r = .33 p = .008	r = .45 p = .0002	r = -.68 p = .0001
# Math Units	-	r = .45 p = .0002	r = -.44 p = .0003
# Science Units	-	r = .37 p = .002	r = -.35 p = .004
# Social Studies Units	r = .37 p = .002	r = .29 p = .02	r = -.61 p = .0001
# Academic Units	-	r = .53 p = .0001	r = -.52 p = .0001

subject except in English language skills, where GEDs surpassed both mainland and foreign high school graduates. Table 6.6 shows the correlations between academic back-

TABLE 6.6
RELATIONSHIP OF ACADEMIC BACKGROUND VARIABLES
TO PTD_1 FOR ESL STUDENTS BY
HIGH SCHOOL TYPE

	Mainland H.S. (N=34)	P.R./ Foreign H.S. (N=12)	GED H.S. (N=24)
	$rPTD_1$	$rPTD_1$	$rPTD_1$
CAA	.01	.06	.37
# English Units	.07	.13	-
# FFL ₁ Units	.08	-.37	-
# Math Units	.11	-.10	-
# Science Units	-.16	-.40	-
# Social Studies Units	-.26	-.48	-
# Academic Units	-.01	-.41	-

ground variables and PTD_1 for the three types of graduates. Again, we find that there was no meaningful relationship between academic preparation and PTD_1 among ESL

mainland graduates. Since many of the ESL students (40%) came to the United States during their high school years (ages 13 to 17), it is possible that the relationship between academic preparation and PTD_1 was obfuscated by the language barrier.

The correlations between academic preparation and PTD_1 among ESL foreign high school graduates, in spite of their small numbers, are very revealing. The most adequately prepared students [as shown by the correlations between PTD_1 and native language ($r = -.37$), science ($r = -.40$), social studies ($r = -.48$) and total number of academic units ($r = -.41$)] are more likely to do less well academically during the first semester in college. This suggests that the incongruence between language of instruction in college (English) and the language of instruction in high school (Spanish) precluded ESL foreign high school graduates from achieving maximum benefit from the first semester in college. This hypothesis is congruent with findings previously discussed on the effect of high school academic preparation on the performance of BSP students. Additional evidence to support the hypothesis is provided by Table 6.7 which shows the relationships between high school academic preparation and dropping out during the first semester by high school type. Note the high correlation ($r = -.41$) between lack of Eng-

TABLE 6.7
RELATIONSHIP OF ACADEMIC BACKGROUND VARIABLES
TO DO₁ FOR ESL STUDENTS
BY HIGH SCHOOL TYPE

	Mainland H.S. (N=34)	P.R./ Foreign H.S. (N=12)	GED H.S. (N=24)
	rDO ₁	rDO ₁	rDO ₁
CAA	.02	.30	-.21
# English Units	.24	-.41	-
# FFL ₁ (Spanish)	.16	.23	-
# Math Units	-.11	.26	-
# Science Units	-.26	.40	-
# Social Studies Units	-.11	.08	-
# Academic Units	.07	.19	-

lish preparation and dropping out in the first semester among foreign students. Note, too, that the students with the best science preparation were also more likely to drop out in the first semester ($r = .40$).

Pertaining to GEDs, it will be recalled that CUNY assigns only six academic units (four in English, one in Social Studies, and one in Science) to all GED graduates. Depending upon the scores attained on the GED exam, students are given corresponding CAAs (high school averages). Because of the lack of variation in academic units, these variables failed to show any relationship with PTD_1 or DO_1 . CAA among GEDs, however, did behave in ways one would expect: higher scoring students on the GED exams (and thus, higher CAAs) were more likely to progress satisfactorily towards the degree during the first semester in college ($r = .37$, Table 6.6), whereas those with lower scores tended to drop out ($r = -.21$, Table 6.7).

Among ESL students who went on to the second semester (Table 6.4), four academic background variables (mainland high school, $r = -.37$, GED, $r = .28$, English units, $r = .31$, foreign language units (Spanish, $r = -.32$) affected PTD_2 . These findings conform to what would be expected: having a high degree of previous academic preparation in English and performing well on the high school equivalency diploma (it will be recalled that the low scoring GEDs dropped out during the first semester) are conducive to making adequate progress during the second semester. Examination of the intercorrelations among the four variables affecting PTD_2 showed that the unsatis-

factory academic performance of mainland graduates was due to the fact that they were poorly academically prepared in English ($r = -.56$) and that the negative effect of foreign language units was for the most part an artifact resulting from the fact that GEDs do not earn academic units in a foreign language. It is important to note that many of the students who obtained GEDs in the ESL group had actually attended high school in their native countries although the extent and nature of their high school backgrounds could not be determined from CUNY records.

A question needs to be asked: To what extent are the correlations between family background variables and college performance of students a function of academic background? In order to provide an answer to this question, a series of partial correlations were conducted to remove the influence of educational background. Among BSP students, it was found that the associations with progress toward the degree were reduced to nonsignificant levels, whereas the associations with dropping out remained essentially the same. Among ESL students, it was found that of all the family background measures that influenced progress toward the degree, public assistance and income were the only variables that were independent of academic background. The educational background measure that accounted for most of the variance was graduating from a mainland

high school. Thus, the students who performed well during the second semester (older immigrants, older students on entering KCC, and those living with spouse) had one thing in common: they tended not to have graduated from a mainland high school whereas those whose PTD₂ was unsatisfactory (students living with parents) were more likely to be mainland high school graduates. Regarding persistence, educational background did not explain the tendency among Puerto Ricans to drop out.

To summarize, the findings pertaining to the relationship of family, personal, and educational background characteristics to educational outcomes in college can be described as follows:

- . Among BSP students, the factors that influenced progress towards the degree were not necessarily the factors that influenced persistence in college.

- . The educational background was more important than family background or personal characteristics in determining student progress towards the degree during the first and second semesters in college. Family background and personal characteristics, however, did have a small influence on persistence.

- . The students to benefit most from the bilingual program in that they had better progress toward the degree were those who had graduated in their native countries,

were better academically prepared relative to the others, including preparation in their native language, and had slightly higher high school averages.

. The factors that influenced persistence among BSP students were gender, place of birth, and the composition of the household. Males, Puerto Rican born students, and those living with spouse or relatives other than parents were less likely to persist in college. The influence of these variables, however, was rather small, with the largest, gender, explaining only 5% of the variance. Furthermore, with the exception of living with other relatives, the influence of all the variables was exerted in the first semester in college.

. Among ESL students, family and educational background exerted an influence on both their academic progress and persistence in college.

. Of the family background variables, economic status and public assistance were the only variables that were independent of academic background. Students whose families were receiving public assistance or those from low income families, in general, were more likely to progress unsatisfactorily during the first or second semesters respectively. Since in these areas, the BSP students were more disadvantaged, the lack of influence of these variables on BSP students' academic progress or in drop-

ping out suggests that the Bilingual Studies Program must have had an impact in attenuating the effects of these variables.

. Other social background factors that appeared to influence the ESL students' academic progress were: age when the student came to the United States, age on entering Kingsborough, living with spouse and living with parents. The findings were that older immigrants, older students on entering Kingsborough and those living with spouse tended to progress satisfactorily during the second semester whereas those living with parents tended to have unsatisfactory progress. The effects of these, however, were largely due to graduating or not graduating from a mainland high school. Students who did not graduate from a mainland high school (older immigrants, older students on entering Kingsborough, and those living with spouse tended to make better progress in the second semester. These students also tended to have better academic preparation in English. Students who lived with parents, on the other hand, were largely mainland graduates with little preparation in English.

. One of the most important findings, however, was that ESL foreign high school graduates, who were better academically prepared than either mainland graduates or GEDs except in English, did not do well academically and

tended to drop out by the end of the first semester in college. This finding underscores the importance of bilingual instruction for this type of student.

. Other factors that influenced persistence in ESL were being non-Puerto Rican born and obtaining a high score on the GED exam.

Language Usage, Attitudes Toward Spanish and English and Academic Performance

Of the many items in the questionnaire intended to measure language usage and attitudes toward Spanish and English, eight summary measures were created and included in the correlational matrices. Two of these measures represented the students' self-assessment of their language skills in English and Spanish. Two measures (Activities in English, Activities in Spanish) were global indicators of the extent to which the students exposed themselves to, or engaged in activities involving the use of each language, such as listening to the radio, reading newspapers and magazines, listening to records and attending movies and plays. One measure (Language Dominance) summarized whether the student spoke Spanish or English at home (to parents, siblings, other relatives, children, etc.), in school (peers, teachers, counselors), and outside the home or school situations (friends, at work). The last two measures were intended to tap attitudes toward Spanish or

English and summarized the extent to which students agreed or disagreed with a series of statements.

In addition to the summary measures, several other single items from the questionnaire were included.

The results of this analysis for the BSP students are shown in Table 6.8. As with previous variables dis-

TABLE 6.8
RELATIONSHIP BETWEEN LANGUAGE USAGE, ATTITUDES
TOWARD ENGLISH AND SPANISH AND ACADEMIC
PERFORMANCE: BSP STUDENTS

	PTD ₁ (N=104-110)	PTD ₂ (N=100-110)	DO ₁ (N=107-113)	DO ₂ (N=100)
Language Dominance	-	-	r = -.18 p = .05	r = -.20 p = .04
English Activities	-	r = -.18 p = .06	-	-
Attitudes Toward Spanish	-	r = .18 p = .06	-	-
Importance of Spanish	-	r = -.25 p = .01	-	-
Visits to Hispanic Country	-	-	r = .17 p = .07	-
Marry a Non-Hispanic	r = -.27 p = .004	-	r = .22 p = .03	-
Take job requiring English	r = -.20 p = .03	-	-	-
Majority of Friends Non-Hispanic	-	-	r = .25 p = .008	-

cussed earlier, the measures that influenced progress towards the degree were not necessarily the items that influenced persistence. Notwithstanding this qualification, an unexpected and very important finding emerged. Although positive attitudes toward the Spanish language did exercise some effect on the academic progress of BSP students, the major pattern that emerged was that BSP students who expressed favorable attitudes and behavior toward the majority language and people were more likely to perform better academically and were also less likely to drop out.

Students with greater expectations of marrying a non-Hispanic or of taking a job requiring English were more likely to progress satisfactorily during the first semester. Those who reported that they exposed themselves to English activities more frequently progressed satisfactorily during the second semester. Similarly, although it will be recalled from Chapter IV that BSP students basically used Spanish in their interaction with people in most social situations, students who reported using English to some extent were less likely to drop out during the first semester ($r = -.18$, $p = .05$) or during the second semester ($r = -.20$, $p = .04$). In fact, this was the only social, educational, or personal background measure that exerted an influence on dropping out during the first

and second semesters in college.

Two other items that influenced persistence among BSP students were measures intended to tap willingness to assimilate structurally. One of them, expectations of marrying a majority person (which had influenced academic progress), was also associated with persistence, with those expressing greater expectations of marrying a majority person being more likely to continue after the first semester ($r = .22$, $p = .03$). Similarly, those who expected that the majority of their friends would be non-Hispanics were also more likely to stay in college after the first semester ($r = .25$, $p = .008$).

The foregoing findings must assuage the concerns of those who see in bilingual education an instrument to maintain ethnic enclaves and to retard assimilation. Nonetheless, attitudes toward the Spanish language did exercise some influence, and although the influence was largely confined to the second semester, it was in the expected direction. Students who attached a greater importance to the study of Spanish ($r = -.25$, $p = .01$) and those who perceived the language as having a great deal of instrumental and cultural value ($r = -.18$, $p = .06$) were more likely to progress satisfactorily during the second semester. The fact that these relationships emerged during the second semester strengthens an interpretation ad-

vanced in Chapter IV, that the Bilingual Studies Program must have had some impact that fostered these attitudes. On the other hand, there was an indication that students who visited their native country more frequently were more likely to drop out during the first semester ($r = .17$, $p = .07$).

Among ESL students, the same pattern of manifesting positive attitudes toward the majority language and people and exposure to English was found among those who progressed satisfactorily (Table 6.9). The influence of these variables, however, was confined to the first semester. Those who tried to speak English as often as possible ($r = -.35$, $p = .05$) and who reported speaking English in most social situations ($r = .31$, $p = .09$) were more likely to progress satisfactorily towards the degree in the first semester. In addition, they also had greater expectations of marrying a non-Hispanic ($r = -.35$, $p = .05$), of living permanently in the United States ($r = -.36$, $p = .04$), and of taking a job requiring English ($r = -.33$, $p = .07$).

Persistence in college among ESL students, however, was influenced by acceptance of the native language, suggesting that development of ethnic identity is one of the ingredients necessary to survive in college. Those who attached little importance to the study of Spanish

TABLE 6.9
 RELATIONSHIP BETWEEN LANGUAGE USAGE, ATTITUDES
 TOWARD ENGLISH AND SPANISH AND ACADEMIC
 PERFORMANCE: ESL STUDENTS

	PTD ₁ (N=30-33)	DO ₁ (N=33)
Language Dominance	r = .31 p = .09	-
Attitudes Toward Spanish	-	r = -.38 p = .03
Try to Speak English	r = -.35 p = .05	-
Importance of Spanish	-	r = .38 p = .03
Marry a Hispanic	r = .32 p = .08	-
Marry a Non-Hispanic	r = -.35 p = .05	-
Take a job Requiring English	r = -.33 p = .07	-
Take a job Requiring Spanish	-	r = .34 p = .05
Live Permanently in U.S.	r = -.36 p = .04	-

Note: There was no significant relationship between any of the independent variables and PTD₂ or DO₂.

(r = .38, p = .03), those who did not expect to take a job requiring Spanish (r = .34, p = .05), and who viewed Span-

ish as having little cultural or instrumental value ($r = -.38$, $p = .03$) were more likely to drop out by the end of the first semester.

Overall, the findings confirm the hypothesis that academic performance is related to language usage and attitudes toward Spanish and English. Positive attitudes toward the majority language and people, exposure to English activities, and using English in social situations were conducive to satisfactory academic progress in both groups and to persistence for BSP students. Favorable attitudes toward the native language was related to the academic progress of BSP students and to persistence for ESL students. In addition, the findings tend to refute the notion that bilingual education retards assimilation. On the contrary, they strongly suggest that enrollment in a bilingual program facilitates acceptance of majority culture.

Performance in English Courses

Since a major objective of KCC's Bilingual Studies Program and of ESL is to promote the learning of English, it is important to look at differences between the two groups in their progress in English language-arts courses and to examine how the students' performance in English is related to other educational outcomes. Before describ-

ing how members of each group fared in their English courses, some cautionary remarks are in order. First, it will be recalled from Chapter III that the two programs used different instruments for initial placement purposes. Second, the two groups did not start at comparable levels. As Table 6.10 shows, 86% of BSP were placed in the ESL sequence within the Bilingual Studies Program specifically

TABLE 6.10
INITIAL PLACEMENT IN ENGLISH COURSES

	<u>BSP</u>		<u>ESL</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%**</u>
English 15, 07	95	49.7	13	18.6
English 16, 08	49	25.7	36	51.4
English 17	21	11.0	-	-
Basic Reading Skills	1	0.5	1	1.4
Basic Writing Skills	9	4.7	8	11.4
Analytical Reading	<u>16</u>	<u>8.4</u>	<u>12</u>	<u>17.1</u>
TOTAL	191	100.0	70	99.9

**Percentages do not total 100% due to rounding.

designed for students whose native language is Spanish (English 15, 16, and 17), with 50% being placed in the beginner's course (English 15). Most ESL students, on the other hand, began at least one step ahead. Although 70% of them were placed in the comparable courses of English 07 and English 08, only 11% of the students were placed in the beginner's course (English 07). Finally, the comparison is limited to the first four English courses in which the students enrolled, which was as far as meaningful sample sizes in each group were available. Nonetheless, we believe that the comparison provides an approximation of the students' progress in this critical area.

Table 6.11 shows the distribution of students who passed the first English course by Program. The most prominent finding is that ESL students outperformed BSP students. Overall, over 70% of ESL students successfully completed their first English course, with students in English 08 performing remarkably well. Eighty-three percent of the ESL students enrolled in this course achieved a C (the minimum grade required to pass English language-arts courses) or better. By contrast, only 58% of the BSP students passed the first English course. BSP students in English 17 attained the highest completion rate, with

TABLE 6.11
DISTRIBUTION OF BSP AND ESL STUDENTS
WHO PASSED FIRST ENGLISH COURSE

	<u>BSP</u>			<u>ESL</u>		
	Enrolled	Passed		Enrolled	Passed	
	N	N	%	N	N	%
English 15, 07	95	55	57.9	13	8	61.5
English 16	49	29	59.2	36	30	83.3
English 17	21	14	66.6	-	-	-
Basic Reading Skills	1	0	0.0	1	0	0.0
Basic Writing Skills	9	4	44.4	8	4	50.0
Analytical Reading	<u>16</u>	<u>9</u>	56.2	<u>12</u>	<u>8</u>	66.6
TOTAL*	191	111	58.1	70	50	71.4

*Statistically significant at the .05 level or below.

two-thirds passing the course. In both groups, students enrolled in Basic Writing Skills were the least successful, with only half or fewer in each group passing this course.

In the second English course (Table 6.12), the BSP

TABLE 6.12
DISTRIBUTION OF BSP AND ESL STUDENTS WHO
PASSED SECOND ENGLISH COURSE

	BSP			ESL		
	Enrolled	Passed		Enrolled	Passed	
	N	N	%	N	N	%
English 15, 07	22	6	27.3	2	2	100.0
English 16, 08	56	35	62.5	4	0	0.0
English 17	26	15	57.7	-	-	-
Basic Writing Skills	24	11	45.8	29	12	41.4
Analytical Reading	14	6	42.9	11	5	45.5
Other	<u>7</u>	<u>5</u>	71.4	<u>6</u>	<u>2</u>	33.3
TOTAL	149	78	52.3	52	21	40.4

students performed slightly better overall with 52% achieving the minimum requirements, whereas only 40% of ESL students did so. It should be noted, however, that the bulk of ESL students were enrolled in Basic Writing Skills and in Analytical Reading, and in these two courses the proportion of students who passed in each group was generally similar. In neither group did the proportion

who passed either one of these two courses exceed 45%. It should also be noted that, among BSP students, the least successful were those who had to repeat English 15, with only 27% achieving the minimum grade the second time around.

Both groups of students encountered enormous difficulties in achieving the minimum requirements of the third English course (Table 6.13) as evidenced by the small pro-

TABLE 6.13
DISTRIBUTION OF BSP AND ESL STUDENTS WHO
PASSED THIRD ENGLISH COURSE

	BSP			ESL		
	Enrolled	Passed		Enrolled	Passed	
	N	N	%	N	N	%
English 15, 07	6	2	33.3	-	-	-
English 16	8	2	25.0	4	2	50.0
English 17	28	13	46.4	-	-	-
Basic Writing Skills	28	10	35.7	17	4	23.5
Analytical Reading	20	7	35.0	5	2	40.0
Methods of Expression	8	2	25.0	4	1	25.0
Other	<u>3</u>	<u>2</u>	66.6	<u>7</u>	<u>3</u>	42.9
TOTAL	101	38	37.6	37	12	32.4

portions who passed: 38% of BSP and 32% of ESL. For almost half of ESL students, the third course was Basic Writing Skills, which was passed by only 24% of the students. For the bulk of BSP students, the third course was either English 17, which was passed by 46%, Basic Writing Skills, in which BSP students were slightly more successful than ESL students, with 36% passing, and Analytical Reading, passed by 35% of the students.

In the fourth English course (Table 6.14), the

TABLE 6.14

DISTRIBUTION OF BSP AND ESL STUDENTS WHO
PASSED FOURTH ENGLISH COURSE

	BSP			ESL		
	Enrolled	Passed		Enrolled	Passed	
	N	N	%	N	N	%
English 15, 07	1	0	0.0	-	-	-
English 16, 08	6	2	33.3	2	1	50.0
English 17	7	1	14.3	-	-	-
Basic Writing Skills	21	5	23.8	10	4	40.0
Analytical Reading	16	9	56.3	3	1	33.0
Methods of Expression	12	4	33.3	3	3	100.0
Other	<u>-</u>	<u>-</u>	-	<u>2</u>	<u>0</u>	0.0
TOTAL	63	21	33.3	20	9	45.0

problems that ESL students had earlier encountered with Basic Writing Skills were now evident among BSP students even though those who were still in college, by this time, were generally the better students. Of 21 BSP students enrolled in this course, only 24% passed, whereas four of ten ESL students in this course completed it successfully. Nonetheless, considering that most of the ESL students were repeating the course, the number who passed was not that high. It is obvious that achieving the minimum requirements in Basic Writing Skills was a problem for both groups, even among the better students. It is encouraging to see, however, that the majority of BSP students (56%) passed Analytical Reading.

In sum, this comparison of the students' progress in their English courses has shown that after the first semester, the two groups generally progressed at the same rate, and that progress in English courses was to some extent determined by where the students started and which course they took. Reaching even minimum proficiency levels in the more complex skills of writing and analytical reading was difficult for both groups of students, but most particularly for those who started in the basic introductory courses. It should be noted that lack of skills in reading and writing are common among CUNY's entering freshmen (Lavin et al., 1981). It has also been

found that, after one year, remedial efforts yield minor effects in erasing these difficulties even among those whose native language is English. The finding, therefore, that many of these Hispanic students encounter a stumbling block and have to repeat these courses should not be surprising, considering that their natural mode of full expression is Spanish.

How did performance in English courses affect other educational outcomes? Among BSP students there was a definite and consistent relationship between passing the first two English courses and the students' progress towards the degree and persistence (Table 6.15). For exam-

TABLE 6.15

RELATIONSHIP BETWEEN PROGRESS IN ENGLISH COURSES
AND ACADEMIC PERFORMANCE: BSP STUDENTS

<u>English Grade</u>	PTD ₁ (N=134-178)	PTD ₂ (N=94-144)	DO ₁ (N=178)	DO ₂ (N=134)
First Course	r = .40 p = .0001	r = .26 p = .002	r = -.30 p = .0001	-
Second Course	r = .30 p = .0004	r = .38 p = .0001	-	r = -.20 p = .02
Third Course	-	r = .24 p = .02	-	-
Fourth Course	-	-	-	-

ple, those who passed the first English course were more likely to progress satisfactorily during the first semester ($r = .40$, $p = .0001$) and during the second semester ($r = .26$, $p = .002$). They were also less likely to drop out during the first semester ($r = -.30$, $p = .001$). Similarly, passing the second English course was positively related to PTD_1 ($r = .30$, $p = .0004$), PTD_2 ($r = .38$, $p = .0001$) and negatively related to DO_2 ($r = -.20$, $p = .02$). Since English was only one of several courses included in the measures PTD_1 and PTD_2 and since the grades obtained in the English courses were also excluded from PTD_1 and PTD_2 , these findings indicate that the students who did well in their English courses were the better students who also performed well in their other courses (which were taught in Spanish). These students, it will be recalled, were graduates of foreign high schools who were relatively better academically prepared. They were also students who expressed very favorable attitudes and behavior toward the majority language and people, engaged in activities requiring the use of English, and attempted to speak English in their social interactions.

Among ESL students, the same general pattern emerged (Table 6.16). Students who passed the first English course were more likely to progress satisfactorily

TABLE 6.16

RELATIONSHIP BETWEEN PROGRESS IN ENGLISH COURSES
AND ACADEMIC PERFORMANCE: ESL STUDENTS

<u>English Grade</u>	PTD ₁ (N=18-67)	PTD ₂ (N=45-51)	DO ₁ (N=67)
First Course	r = .36 p = .003	r = .39 p = .005	r = -.33 p = .006
Second Course	-	r = .35 p = .02	-
Third Course	-	-	-
Fourth Course	r = .66 p = .003	-	-

Note: There was no significant relationship between any of the independent variables and DO₂.

and less likely to drop out in the first semester. Passing the second English course, however, although positively related to PTD₂ was not related to DO₂. The lack of association between performance in the second English course and dropping out in the second semester was due to the fact that for many ESL students the second course represented a new course. Failure to pass it did not prompt them to withdraw immediately from KCC. Many students did stay on and repeated the course. Those who did not succeed the second time, eventually did drop out. The correlation between passing the second English course and all

dropouts after the first semester (not shown in the table) was $-.27$ ($p = .05$).

Summary

In recognition that deficiencies in English language skills are a major impediment to the academic success of Hispanics in higher education, Kingsborough Community College has utilized bilingual education with an ESL component and English as a Second Language (without bilingual education) to assist students in overcoming this disadvantage. The analyses presented in this chapter revealed that the most consistent factor associated with academic progress and persistence in college is the very deficiency that the two approaches are intended to overcome: progress in English language courses. Regardless of whether inadequate English language skills are the fundamental cause of Hispanic underachievement in school, attaining even minimum levels of proficiency in the complex skill of writing is a formidable task for these two groups of Hispanic students. This task seemed to be even more onerous for those students in both groups who began in the introductory or intermediate courses.

In addition to their difficulties with writing, ESL students who were initially placed in the basic courses of English 07 and English 08 encountered extraordinary problems in mastering the skills required in Analytical

Reading, whereas many BSP students had difficulties in acquiring even the elementary concepts taught in the introductory course.

The foregoing findings highlight the limitations of each educational approach in compensating for the initial deficiencies in English language skills that the students bring to college, given their social and educational background and the constraints imposed by the short time frame of one or two semesters in college. Some may see this as a very worrisome sign and call for the imposition of minimum standards in English for non-native English speakers before admission to CUNY. It should be remembered, however, that many native English speakers at CUNY also encounter serious obstacles in meeting standards in English reading and writing even after exposure to remedial courses. In fact, some would argue that given the formidable barrier that mastering English presents to this population and to open-admission students in general, grading and testing procedures should be revised to implement a "value added approach" (Astin, 1982). This would entail, among other things, the replacement of normative or relativistic measures by measures that assess students' growth over a period of time. We believe, however, that the finding that mastery of English language skills presents a problem of such huge proportions for these Hispan-

ic students underscores the importance of using bilingual education as an interim measure until the student learns enough English to profit from the regular curriculum.

Another major influence on college performance was previous educational background. This finding emerges in study after study. In the present study, educational background behaved somewhat differently for the two groups. Among BSP students, educational background influenced only the students' academic progress. Among ESL students, it influenced both their academic progress and persistence in college. One key finding was that, although graduates from foreign high schools were the best academically prepared students in most academic subjects except in English, those in BSP and ESL had opposite fates. In BSP, these were the students to profit most from bilingual instruction in that they were more likely to progress satisfactorily during the first and second semesters and were also the students whose progress in English was better. In ESL, these students tended to perform poorly and to drop out during the first semester. This finding is of enormous significance because of its implications for improving the status of Hispanics in the United States. The Hispanic community on the U.S. mainland is in desperate need of intellectual and moral leadership. If we accept the notion that it is important for

the community colleges to develop leadership among distinct subgroups in our society, the disparate fates of the better academically prepared students (and probably the most able) in each program can only be interpreted as indicating that the Bilingual Studies Program is superior to the ESL approach as a ladder for those non-native English speakers with the greatest potential for community leadership. The fact that the Bilingual Studies Program is salvaging the best academically prepared students who fall by the wayside in ESL should convince even the most hard rock advocates of meritocratic values that bilingual education is desirable.

Disparate relationships with outcome variables were also found for GEDs in the two groups. Among ESL students, low-scoring GEDs on the high school equivalency examination dropped out in the first semester, whereas high scorers tended to persist and to perform better than mainland or foreign high-school graduates. Among BSP students, although GEDs tended to perform poorly during the first semester, having a GED was not related to subsequent academic progress or to dropping out. Clearly, the bilingual program was able in some way to rectify some of the deficiencies that GEDs brought with them. Keeping in mind that by far the highest dropout rate in New York City's public high schools is among Hispanics, most notably among

Puerto Ricans, that for these dropouts the GED represents the last chance to obtain a high school diploma, and that enrollment in CUNY requires a high school diploma or a GED, the finding that having a GED does not determine the fate of the students in the Bilingual Studies Program provides additional evidence of the superiority of the bilingual program over the ESL-only approach in extending opportunities in higher education for these students.

Another finding worthy of discussion is the fate of the mainland high-school graduates who constituted almost half of the students in the ESL group and almost one-fifth of the BSP group. The present study did not reveal any clear cut advantage to the ESL mainland graduates in spite of their greater exposure to English in a conventional educational setting. If anything, ESL mainland graduates came to KCC less academically prepared in English than GEDs and their inadequate background in English eventually caught up with these students in the second semester, when their academic progress was notably inferior to that of GEDs. Among BSP students, to have graduated from a mainland high school was not related to any of the outcome variables.

It is evident that to succeed in ESL, the student must come to college with a certain degree of preparation in English. It is also evident that graduation from a

mainland high school does not guarantee that the student is able to handle an all-English curriculum. The existing practice of placing disadvantaged Hispanic students in an ESL program to correct their deficiencies in English while simultaneously requiring that they enroll in academic content courses taught in English is obviously not meeting the needs of the students or the needs of the Hispanic or larger community. There is reason to believe that the ESL experience at KCC reflects in microcosm the experiences of the majority of Hispanic students in CUNY (e.g., see Lavin et al., 1981). From the findings in this study, bilingual education with an ESL component appears to be a better educational alternative: it boosts the academic performance of the best academically prepared student and does not foreclose opportunities for higher education for students with poor academic backgrounds who have the motivation to persist in college after the first semester.

Additional evidence that the Bilingual Studies Program yielded superior results came from findings on income levels. For ESL students, academic progress was related to income level and public assistance. No such relationship was found, however, for BSP students. Since the Bilingual Studies Program students were clearly more disadvantaged in these areas than ESL students, it appears that the program must have had some impact that diminished the

influence of these variables.

But there were limitations to what the bilingual education program could accomplish given the characteristics of the population the Program served. As Fishman (1976) forewarned, to expect any educational technique to overcome all the disadvantages of the poor is unrealistic. This analysis of the possible influences of family and other background characteristics on educational outcomes revealed that there were some ascriptive characteristics and conditions operating in the family environment of BSP students that militated against their persistence in college after the first semester. These were being male, Puerto Rican born and living with spouse. The Puerto Rican born student in ESL also tended to drop out. This study was not able to explain the proneness of Puerto Ricans to drop out. The Puerto Rican migrant is characterized by a complex pattern of circulation between the United States and the island. Lavin et al. (1981), who observed a similar tendency among Puerto Ricans in their study, suggest that it is possible that these students may actually be stopping out instead of dropping out. A finding in the present study that supports Lavin's interpretation was that those BSP students who visited more frequently their country of origin were also more likely to "drop out."

The hypothesis that educational outcomes were related to the student's language dominance configuration, his/her sociolinguistic environment, and the extent to which he/she shared majority attitudes and behavior was confirmed. Students who attempted to speak English in social situations, who exposed themselves to or engaged in activities involving the use of English, and who expressed positive attitudes toward the majority language and people, including willingness to assimilate structurally, were more likely to progress satisfactorily in both groups, although the associations were stronger among ESL students. In addition, in BSP, these same students were less likely to drop out. Favorable attitudes toward the native language were conducive to satisfactory academic progress among BSP students and to persistence for ESL students.

Of major importance was the evidence that enrollment in a bilingual program did not retard assimilation but, in fact, appeared to facilitate it. The explanation for this finding may lie in the concept of anticipatory socialization, which proposes that people adopt the characteristics of groups of which they aspire to become members. It is also possible that the KCC Bilingual Studies Program, being transitional in nature, placed heavy em-

phasis on the importance of learning English and participating in the majority culture.

In brief, the analyses in this chapter together with those of the previous chapter have shown that there are many important tangible ways in which the bilingual program was of greater benefit to the students. The previous chapter demonstrated that students in the bilingual program attempted and earned more credits, generally earned higher GPAs and were more likely to progress satisfactorily toward the degree during the first three semesters in college. It also showed that even when students dropped out they tended to stay in school longer and were less likely to be academically dismissed than ESL dropouts. Furthermore, dropouts who stayed for at least one semester in college were more likely than ESL students to be making adequate progress toward the degree and to have earned GPAs high enough to enable them to return to college. This chapter has shown that exposure to the bilingual program mitigated some of the most pervasive negative influences on academic performance that doom minority students to failure: low socioeconomic status and poor high school preparation in academic courses including English language skills. Placement in ESL only maintained the educational inequalities stemming from these sources; it

also foreclosed opportunities in higher education even for the most academically prepared, and perhaps, the most talented, non-English-speaking Hispanic students seeking a college education.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Bilingual education programs in the United States emerged as an intervention technique to help improve the educational attainment of ethnolinguistic minorities, most particularly Hispanics, who had higher dropout rates before the completion of secondary schooling and were by far

less likely to graduate from high school than majority students and even other minority groups. For most of their existence, bilingual programs have been highly controversial and their implementation in the United States has been primarily directed to elementary school children, whose participation in these programs has by and large been limited to until the student learns enough English to benefit from regular English instruction in the classroom. Although the problems encountered by Hispanics in higher education are comparable, very few institutions have experimented with the bilingual approach.

This study has examined the educational performance of two groups of Hispanic students who entered Kingsborough Community College of the City University of New

York from fall 1978 to fall 1980. One group entered the Bilingual Studies Program, where instruction was in the students' native language for the first thirty credits of the students' course work. The other group entered the more conventional English as a Second Language Program and followed the general college curriculum. The study followed the students through fall 1981, by the end of which the various entering classes had been in college from one to three years.

The BSP and ESL groups were comparable in that most of the students were non-native born, Spanish was the primary language in the home, and the students described themselves as thinking primarily in Spanish. Additionally, they were comparable in many other social background and educational characteristics, which by any standard would place them at a very serious disadvantage in a higher education setting. In both groups, the majority were women and a significant number were housewives and single parents. They were older than the typical college student and they generally came from financially impoverished families.

Educationally, both groups were strikingly deficient not only in English language skills but in other academic areas as well, such as Math, Science, and Social Studies. In addition, substantial numbers in both groups

had come to college via nontraditional high schools, suggesting previous difficulties in adapting to conventional school settings.

But on many of the foregoing characteristics, the students in the Bilingual Studies Program fared even worse than ESL students. The BSP students were older when they came to the United States and older when they entered Kingsborough. They were more likely to be single parents, heads of households, and to come from families with incomes substantially below the poverty level. Furthermore, a significantly higher proportion of BSP students had come to college via the high-school equivalency diploma route.

What conclusions can be drawn about the impact of the bilingual educational approach in extending opportunities for higher education for students with limited English proficiency and characteristics such as those in the present study? The major questions that guided the study are given below together with a brief review of the main findings.

How did students in a bilingual higher-education program compare academically to those exposed only to ESL instruction? Overall, the answer to this question is "quite well." All signs were favorable when the academic performance of the two groups was assessed by the follow-

ing measures: the number of courses for which the students registered, the number of courses passed, the number of credits attempted, the number of credits earned, and the students' grade-point average. The BSP students outperformed ESL students on almost every criterion during the first three semesters in college. Beginning with the first semester, they attempted and earned more credits, so that by the end of the first academic year, the BSP students were close to three courses ahead, or the equivalent of almost one full semester. This advantage in credits earned persisted throughout the third and fourth semesters in college. Furthermore, the students in the bilingual program also achieved higher GPAs during the first three semesters in college. Thus, exposure to a higher credit load did not appear to affect the quality of the academic performance of the BSP students.

The superiority of the bilingual approach in opening up opportunities in higher education was also confirmed when the students' performance was assessed by the global indicator, progress toward the degree. This criterion measured simultaneously several aspects of the students' performance, such as: the pace at which the student was earning his degree, the quality of the academic work, performance in non-credit and compensatory courses, and formal withdrawal from courses. Beginning in the

first semester and continuing throughout the third semester, significantly more BSP than ESL students were making adequate progress toward the degree. The disparity in the academic performance of the two groups was again most clearly evident in the second semester, by the end of which there was a twenty-two percentage point difference in favor of BSP over ESL students in the proportion who were progressing satisfactorily.

How well did the students in each group perform in their English courses? After the first semester, the BSP student progressed no better or no worse than the ESL student. In fact, progress in English courses was to some extent determined by where the students started and which course they took. Students in each group who began above the second English course in each of the ESL sequences were generally more successful in meeting the minimum proficiency levels of the higher level courses. By and large, though, both groups encountered major difficulties in learning the basic concepts in writing skills. Furthermore, ESL students also encountered problems in passing the skills required in Analytical Reading, whereas a significant number of BSP students did not meet the requirements of the introductory course.

The evidence just presented can hardly be construed

as indicating that bilingual education retards the learning of English to a greater extent than ESL. The evidence also highlights the limitations of what each educational technique can accomplish given the social and educational background characteristics of the students. Nevertheless, the fact that a small percentage of BSP and ESL students did graduate within the short period of three years and that many of the BSP students who left after the first semester were making satisfactory progress toward the degree does indicate that it is possible to master the required English language skills. There were indications, however, that the students' interests and efforts also determined progress in English. Students in both groups who reported taking greater advantage of the many opportunities existing in the New York City area to enhance their English language skills through interaction with native English speakers and participation in social or leisure time activities requiring the use of English performed better in their English courses and in overall academic progress.

How did the groups compare in graduation and attrition rates? Graduation and attrition rates for the two groups were about the same. The low graduation rates for each group (5% for BSP, 4% for ESL) was largely due to the

fact that the study did not cover a long enough span of years. At CUNY, it has been found that open-admission students, including native speakers of English, take from three to as many as eleven years to complete the degree requirements in the community colleges. Also, since the educational careers of Hispanics are often characterized by "stopping out," it is likely that the long-term graduation rates for each group will be much higher.

Pertaining to attrition, over half of the students in each group had dropped out by fall 1981, with close to two-thirds of the dropouts in each group doing so by the end of the freshman year. However, even when they did drop out, BSP students were more likely to stay in school longer and were less likely to be academically dismissed. In addition, BSP dropouts who had stayed at KCC for at least one full semester were more likely than ESL students to be making adequate progress towards their degree and to have earned GPAs high enough to enable them to return to college should their circumstances allow.

What student characteristics were associated with success or failure in the Bilingual Studies Program? The BSP students who progressed satisfactorily academically were generally:

- . Graduates from foreign high schools.
- . Students who had a better high-school academic

preparation in their native language and in other college preparatory courses.

- . Students who passed their English courses.
- . Students who engaged more often in social or leisure time activities requiring the use of English.
- . Students who expressed willingness to assimilate structurally.
- . Students who expected to obtain a job requiring the use of English.
- . Students who viewed Spanish as having instrumental and integrative value.
- . Students who viewed the study of Spanish as very important.

The BSP students likely to drop out were:

- . Males.
- . Puerto Rican born students.
- . Students living with spouse or with other relatives.
- . Students who did not attempt to speak English in social situation.
- . Students who expressed unwillingness to assimilate structurally.
- . Students who visited their country of origin frequently.

- . Students who failed English courses.

What characteristics were associated with success or failure in ESL? ESL students who progressed satisfactorily academically were generally:

- . Students who came from families with higher incomes or not receiving public assistance.
- . Students with better high-school academic preparation in English.
- . Students who obtained a high score on the GED exam.
- . Students who attempted to speak English in social situations.
- . Students who expected to obtain a job requiring the use of English.
- . Students who expected to live permanently in the United States.
- . Students who expressed willingness to assimilate structurally.
- . Students who passed English courses.

Drop-out prone students in ESL were generally:

- . Foreign high school or mainland graduates with little academic preparation in English.
- . Puerto Rican born students.
- . Low scoring GEDs on the high school equivalency

examination.

- . Students who failed English courses.
- . Students who did not view Spanish as having instrumental or integrative value.
- . Students who did not view the study of Spanish as important.
- . Students who did not expect to take a job requiring Spanish.

Does enrollment in a bilingual program contribute to ethnocentric attitudes and behavior? The answer to this question is an unqualified "No." Although the Bilingual Studies Program students were more likely than ESL students to view Spanish as having both instrumental and integrative value, they did not differ from ESL students in their participation in activities involving the use of English or majority culture, or in their attitudes toward the English language or majority people, which were generally very positive. In addition, since the students more likely to progress better academically and to persist in college were those most likely to express favorable attitudes and behavior toward the majority language and people, we have concluded that enrollment in a bilingual program such as Kingsborough's appears to facilitate assimilation rather than retard it.

APPENDIX A
STUDENT QUESTIONNAIRE

THE CITY UNIVERSITY OF NEW YORK

Estimado Estudiante:

Este cuestionario ha sido enviado a estudiantes hispanos en los programas bilingüe e inglés como idioma (ESL) de Kingsborough Community College. La información que solicitamos nos ayudará a entender mejor los factores que ayudan o impiden el progreso educacional de los estudiantes hispanos para poder mejorar los servicios educativos.

Agradeceríamos su cooperación en contestar todas las preguntas. Todas sus respuestas son muy importantes para poder obtener resultados válidos. Sin embargo, si hay alguna pregunta que Ud. prefiere no contestar, déjela en blanco y continúe con la siguiente pregunta. Queremos asegurarle que la información que Ud. nos dé es confidencial y no enseñaremos sus contestaciones individuales a nadie. La información será codificada y se usará simplemente para comparar las experiencias de los grupos hispanos en los programas bilingüe y ESL.

Si tiene alguna pregunta en cuanto a este estudio, puede llamarme al teléfono (212) 934-5576.

Muchas gracias por su cooperación con este estudio de gran importancia para la comunidad hispana en Nueva York.

Sinceramente,


Yvonne A. Torres
Directora del Proyecto

CUESTIONARIO CONFIDENCIAL

1. Número de su seguro social: _____
2. País donde Ud. nació: _____
3. Si nació fuera de los Estados Unidos, indique el número de años que ha vivido en los Estados Unidos: _____
4. Cuando nació: _____
mes día año
5. País donde nacieron sus padres:
Madre: _____
Padre: _____
6. Sexo: (Indique uno)
1. ☐ Masculino
2. ☐ Femenino
7. Estado Civil: (Indique uno)
1. ☐ Soltero/a
2. ☐ Casado/a
3. ☐ Divorciado/a; separado/a; viudo/a
8. ¿A qué grupo étnico Ud. pertenece?
(Indique uno)
1. ☐ Puertorriqueño
2. ☐ Cubano
3. ☐ Dominicano
4. ☐ Guatemalteco
5. ☐ Mexicano/Chicano
6. ☐ Colombiano
7. ☐ Ecuatoriano
8. ☐ Nicaragüense
9. ☐ Otro (Especifique) _____
9. ¿Solicitó Ud. al Programa Bilingüe de Kingsborough? (Indique una)
1. ☐ Sí
2. ☐ No
10. ¿Cuál es el grado académico más alto que Ud. intenta obtener? (Indique uno)
1. ☐ Ninguno, simplemente algunos cursos
2. ☐ Asociado (AA, AS, AAS, etc.)
3. ☐ Bachillerato (BA, BS, etc.)
4. ☐ Maestría (MA, MS, etc.)
5. ☐ Doctorado (Ph.D., Ed.D., etc.)
6. ☐ Otro grado profesional (MD, JD, etc.)
11. ¿Cuál es el grado más alto que sus padres completaron? (Indique uno en cada columna)

Madre	Padre
1. ☐	1. ☐ Sexto (6) grado o menos
2. ☐	2. ☐ 7-9
3. ☐	3. ☐ 10-11
4. ☐	4. ☐ Graduado de escuela superior, secundaria
5. ☐	5. ☐ Algunos curso de Universidad
6. ☐	6. ☐ Graduado de universidad o grado más alto
12. ¿Es Ud. ciudadano de los Estados Unidos? (Indique uno)
1. ☐ Sí, nació en los Estados Unidos
2. ☐ Sí, nació en un territorio de los Estados Unidos
3. ☐ Sí, naturalizado
4. ☐ No, tengo visa permanente
5. ☐ No, tengo visa temporera

13. ¿Qué idioma hablaban en su casa cuando Ud tenía 16 años o menos? (Indique uno)

1. ☐ español solamente
 2. ☐ español mayormente
 3. ☐ ambos - español e inglés
 4. ☐ inglés mayormente
 5. ☐ inglés solamente

14. ¿Piensa Ud: (Indique uno)

1. ☐ Principalmente en inglés
 2. ☐ Principalmente en español

15. ¿Con quién ha vivido la mayor parte del tiempo mientras ha estado en este colegio? (Indique todas las personas)

1. ☐ solo/a
 2. ☐ con mis padres
 3. ☐ con mi esposo/a
 4. ☐ con mis hijos/as
 5. ☐ con otros parientes/familiares
 6. ☐ con amigos/as

16. Aproximadamente ¿cuál fue su ingreso familiar durante el año pasado? Considere ingreso de todas las clases antes de los impuestos. (Indique uno)

1. ☐ menos de \$ 3,000
 2. ☐ 3,000 - 3,999
 3. ☐ 4,000 - 5,999
 4. ☐ 6,000 - 7,999
 5. ☐ 8,000 - 9,999
 6. ☐ 10,000 - 11,999
 7. ☐ 12,000 - 13,999
 8. ☐ 14,000 - 15,999
 9. ☐ 16,000 - 19,999
 10. ☐ 20,000 - 24,999
 11. ☐ 25,000 o mas

17. ¿Asistió, alguna vez, a una escuela en un país hispano: e.g., Puerto Rico, Cuba, República Dominicana, España, América Central, Sur América? (Indique todas las contestaciones que le apliquen)

1. ☐ No
 2. ☐ Sí, escuela elemental (grados 1-6)
 3. ☐ Sí, escuela intermedia (grados 7-9)
 4. ☐ Sí, escuela superior o secundaria (grados 10-12)
 5. ☐ Sí, otra escuela (especifique)

18. ¿Cuán bien puede Ud: (Conteste todas las partes de esta pregunta)

	No en absoluto	Un Poco	Regular	Extremamente bien
Leer inglés	☐	☐	☐	☐
Escribir inglés	☐	☐	☐	☐
Hablar inglés	☐	☐	☐	☐
Entender inglés hablado	☐	☐	☐	☐
Leer español	☐	☐	☐	☐
Escribir español	☐	☐	☐	☐
Hablar español	☐	☐	☐	☐
Entender español hablado	☐	☐	☐	☐

19. ¿Qué idioma habla Ud: (Conteste todas las partes de esta pregunta)

	Español siempre	Español mayormente	Español tan frecuentemente como el inglés	Inglés mayormente	Inglés siempre
En su casa	☐	☐	☐	☐	☐
Con familiares que no viven en su casa	☐	☐	☐	☐	☐
Amigos en la escuela	☐	☐	☐	☐	☐
Amigos fuera de la escuela	☐	☐	☐	☐	☐
Maestros del colegio	☐	☐	☐	☐	☐
Consejeros de colegio	☐	☐	☐	☐	☐
Hermanos y hermanas	☐	☐	☐	☐	☐
En el trabajo	☐	☐	☐	☐	☐
Con su esposo/a; novio/a	☐	☐	☐	☐	☐
Con sus hijos (si tiene alguno)	☐	☐	☐	☐	☐

20. ¿Hasta qué punto está de acuerdo o difiere con cada una de las siguientes aseveraciones? (Conteste todas las partes de esta pregunta)

	Definitivamente difiere	Probablemente difiere	Probablemente está de acuerdo	Definitivamente está de acuerdo
El inglés me ayuda a comprender a los estadounidenses y su modo de vida	☐	☐	☐	☐
El inglés es necesario para obtener un buen trabajo	☐	☐	☐	☐
El inglés me permite pensar y actuar como los estadounidenses	☐	☐	☐	☐
El inglés me permite hacer buenos amigos más fácilmente entre los estadounidenses	☐	☐	☐	☐
Uno necesita un buen conocimiento del inglés para merecer reconocimiento social	☐	☐	☐	☐
Usaré el inglés extensivamente en mi trabajo futuro	☐	☐	☐	☐
Creo que nadie realmente es una persona educada a menos que no tenga fluidez en inglés	☐	☐	☐	☐
Necesito estudiar inglés debido a una meta educacional específica	☐	☐	☐	☐
Necesito estudiar inglés debido a una meta relacionada con mi trabajo	☐	☐	☐	☐

21. ¿En total, el estudio del inglés es: (Indique una)

- 1 ☐ esencial para mí
- 2 ☐ muy importante para mí
- 3 ☐ de alguna importancia para mí
- 4 ☐ de poca importancia para mí

22. Trato de hablar inglés: (Indique una)

- 1 ☐ en cada oportunidad que tengo
- 2 ☐ De vez en cuando
- 3 ☐ Solamente si tengo que hacerlo
- 4 ☐ Nunca

23. ¿Durante los últimos cinco años, cuántas veces ha visitado un país hispano? (Conteste uno)

- 1 ☐ Nunca
- 2 ☐ Una vez
- 3 ☐ Dos veces
- 4 ☐ Tres veces o mas

Indique el país o países:

24. ¿Cuán frecuente le gustaría visitar un país hispano? (Conteste una)

- 1 ☐ Solamente si tengo que hacerlo
- 2 ☐ De vez en cuando
- 3 ☐ En cada oportunidad que tengo

Indique el país o países:

25. ¿Cuál oración describe mejor su situación? (Indique una)

- 1 ☐ No he trabajado mientras he estado en Kingsborough.
- 2 ☐ He trabajado solamente durante el verano.
- 3 ☐ He trabajado "part-time" por algún tiempo mientras he estado en Kingsborough.
- 4 ☐ He trabajado "part-time" la mayor parte del tiempo que he estado en Kingsborough.
- 5 ☐ He trabajado "part-time" todo el tiempo mientras he estado en Kingsborough.
- 6 ☐ He trabajado "full-time" por algún tiempo mientras he estado en Kingsborough.
- 7 ☐ He trabajado "full-time" la mayor parte del tiempo que he estado en Kingsborough.
- 8 ☐ He trabajado "full-time" todo el tiempo que he estado en Kingsborough.

26. Si ha trabajado mientras ha estado en Kingsborough, trabajó Ud: (Indique todas las contestaciones que le apliquen)

- 1 ☐ durante el primer año
- 2 ☐ durante el segundo año
- 3 ☐ durante el tercer año

27. Durante el año pasado, ¿Cuán frecuente hizo cada una de las siguientes actividades? (Conteste todas las partes de esta pregunta) Si no participó en una actividad, indique "Nunca."

	Con mucha frecuencia	Con bastante frecuencia	Con alguna frecuencia	Raras veces	Nunca
Leí periódicos en inglés	☐	☐	☐	☐	☐
Leí periódicos en español	☐	☐	☐	☐	☐
Observé programas de televisión en inglés	☐	☐	☐	☐	☐
Observé programas de televisión en español	☐	☐	☐	☐	☐
Escuché programas de radio en inglés	☐	☐	☐	☐	☐
Escuché programas de radio en español	☐	☐	☐	☐	☐
Escuché discos en inglés	☐	☐	☐	☐	☐
Escuché discos en español	☐	☐	☐	☐	☐
Leí revistas en inglés	☐	☐	☐	☐	☐
Leí revistas en español	☐	☐	☐	☐	☐
Me reuní con amigos hispanos	☐	☐	☐	☐	☐
Me reuní con amigos no hispanos	☐	☐	☐	☐	☐
Asistí a películas y obras hispanas	☐	☐	☐	☐	☐
Asistí a películas y obras en inglés	☐	☐	☐	☐	☐
Escribí una carta, ensayo, etc. en español	☐	☐	☐	☐	☐
Escribí una carta, ensayo, etc. en inglés	☐	☐	☐	☐	☐
Hispanos visitaron mi casa	☐	☐	☐	☐	☐

28. La siguiente es una lista de actividades que los estudiantes hacen algunas veces. Indique cuán frecuente Ud. hizo cada una de ellas durante el año pasado. Si Ud. no participó en una actividad, indique "Nunca."

	Con mucha frecuencia	Con bastante frecuencia	Con alguna frecuencia	Raras veces	Nunca
Estudie en la biblioteca	☐	☐	☐	☐	☐
Recibí tutoría	☐	☐	☐	☐	☐
Leí extra para un curso	☐	☐	☐	☐	☐
No completé las asignaciones (tareas) a tiempo	☐	☐	☐	☐	☐
Recibí orientación (consejería) personal	☐	☐	☐	☐	☐
Me di de baja en un curso	☐	☐	☐	☐	☐
Recibí orientación (consejería) sobre ayuda financiera	☐	☐	☐	☐	☐
Falté a la escuela debido a enfermedad	☐	☐	☐	☐	☐
Falté a la escuela debido a otras razones	☐	☐	☐	☐	☐
Estudie en casa	☐	☐	☐	☐	☐
Recibí orientación (consejería) vocacional	☐	☐	☐	☐	☐
Participé en actividades extra-curriculares	☐	☐	☐	☐	☐
Recibí orientación (consejería) académica	☐	☐	☐	☐	☐
Pedí consejo a un maestro	☐	☐	☐	☐	☐

29. La siguiente es una lista de varias experiencias en la escuela. ¿Cuán satisfecho o desatisfecho está Ud. con cada una? (Conteste todas las partes de esta pregunta)

	Muy Satisfecho	Satisfecho	Desatisfecho	Muy Desatisfecho
Orientación para estudiantes nuevos	☐	☐	☐	☐
Matrícula	☐	☐	☐	☐
Suma de ayuda financiera	☐	☐	☐	☐
Orientación (consejería) académica	☐	☐	☐	☐
Tutoría	☐	☐	☐	☐
Orientación (consejería) sobre ayuda financiera	☐	☐	☐	☐
Orientación (consejería) vocacional	☐	☐	☐	☐
Orientación (consejería) personal	☐	☐	☐	☐
Actividades extra-curriculares	☐	☐	☐	☐
Cursos	☐	☐	☐	☐
Maestros	☐	☐	☐	☐
Consejeros	☐	☐	☐	☐
Su progreso en el inglés	☐	☐	☐	☐
Su progreso en la escuela	☐	☐	☐	☐
Recibir cheques de ayuda financiera a tiempo	☐	☐	☐	☐
El colegio en general	☐	☐	☐	☐

30. ¿Qué importancia tiene cada uno de los siguientes recursos en ayudarle a pagar los gastos de colegio? (Conteste todas las partes de esta pregunta)

	Gran importancia	Poca importancia	Ninguna importancia
Estipendio del Programa Bilingüe, "College Discovery"	☐	☐	☐
BEOG (Beca Básica de Oportunidades Educativas), otra beca o ayuda federal (e.g., SEOG)	☐	☐	☐
TAP (Programa de Asistencia para Pago de Matriculas), otra ayuda o beca del estado	☐	☐	☐
Préstamos repagables	☐	☐	☐
Departamento de Servicios Sociales de la Ciudad de Nueva York (Asistencia a Niños Menores, Asistencia Pública, etc)	☐	☐	☐
Beneficios de Seguro Social	☐	☐	☐
Beneficios Por Desempleo	☐	☐	☐
Beneficios de Veterano	☐	☐	☐
Cupones o estampillas de alimento	☐	☐	☐
Programa de estudio y trabajo	☐	☐	☐
Otro empleo durante el año escolar o de verano	☐	☐	☐
Ahorros personales	☐	☐	☐
Regalos, ayuda de sus padres o familiares	☐	☐	☐
Empleo del esposo/a	☐	☐	☐

31. ¿Hasta qué punto está de acuerdo o difiere con cada una de las siguientes aseveraciones? (Conteste todas las partes de esta pregunta)

	Definitivamente cierto	Probablemente cierto	Probablemente falso o errado	Definitivamente falso o errado
El español me ayuda a llevarme bien con mi familia	☐	☐	☐	☐
El español me ayuda comprender los hispanos y su modo de vivir	☐	☐	☐	☐
El español es necesario para obtener un buen trabajo	☐	☐	☐	☐
El español me permite pensar y actuar como los hispanos	☐	☐	☐	☐
El español me permite hacer buenos amigos más fácilmente entre los hispanos	☐	☐	☐	☐
Uno necesita un buen conocimiento del español para merecer reconocimiento social	☐	☐	☐	☐
Usaré el español extensivamente en mi trabajo futuro	☐	☐	☐	☐
Creo que nadie realmente es una persona educada a menos que no tenga fluidez en español	☐	☐	☐	☐
Necesito estudiar español debido a una meta educacional específica	☐	☐	☐	☐
Necesito estudiar español debido a una meta relacionada con mi trabajo	☐	☐	☐	☐

32. En total, el estudio del español es: (Indique uno)

1. ☐ esencial para mí
2. ☐ muy importante para mí
3. ☐ de alguna importancia para mí
4. ☐ de poca importancia para mí

33. ¿Hasta que punto las siguientes personas le estimulan o le desestimulan a asistir al colegio? (Conteste todas las partes que le apliquen)

	Me estimulan mucho	Me estimulan	Me desesti- mulan	Me desestimulan mucho
Sus padres	☐	☐	☐	☐
Sus hermanos/as	☐	☐	☐	☐
Su esposo/a; novio/a	☐	☐	☐	☐
Otros familiares	☐	☐	☐	☐
Sus amigos	☐	☐	☐	☐
La mayor parte de sus maestros	☐	☐	☐	☐
La mayor parte de sus consejeros	☐	☐	☐	☐

34. ¿Cómo ve Ud. sus posibilidades de hacer lo siguiente? (Conteste todas las partes que le apliquen)

	Muy Posible	Alguna Posibilidad	Muy Poca Posibilidad	Ninguna Posibilidad
Necesitar mas de tres años para completar el grado Asociado	☐	☐	☐	☐
Darse de baja de Kingsborough temporalmente	☐	☐	☐	☐
Transferirse de Kingsborough antes de graduarse	☐	☐	☐	☐
Darse de baja de Kingsborough per- manentemente	☐	☐	☐	☐
Convertirse en ciudadano americano	☐	☐	☐	☐
Casarse con alguien que no es hispano/a	☐	☐	☐	☐
Renunciar la ciudadanía americana	☐	☐	☐	☐
Conseguir un trabajo que requiera inglés	☐	☐	☐	☐
Conseguir un trabajo que requiera español	☐	☐	☐	☐
Casarse	☐	☐	☐	☐
Vivir en un país hispano	☐	☐	☐	☐
Dominar el inglés como los hablantes nativos	☐	☐	☐	☐
Obtener el grado Asociado	☐	☐	☐	☐
Casarse con un hispano/a	☐	☐	☐	☐
Tener mayoría de amigos no hispanos	☐	☐	☐	☐
Cambiar su curriculum	☐	☐	☐	☐
Vivir permanentemente en los Estados Unidos	☐	☐	☐	☐

MUCHAS GRACIAS POR SU COOPERACION. AGRADECEMOS MUCHISIMO SU CONTRIBUCION A ESTE PROYECTO. SI HA RECIBIDO ESTE CUESTIONARIO POR CORREO, HAGA EL FAVOR DE DEVOLVERLO CUANDO LO HAYA COMPLETADO EN EL SOBRE SELLADO CON LA DIRECCION QUE LE HEMOS ENVIADO.

APPENDIX B
GLOSSARY OF VARIABLES

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GLOSSARY OF VARIABLES

Listed below is a description of the significant measures reported in the correlational analyses.

Academic Units (#) - The total number of academic units earned in high school in college preparatory courses.

Activities in English - A constructed variable summarizing the frequency with which respondent (student) engaged in a series of activities involving the use of English. A score of 1 indicates that the student engaged in each activity "very frequently" and 5 indicates "never."

Age KCC - Student's age on admission to Kingsborough as of the nearest birthday.

Age U.S. - Student's age on entry to the United States.

Attitudes toward Spanish - A composite measure summarizing the extent to which students agreed or disagreed with nine statements intended to tap whether students viewed Spanish as having integrative and instrumental value. A score of 1 indicates strong disagreement (and thus, very negative attitudes) and a score of 4 indicates strong agreement (very positive attitudes).

CAA (College Admissions Average) - This measure is the high school average of the student's grades in all college preparatory courses (English, social sciences, foreign languages, math, and science).

- DO1 - A dummy variable identifying students who dropped out from KCC by the end of the first semester.
- DO2 - A dummy variable identifying students who dropped out during or at the end of the second semester.
- English Grade: First Course - The student's grade in the first English course in college. A score of 0 indicates that the student did not meet the requirements of the course, 4 indicates that he/she obtained an A.
- English Grade: Second Course - The student's grade in the second English course in college. A score of 0 indicates that the student did not meet the requirements of the course, 4 indicates that he/she obtained an A.
- English Grade: Third Course - The student's grade in the third English course in college. A score of 0 indicates that the student did not meet the requirements of the course, 4 indicates that he/she obtained an A.
- English Grade: Fourth Course - The student's grade in the fourth English course in college. A score of 0 indicates that the student did not meet the requirements of the course, 4 indicates that he/she obtained an A.
- English Units (#) - The number of units completed by each student in high school in English courses deemed to be college preparatory in nature.
- FFL1 Units (#) - The number of units completed by each student in high school in the first foreign language. For this population the first "foreign language" was generally Spanish.
- GED HS - A dummy variable identifying students who obtained the high school equivalency diploma.
- Gender - A dichotomous dummy variable with females coded as 1 and males as 0.

Importance of Spanish - A Likert-type item indicating how important the student viewed the study of Spanish. A rating of 1 indicates "essential," a rating of 4 indicates "of little importance."

Income - Total family income from all sources before deductions.

Language Dominance - A summary measure consisting of ten Likert-type items indicating the language spoken by each student in different social contexts. A score of 1 indicates that the student always spoke only Spanish in the various contexts, a score of 5 indicates that he/she spoke only English.

Language Spoken in the Home - A Likert-type item indicating the language spoken in the home when student was sixteen years old and younger. A score of 1 indicates "only Spanish" and 5 "only English."

Lived with Children - A dummy variable identifying students living with their children.

Lived with Parents - A dummy variable identifying students living with parents.

Live Permanently in the U.S. - A Likert-type item which measured the student's expectations of living permanently in the United States. The ratings ranged from 1 to 4, with 1 indicating "a very good chance" and 4 "no chance."

Lived with Relatives - a dummy variable identifying students living with relatives other than parents or spouse.

Lived with Spouse - a dummy variable identifying students living with spouse.

PR born - A dummy variable identifying students born in Puerto Rico.

PR/Foreign HS - A dummy variable identifying Puerto Rican and foreign high school graduates.

- PTD₁ - A dummy variable identifying students whose progress toward the degree was satisfactory by the end of the first semester. The measure takes into consideration cumulatively the proportion of courses passed of courses attempted; or the proportion of credits earned of credits attempted; and the student's GPA.
- PTD₂ - Same as above except that the measure identifies students whose progress toward the degree was satisfactory by the end of the second semester.
- Public Assistance - A dummy variable identifying students whose families were receiving public assistance.
- Mainland HS - A dummy variable identifying graduates from mainland high schools.
- Majority of non-Hispanic friends - A Likert-type item which measured the student's expectations of having a majority of non-Hispanic friends. A rating of 1 indicates "a very good chance" and 4 "no chance."
- Marry a Hispanic - A Likert-type item which measured the student's expectations of marrying a Hispanic. The ratings ranged from 1 to 4, with 1 indicating a "very good chance" and 4 "no chance."
- Math Units (#) - The number of units completed by each student in high school in mathematic courses deemed to be college preparatory in nature.
- Science Units (#) - The number of units completed by each student in high school in science courses deemed to be college preparatory in nature.
- Social Studies (#) - The number of units completed by each student in high school in social studies courses deemed to be college preparatory in nature.
- Take job requiring English - A Likert-type item which measured the student's expectations of obtaining a job requiring English. The ratings ranged from 1 to 4, with 1 indicating "a very good chance" and 4 "no chance."

Take job requiring Spanish - A Likert-type item which measured the student's expectations of obtaining a job requiring Spanish. The ratings ranged from 1 to 4, with 1 indicating "a very good chance" and 4 "no chance."

Time U.S. - The number of years the student has been living in the United States.

Try to speak English - A self-rating indicating how often the student tried to speak English, with 1 indicating "every opportunity I get" and 4 "never."

Visits to Hispanic Country - The number of times the student had visited a Hispanic country during the last five years.

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