This paper provides a review of three related literatures on urban education: the demographic characteristics of the students and communities served by urban schools; some notable urban educational policies and practices; and issues and trends in equity research. The following trends and issues in school programs and practices specifically related to urban and minority education are examined: urban responses to the reform commission reports; urban and minority students and private schooling; effective schooling programs; curricular issues related to urban, minority, and poor students; compensatory education programs; school violence; dropout programs and practices; school-corporate alliances; parent participation in schooling; and programs related to new immigrants. The four equity concerns which are highlighted include: desegregation effects, magnet schooling, bilingual education, and sex equity. There are small encouraging signs that the schools are educating urban students better than they did a decade ago: dropout rates for all groups but Hispanics are down; standardized achievement test scores have risen slightly; and efforts to help parent participation in schooling through at-home teaching have enhanced the educational process. Yet many special needs of urban students go unmet, including such basic needs as housing, nutrition, and health care. (ETS)
TRENDS AND ISSUES IN URBAN EDUCATION
A STUDENT-BASED PERSPECTIVE

Carol Ascher
with
Carolyn Riehl and Adam Price
Institute on Urban and Minority Education
Teachers College, Columbia University

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Carol Ascher
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I. INTRODUCTION

The evidence is mounting that American students, like American workers, are changing radically -- in geographic, ethnic, linguistic, and socioeconomic background. Schools in cities of over 250,000 currently educate some 20 percent of all the nation’s children, including over a third of all minority students, a quarter of all low income youngsters, and a third of all children whose first language is not English. Childhood poverty is extremely high in the central cities -- 30.8 percent. And most of the students in all of our 25 largest school districts are minorities.

Though an analysis of the educational experience of urban students shows many weak curricular areas, as well as great inequities in the experiences of different groups of students, there are also signs which offer hope. Achievement scores for urban minority students have risen over the past years; compensatory education does appear to make a difference, particularly when begun in the preschool years; and we do know a great deal about the strengths and needs of urban students, which can be used to create effective schooling, if the will is there.

This paper provides a review of three related literatures on urban education: on the demographic characteristics of the students and communities served by urban schools; on some notable urban educational policies and practices, and on issues and trends in equity research. Although some readers will want to read through the detailed statistical and research summaries, others will use the paper more as a reference. Our goal in all cases has been to offer more, rather than less, information, on the assumption that planners and policy makers will find much of use here. Though specific studies are cited, references to demographic information are contained in Appendix A, which the reader should also find useful as a source for a variety of data related to the information summarized within the body of the paper.

II. THE CHANGING CITY

Many cities across the United States experienced population declines in the 1970s. Moreover, the departure of people with relatively higher incomes from large cities all over the country during the decade resulted in a general reduction of the average income levels of urban populations in comparison to the levels of the states in which they are located. Cities also tended to be left with a disproportionate number of people over 65, which added to the depressed average income. This socioeconomic decline has contributed to the fiscal difficulty of most urban, tax-supported institutions, and has been at the root of much of the fiscal problems of schools themselves. As Borman and Spring (1984) note, the recent push by urban school districts to involve business in schooling is one current solution to the eroded tax base, at the same time as it is an attempt to create better linkages between the education of urban populations and the
changing nature of urban employment.

The exodus of many whites from large cities that began in the 1960s continued into the 1970s. Although some black migration from the cities also occurred in the 1970s, the trend was toward the concentration of blacks and other minorities in central cities (U.S. Department of Education, 1983). Census data for 1980 indicate a drop of six million in the white population of central cities since 1970. Although some of this drop is due to the reclassification of some Spanish-origin persons, it is clear that the black population in central cities increased by almost two million in the ten-year period, and that other racial minorities grew by somewhat under 4.4 million. In 1980, virtually all the 44 sample cities in the census had a ratio of blacks and/or Hispanics that exceeded the national average of 18 percent for both groups (U.S. Department of Education, 1983). Moreover, the school systems of most cities tend to be more heavily minority than the cities themselves: by 1982, 71 percent of Miami's (Dade County) elementary and secondary students were minorities; in Philadelphia, the proportion of minority students had reached 73 percent; in New York City, it was 74 percent; in Los Angeles, 78 percent; Baltimore, 80 percent; Chicago, 84 percent; and Detroit, 89 percent (McNett, 1983).

With the white and black middle class leaving the inner cities for suburban areas, poverty among school-age children has become acute. According to the 1980 census, fourteen of the 44 sample cities, most of them in the Northeast, had more poor children than a decade earlier. Although the number of poor children had declined in some of the urban school systems in the South, they still comprised a larger share of the public enrollment there than they did nationwide. In all but two sample cities, per capita incomes declined relative to state averages between 1970 and 1980. Moreover, inflation and a recession have likely swelled the number of urban poor since 1980 (U.S. Department of Education, 1983).

The increase in poverty in New York City may be taken as a severe, but not extreme, example. Starting in 1969, the city experienced a rapid rise in poverty. Climbing from 14.9 percent, it reached 17.5 percent in 1976 (while the national rate remained down around 11.8 percent). Although the city has gained new jobs in the white collar sector, manufacturing jobs, which once employed large numbers of less educated people, have continued to decline. Thus poverty in the city continued to grow in the late seventies and early eighties, reaching 24.0 percent by 1982, while in the same year the national poverty rate was 15.0 percent (Tobier, 1984).

Again using New York City as an example, the black population increased by 11 percent during the 1970s, from 19.3 percent of the total population in 1970 to 23.9 percent in 1980 (New York Urban League, 1984). In about the same period, the Hispanic population increased by 5.4 percent, growing to 13 percent of the city's population by 1985 (Hispanic Link Weekly Report, October 28, 1985). Although the poverty rate for all groups in New York City in 1982 was 24.0 percent, among blacks the poverty rate was 34.8 percent, and among Hispanics it was 44.9 percent. Public assistance actually declined between 1969 and 1982; however, had the maximum income limit been adjusted to the poverty threshold and programs kept intact, New York City's welfare population would have risen by 40 to 45 percent between 1969 and 1982 (Tobier, 1984).

The increasing poverty of the nation's cities, and the increasing burden of that poverty shared by the nation's minority populations, are two facts that affect both urban life and, more generally, the future of the nation. A related problem is the increasing concentration of the poor, and particularly of minority poor, in poverty areas within the cities. In
1982, 3 out of 5 poor children lived in poverty areas--that is, neighborhoods defined by a concentration of poor (Peterson, 1985). Data dividing New York City by tracts indicates the same phenomena of a high concentration of poverty in some areas and very few poor people in others. Moreover, such tract data suggest that unemployment rates, even among the poor, are higher in low income areas than in higher income areas. Racially, poor Hispanics are more concentrated in the lowest income tracts than poor blacks, and both are more concentrated than poor whites. A group which is most heavily concentrated in the lowest income tracts are female-headed households whose children are between 6 and 17 years of age (Tobier, 1984).

Social Life, Conditions, Institutions, Policies, and Services Affecting Urban Children and Youth

The two types of urban decline, in total population and in middle-class families, have brought with them a deterioration of the tax base which supports a variety of urban institutions. Thus urban populations, which need special services the most, are also more likely than better off groups in more middle-class areas to find the services they need sorely lacking. Most important is the changing employment available in cities--with jobs for minority men being scarce or unavailable, and employment for minority women generally low-paying. Low-rent housing, good transportation, safety from crime, and assistance with health care all problems in most cities.

Poverty, Employment, and the Female-Headed Household. One important correlative of the current poverty of urban, and particularly urban minority, populations is the high proportion of female-based households. Today, there are more than twice as many family households headed by women with no spouse present than there were in 1960--9.9 million in 1984, compared to 4.4 million in 1960. While 83 percent of white families with children are married-couple families, fewer than half of black families with children are married-couple families (48 percent). Moreover, one in three female householders subsists at below the poverty level, as do more than half (56 percent) of the children living with them. Black female-headed households accounted for 70 percent of all poor black families in 1981. As Feistrizer (1985, p. 31-32) notes: .

If the nation is having a poverty boom, the children are getting the brunt of it, minority children on a proportionately larger scale than white. . .

Children--that is, all those under 18--slipped from 14.2 percent below the poverty level in 1973 to 21.3 percent in 1983. For black children, the increase was from 40.6 percent to 46.3 percent; for Hispanics, from 27.8 percent to 37.8 percent, and, for white children, from 9.7 percent to 16.9 percent.

Another way of looking at the phenomenon is by comparing urban with nonurban areas. While one in five (20 percent) of the residents in inner cities is classified as poor, outside the central cities in metropolitan areas the figure is 9.3 percent. Moreover, one-third of all children
living in the inner-city are poor, and two-thirds of all children inside female households in the inner-city are poor. Over 72 percent of inner-city children under 6 in female households are currently living in poverty—and the rate is almost 75 percent among black female-headed urban families.

On the other hand, the connection between black female-headed households and joblessness has been exaggerated. Three out of four (76.3 percent) of family heads of households worked at some time in 1982. Only one-third of black family householders and one-fifth of white family householders did not work. Six out of ten female householders, no husband present, worked in 1982; 55 percent of black women maintaining their own families worked, and half of all black women with children under six worked. However, due to part-time employment, working less than a full year, and simply lower wages, one-third of all women with incomes earned less than $10,000 in 1983. (The median income for all U.S. males in 1983 was $14,631, compared to $6,319 for females.) And the income of black women was, of course, lower than that of white women.

On the other side, those urban female-headed families with children and without jobs subsist on a complicated variety of aid. About 30 percent have an income from social insurance—social security, survivor's and dependents' benefits, as well as unemployment and disability insurance. Those who receive such payments can generally avoid both poverty and welfare. However, about 23 percent of female families with children receive some (an average of $2,160) money from child support, and a significant proportion of all female-headed households with children receive some income from public assistance (almost entirely AFDC) and half have some relief from food stamps.

Housing. Although housing conditions (urban or otherwise) are notoriously difficult to measure, it is safe to say that the largely minority urban poor live in deteriorated, often unsafe housing. Rents consume a high percentage of household income and, in fact, rose in the 1970s from 20-24 percent to around 33 percent of a household income in the Northeast. (In Boston, the poor pay as much as 39 percent of their income for rent.) Moreover, another 9 percent of poor people's income is spent on heating and another 16 percent on energy costs.

As for public housing, much of it across the nation is now growing old, particularly that built for large family units. The extent of the housing deterioration is revealed by the high vacancy rates, despite long waiting lists. Vacant units generally reflect a long policy of neglect combined with a high cost of returning the unit to habitable conditions. Vandalism in such units is a constant problem.

Although the possible relationship between the institution of desegregation in the cities and white flight has been debated, with studies and arguments bolstering both sides, the fact is that many urban neighborhoods have become de facto segregated because for a long time whites with families have left the inner cities for better and more affordable housing. The current effort to develop metropolitan plans that include suburban neighborhoods in desegregation is one means of sustaining integrated schools in the context of changing housing patterns.

Crime. The relationship between poverty and susceptibility to victimization by crime is striking. In Massachusetts, for example, the rate of victimization was 2-3 times as high for poor people as for the middle and upper income population. Not only are the poor victimized more
often, but national data show that the consequences of their victimization are more severe. The lower the family income, the greater the chance of physical injury. And stranger-on-stranger violent crime is more a problem for the poor than for those with money. Black victimization is 20 percent higher than white victimization, partly because residence is a critical factor: the rate of violent crime for city center residents is twice as high as that for nonmetropolitan residents.

**Transportation.** A commonly known fact about cities is that, while the middle class and well-to-do live on major public transportation lines, the poor are most often relegated to neighborhoods where transportation is remote or where double fares are required to get to places of business and commerce. In fact, although the poor rely on automobiles less than higher income groups, a majority of the poor still rely on their automobiles for local transportation, and automobile costs absorb 20–40 percent of their incomes. Although walking and public transit account for only 10.7 and 3.4 percent, respectively, of trips by all urban householders, they account for 23.4 percent and 6.9 percent of all transportation by low income urban householders.

**Health.** National data suggest that, while the health status of the poor has improved faster than that of the non-poor since 1970, the poor remain considerably less healthy than the non-poor. Similarly, while mortality rates for blacks dropped more than for whites during this period, the adjusted mortality rate for black males is still 44 percent greater than that for white males, and the rate for black females is 53 percent greater than that for white females. Black mothers are still 87 percent more likely to deliver underweight infants, largely as a result of little or no prenatal care, and black babies are still 75 percent more likely than white babies to die in their first year. In fact, the 1981 nonwhite infant mortality rate in Washington, D.C., our nation's capital, exceeded that in Cuba and Jamaica--two extremely poor nations.

Low income and minority children also receive fewer preventative services than the overall population. Less than half of black preschoolers are immunized against DPT; only 39 percent are immunized against polio. Although childhood poverty increased by 18 percent between 1980 and 1982, the number of Medicaid recipients grew by only 4 percent, and in FY 1982, 700,000 children were thrown off AFDC and Medicaid as a result of the Omnibus Budget and Reconciliation Act (OBRA).

In urban schools, the effects of poverty on health are increasingly apparent. There has been a growth in adolescent hypertension among black youth, and diabetes remains a serious problem. Nutritional problems keep many students out of school, as well as contribute to less attentiveness during time spent in class. Finally, school stress itself among black and Hispanic urban youth has been shown to create psychosomatic symptoms, which, in turn, lead to heavy use of health rooms and loss of school time.

**Race, Ethnicity, and Urban Schooling**

Although poverty, both in and outside urban areas, may be ameliorated with changing economic policies, the shifting ethnic composition of the nation will continue, and the high concentration of minorities in the
cities is likely to remain stable if not increase. Demographers predict that by the year 2000 one in every three Americans will be nonwhite, and the majority populations of 53 U.S. cities will be nonwhite. Although the white population is growing older, most minority populations are young and aging at a slower pace. Moreover, the size of various ethnic groups has changed significantly over the past decade—the greatest changes being the unprecedented growth among Asian Americans and Hispanics—and is expected to change still further over the next ten to fifteen years. Hodgkinson, writing about the shifting needs of U.S. education, (1985, p. 18) writes: "The rapid increase in minorities among youth is here to stay... There will be barriers of color, language, culture, attitude that will be greater than any we have faced before... Their numbers are now so large that if they do not succeed, all of us will have diminished futures. That is the new reality."

In the following sections we review demographic data on blacks, Hispanics, and Asian Americans, as a background for a discussion of urban school policies and practices and equity issues. While, as we have seen, a large proportion of minorities live in cities, clearly not all do. Similarly, our data on these groups are not always categorized by urban—nonurban. Finally, although not all blacks, Hispanics, or Asian Americans are part of the urban poor, and many live in and outside the cities as part of a prosperous middle class, we include data on the racial or ethnic groups as a whole as part of our background material.

Blacks. In contrast to Hispanics and Asian Americans, the two fast-growth groups, the black population is far more stable. The number of blacks in the U.S. grew 17.3 percent between 1970 and 1980, from 22.6 million to 26.5 million individuals, or 12 percent of the total population by the end of the decade. Although the fertility rate for blacks declined from 3.1 births per woman in 1970 to 2.3 births per woman in 1980, blacks are expected to increase to 36.7 million by the year 2000, making them 13 percent of the total population.

Blacks have increasingly become an urban population. In 1980, 60 percent of the black population lived in central cities, an increase of 13 percent over 1970—although a slowdown from the 32 percent increase recorded in the 1960s. New York City had the largest black population of any city—1.7 million in 1980, followed by Chicago (1.2 million), Detroit (760,000), Philadelphia (640,000) and Los Angeles (500,000). The urban concentration of blacks can be seen by the fact that although they constitute 12 percent of the national population, they comprise only 6 percent of the population outside central cities. More to the point for educators, 63 percent of black students nationwide are in predominately minority schools.

The income of blacks continued to lag behind that of whites between 1970 and 1980. Although black married couple families registered a 6.9 percent gain in real median income, this group dropped from comprising 64 percent to 55 percent of all black families. In real terms, the median income for all black families dropped 8.3 percent between 1971 and 1981 (compared to a drop of 2.7 percent for all whites). While the median income for black families was 60 percent of whites in 1971, it was only 56 percent of the median white family income in 1981. Although 8 million blacks and 17 million whites had incomes below poverty in 1970, by 1980 9 million blacks and 22 million whites were below the poverty line.

Unemployment among blacks has remained double that of whites, rising from 10.3 percent (compared to 5 percent for whites) in 1972 to 18.9
percent (compared to 8.6 percent for whites) in 1982. Among black teenagers, the unemployment rate reached a high of 48 percent in 1982 (compared to 20.4 percent for white teenagers).

Those blacks who are working are overrepresented in the blue collar and service professions. Though blacks constitute 10 percent of the labor force, they comprise 14 percent of all operators, fabricators, and laborers, and 18 percent of all service workers. Fifty-four percent of all workers who are private household cleaners and servants are blacks, as are a quarter of all postal clerks, nursing aides, orderlies and attendants, and a third of all garbage collectors and maids.

The thesis has been advanced that economic polarization is occurring within the black community; that is, that talented and well-educated blacks are competing successfully with whites, while other blacks are falling further behind both whites and successful blacks. Current research supports this view, with minor twists. Such indicators as educational attainment, the probability of unemployment, and the relationship of earning returns to educational attainment indicate increased homogeneity. Several indices, however, suggest polarization: First, there appears to be a growing disparity between those blacks who hold high prestige jobs and those who hold the lower prestige jobs. Second, the per capita well-being of the growing group of black female-headed households is declining relative to persons in black husband-wife households. Third, there is a steady increase in the proportion of black males who do not participate in the labor force—those men who have been called an underclass because they lack skills, motivation, and opportunity for employment.

Hispanics. The Hispanic population has also rapidly expanded. Hispanics grew 61 percent between 1970 and 1980, compared to a 9 percent growth average for all non-Hispanics. By the end of the ten years, they constituted 13.2 million people, or 6.4 percent of the population. Today, although three out of four U.S. Hispanics were born in the United States, four out of five live in Spanish-speaking households. Hispanics are also the youngest ethnic group: more than 30 percent of Hispanics were under ten years old in 1980, compared to 14 percent of non-Hispanics, and the median age of Hispanics was 23 years old, compared to 31 for non-Hispanics. Because of their low median age, high fertility rate, and high rate of immigration, it is estimated that Hispanics will range from between 25 and 30 million by the year 2000, and will surpass blacks to become the largest minority group, constituting 14.7 percent of the population, by the year 2020. Among Hispanics, the fastest growing subgroup are Mexican-Americans, who are expected to increase from 60 percent to nearly 70 percent of the total Hispanic population by the year 1990.

Like blacks, Hispanics are also a highly urban population. In 1980, 51 percent of all Hispanics were in Los Angeles, New York, San Antonio, Chicago, San Francisco and Miami. Between 1980 and 1990, the Hispanic populations of Houston, San Diego, Salinas-Monterey and Los Angeles are projected to increase the most rapidly in percentage terms. Of importance to educators, 68 percent of all Hispanics were in predominately minority schools in 1980, and this percentage will increase significantly by the end of the decade.

Just as in 1970, the 1980 income levels of Hispanics were approximately 66 percent of the income levels of non Hispanic whites—although higher than blacks. However, Hispanics tended to earn less per hour than any other group, and to accrue their higher annual income than blacks through working more hours. In June 1984, Hispanic unemployment was
10.0 percent, compared to 6.1 percent for whites and 15.0 percent for blacks. The percentage of Hispanics living below poverty in 1982 (29.9 percent) was also lower than blacks (35.6 percent), although significantly higher than whites (12.0 percent). Although Hispanics make up 6.4 percent of the U.S. population, they comprise 12.5 percent of the American poor. Moreover, since Hispanic families are generally larger than families of either whites or blacks, the per capita income for Hispanics is actually lower than the family income suggests.

Among Hispanic subgroups, Cuban Americans have the highest median family income and Puerto Ricans the lowest. At $9,900, the median Puerto Rican family income is significantly lower than the black median family income of $13,270. According to one study, island-born Puerto Ricans tend to average $2,000 less annual income than mainland-born Puerto Ricans, to have a higher male unemployment rate (13.9 percent, compared to 9.9 percent), and to have proportionately more people living below poverty (31.2 percent, compared to 25.5 percent). Poverty levels are particularly high among female-headed households. In 1982, 60 percent of Hispanic households headed by a woman were below the poverty level. Hispanic women employed full time have the lowest income of any major population group.

A major cause of the low income of Hispanics is their distribution in the low earning occupational groups. Hispanics are slightly less well represented among white collar workers than blacks (34.5 percent, compared to 36.5 percent), and far less frequently represented than whites (53.6 percent). On the other hand, Hispanics are heavily represented in the blue collar and service workers categories. Forty-five percent of all employed Hispanics are blue-collar workers, mostly operatives, compared to 36.1 percent of blacks. Of all Hispanic workers, 16.7 percent are service workers, compared to 25.6 percent of blacks. Of the various Hispanic subgroups, "other Hispanics" are most concentrated in the white collar occupations, followed closely by Cuban Americans. On the other side, Mexican Americans are most concentrated in the blue collar occupations.

Asian Americans. Asian Americans are currently the fastest growing ethnic group in the nation. Long a relatively small and stable population, the number of Asians in this country grew 142 percent between 1970 and 1980. Largely as a result of new immigrants and refugees, there were 3.7 million Asians in the United States, or 1.5 percent of the population, by the end of the decade. (Fifty-nine percent of all Asians were foreign born in 1980, and approximately two-thirds spoke an Asian language at home.) Immigration of Asians is expected to continue, largely as a result of the 1965 relaxation of exclusionary immigration policies that had previously limited the influx of this group. Among the Asian nationalities expected to increase the most over the next decade are the Chinese, Filipinos, Koreans, and various Southeast Asian groups.

Sixty-four percent of all Asian Americans reside in three states: California, Hawaii, and New York. Like the other minority groups, Asian Americans are also a highly urban population, with two-thirds concentrated in the cities of Honolulu, Los Angeles/Long Beach, San Francisco/Oakland, and New York. Within these metropolitan areas, Asian Americans constitute significant proportions of the populations: in San Francisco, for example, Asian Americans, as the largest minority group, accounted for 22 percent of the 1980 population. Historically, men greatly outnumbered women among the Asian American population, and there were few children. However, by 1980, 52 percent were women; and 34 percent were 19 years old or younger.

Socioeconomically, most Asian Americans are classified as middle
class. The mean family income for Asian Americans in 1979 was $25,681, or 104 percent of the mean white income. However, like blacks and Hispanics, Asians had a larger proportion of families with dependent children, so that their income supported more people than did whites'. Evidence also suggests that the economic rewards of education are limited for this group in comparison with that of other minorities as well as that of the white majority. In fact, Asian Americans tend to under-utilize their education in terms of the expected match between education and employment. Most Asian Americans are located at the lower end of the professional and administrative rank, and there are a higher proportion of Asian Americans who are self-employed in small businesses than there are among non-Asian groups.

Except among Japanese and Filipinos, all other Asian American groups have a higher percentage of families living below poverty as compared with whites—15.7 percent among Chinese, 12 percent among Koreans, 10.2 percent among Asian Indians, and 43.4 percent among Vietnamese. The extremely high percentage of Vietnamese living in poverty is due to their recent immigration and is decreasing steadily. Other Southeast Asian groups, although not included in the 1980 census, are likely to have an even higher percentage of families living in poverty. This is particularly true of such small, preliterate peoples as the Hmong and the Iao. The incidence of female-headed households among Asian Americans was 11.1 percent, a decimal point below whites' 11.2 percent.

Educational Attainment

As the following data indicate, differences in educational attainment among America's major ethnic groups bear a complicated relationship to both family socioeconomic background and the job education is generally said to bring. Although all minorities have made significant educational strides since 1970, education is still not serving minorities in the same way or to the same degree that it does whites.

Blacks. Despite increasingly severe socioeconomic circumstances and highly segregated conditions of education, blacks narrowed their educational gap with whites between 1970 and 1981. First, the public school attendance gap between blacks and whites has been eliminated. Second, the proportion of black high school graduates increased between 1970 and 1982 at twice the rate of whites—growing from 53 percent to 79 percent, compared to a white growth from 76 percent to 87 percent. By 1979, although the median number of years of school completed by blacks was over 12 in most geographic regions, it was still only 11 years in the South.

Performance differences between black and white students have also narrowed over the last years. On National Assessment of Educational Progress (NAEP) reading exercises, black-white differences between students born in 1970 were cut in half when compared with those of students born in 1953. Moreover, there are similar positive trends in NAEP mathematics assessments and in scores on the SAT and Graduate Record Examinations. Part of the increase in these scores is attributable to better enrollment by blacks in academic courses. As of 1980, a third of all black students were in an academic program (compared with 39.8 percent of all whites). However, between 1976 and 1984, the average number of mathematics courses
taken in high school increased by 13 percent for black students—compared to 9 percent for whites. The average number of courses in the physical sciences increased by 21 percent for blacks—compared to 14 percent for whites. In both instances, however, black enrollment still lags behind that of whites. Black enrollment in gifted and talented programs is the lowest of any ethnic group save for American Indians.

Black college attendance grew rapidly in the early 1970s until, by 1977, 51 percent of all white and 50 percent of all black high school graduates went to college. However, as a result of cuts in college student aid, Social Security, and Railroad Retirement (which covers many children of railroad porters), coupled with growing family and youth unemployment, a slow decline in college attendance among blacks began in that year. By 1981, the percentage of young black high school graduates in college had fallen to 43 percent; and by October 1982, it had fallen still further to 36 percent. (By comparison, the white rate in 1982 was holding at 52 percent.) As for college completion, in 1970, 4.5 percent of all blacks 25 years and older had completed college, compared to 11.6 percent for whites. By 1981, the completion rate for both groups had increased, but blacks, at 8.2 percent, still lagged seriously behind the 17.8 percent rate of whites.

Hispanics. Hispanics have not participated in, or benefited from, public education to the same degree as other population groups. From kindergarten through college, proportionately fewer Hispanics than either blacks or whites are enrolled in school. Data from a 1979 Census Bureau study indicate that 35 percent of all 18-21-year-old Hispanics had dropped out of school, compared with 25.5 percent of all blacks and only 15.5 percent of all whites of the same age group. Of U.S. Hispanics, 40.9 percent had only an elementary education or less in 1980, and 56.8 percent had less than a high school education. Among 18 to 24-year-olds, the percentage of high school graduates was slightly higher (56 percent), although it still lagged seriously behind the 86 percent rate of whites.

Of those Hispanics who drop out, 40 percent do so before spring semester of the tenth grade. Moreover, in a national study which followed students still in school as sophomores in 1980, 18.7 percent of the Hispanics were no longer in school by 1982, their senior year. (The rate was 17.1 percent for blacks and 12.5 percent for whites.) Among Hispanics, Puerto Ricans had the highest dropout rate (22.9 percent), followed by Mexican Americans (21.15 percent) and Cubans (19.4 percent).

Apparentiy language background increases the risk of dropping out: Hispanics from non-English language backgrounds are more than three times as likely as Hispanics from English language backgrounds to drop out of school. Since dropping out is related to being two or more grades behind, it is not surprising that there are positive associations between Hispanic recidivism in elementary and high school and non-English language background. The association is most marked in grades 5 through 12. In the fifth to eighth grade range, Hispanic students with non-English backgrounds are roughly four times as likely to be behind grade level as are Hispanic students with an English language background. Among Hispanics, Puerto Ricans and Mexican Americans are more likely to be enrolled two more more years below grade level than are other Hispanics.

Hispanics comprise only 5 percent of all children enrolled in gifted and talented programs, although they comprise 6.75 percent of the school population. (By contrast, white students comprise 75.3 percent of the total school population but 81 percent of the enrollments in gifted and talented classes.) On the other hand, in 1978 there were 1.7 million
Spanish-language background children aged 5-14 with limited English language proficiency, a third of whom were in special language instruction classes.

Although Hispanics who stay in school take the same number of courses as whites, by senior year Hispanics have taken fewer academic courses than any other group. As for being in an academic stream, among Hispanic seniors only 26.2 percent are in a college preparatory curriculum—compared to 38.3 percent of whites, 32 percent of blacks, and 51.8 percent of Asians. (With an enrollment of 23.7 percent in college preparatory programs, American Indians are the sole group to have a lower enrollment than Hispanics.) Of those Hispanics not in college preparatory programs, 40 percent are in general programs—compared to 36.6 percent among whites and 34.5 percent among blacks, and 30.6 percent are in vocational programs—compared to 22.8 percent among whites and 31.1 percent among blacks.

As with blacks, however, there has been some improvement in both academic course enrollment and test scores over the past decade. For example, between 1976 and 1984, the average number of mathematics courses taken by Mexican American students had increased 16 percent. Between 1976 and 1983, Mexican Americans' combined SAT scores increased an average of 11 points, from 781 to 792. Puerto Rican scores decreased an average of 4 points, from 765 to 761. (Black scores increased 22 points, from 686 to 708, and Anglo scores decreased 17 points from 944 to 927.) While the percentages of Mexican Americans and Puerto Ricans taking the SATs have increased dramatically in recent years, only 7 percent of all Mexican American 18-year-olds and 16 percent of all Puerto Rican 18-year-olds took the SATs in 1983, compared to 24 percent of all students.

Though the rate of Hispanic college enrollment is low and has fallen, it has not fallen so severely for Hispanics as it has for blacks. While 46 percent of all Hispanic high school graduates enrolled in college in 1972, 43 percent enrolled in 1982. However, one must not forget those Hispanic students who never even made it to high school completion. Moreover, college completion is still an enormous problem for Hispanic students. Of those Hispanics who entered college in 1972, only 13 percent had completed their baccalaureate four years later in 1976. (If one extends this time period to seven years, the percentage increases somewhat.)

Asian Americans. Overall, Asian Americans have the highest level of education of any group: in 1980, 74.1 percent of Asians 25 years old and older had completed high school and 32.5 percent had completed college.

That this high level of educational attainment starts early is clear from the following facts: With the exception of Filipino Americans, Asian American children between three and six have a higher preschool attendance rate than whites. Public school enrollment between the ages of seven and fifteen is also higher for Asian Americans than for whites (99 percent, compared with 96 percent), and Asian Americans have a better record than whites in the later years when there is typically substantial attrition. Among 16- to 17-year-olds, 96 percent of all Chinese, 93 percent of all Filipinos, 92 percent of all Indians, 96 percent of all Japanese, 95 percent of all Koraans, and 90 percent of all Vietnamese are in school, compared to 89 percent of all whites. Moreover, with expulsions, suspensions, and other forms of punishment at a rate of around 1 percent, Asian Americans are far less likely than any other group to lose school time through discipline problems.

When special programs are considered, Asian American students appear
more often than whites among both those in accelerated classes and those needing special attention. Over 5 percent of Asian American students are enrolled in programs for the gifted and talented (compared to under 3 percent for whites). At the same time, over 15 percent of Asian American students are enrolled in programs for the limited English proficient (compared to less than 2/10th of a percent for whites). In fact, only 86 percent of all Asian American students identified as needing LEP programs are enrolled in them, indicating 14 percent of students with difficulties in English whose needs are not being met.

Compared to white seniors, Asian American seniors have taken one and a half years more academic subjects. They have taken an average of two years more academic subjects than have black and Hispanic students. Asian American students have particularly taken more courses in foreign languages, high level mathematics, and advanced sciences than students of other ethnic groups. While other groups of students tend to lighten their workload in the eleventh and twelfth grades, Asian American students maintain their heavier course loads throughout the four years.

A high percentage of Asian American sophomores spend five or more hours a week on homework (46 percent, compared to 29 percent among white students, 25 percent among black students, and 16 percent among Hispanic students). On the other hand, Asian Americans spend less time than other ethnic groups working for pay during their school years. Only about 24 percent of Asian American students worked 15 or more hours a week, compared to 32 percent of white, 30 percent of black, and 36 percent of Hispanic students.

The High School and Beyond test data show average Asian American scores as slightly higher than average white scores in math, and slightly lower in verbal skills and science. The relatively low verbal scores of Asian American students may be related to their lower scores on tests measuring science and analytical skills, since the items in these types of tests demand a certain level of English comprehension. In fact, Asian American scores vary with the length of residence in the United States. Those who have lived here for five years or less score substantially lower than white students in both verbal skills and science, while those who have lived here at least six years score at about the same level or higher on the three tests.

Asian American SAT scores indicate a similar pattern of higher mathematics scores and lower verbal scores than those received by their white counterparts. Asian American test scores on both the High School and Beyond and the SAT tests are spread over a far wider range, with proportionately more high and more low scores, than those of white students. What this suggests is that, while some Asian American students are doing extremely well, new immigrants with language difficulties, as well as students from low-income families, are doing poorly.

Due largely to a highly selective immigration of well-educated professionals, in 1980 all Asian American groups listed on U.S. census data exceeded whites in their percentage with a college education. Asian Indians—the group with the highest educational attainment—had more than half with a college education, followed by Chinese (37 percent), Filipinos (40 percent), Koreans (34 percent), Japanese (26 percent), and Vietnamese (13 percent). All these percentages must be viewed in comparison with the white rate of 17.4 percent with a college education.

On the other side, although there was some decline between 1970 and 1980 in those with no or minimal education, Chinese, Filipinos, Vietnamese and Koreans all had a sizeable proportion with little or no education in
III. URBAN SCHOOL PROGRAMS AND PRACTICES

Urban schools have a great deal in common with schools serving suburban and rural populations. Yet there are clearly areas in which the urban schools have either unique responses to national trends in programs and practices, or have brought about their own solutions to particular urban educational problems. We review below some trends and issues in school programs and practices specifically related to urban and minority education: urban responses to the reform commission reports; urban and minority students and private schooling; effective schooling programs; curricular issues related to urban, minority, and poor students; compensatory education programs; school violence; dropout programs and practices; school-corporate alliances; parent participation in schooling; and programs related to new immigrant groups.

Urban Responses to the Reform Commission Reports

The reform commission reports of the 1980s stressed the need for higher, more uniform standards and a richer, college preparatory, academic "core" curriculum for all students, as well as for severe curtailing of "soft" nonacademic subjects and service. Most advocated longer school days and years and more homework as a means of ensuring higher achievement. Most also called for better educated teachers and principals more involved in instructional leadership (see, for example, a summary of the major recommendations by the Education Commission of the States, 1983). These commission reports have already spawned several generations of responses in celebratory as well as critical veins (U.S. Dept. of Education, 1984). Most states have developed policies to actualize the reforms recommended by the commissions (Doyle & Hartle, 1985). At the same time there is an increasingly vocal response from urban and minority constituencies, who argue that implementing the commission recommendations is likely to place urban and minority students at greater risk. (See, for example, the response of the Urban Superintendents Network, co-produced with ERIC/CUE.) These urban constituencies point out a number of discrepancies between what we now know about the needs of urban and minority students and what the reports recommend. Although the reports press for a narrower, solely academic vision of schooling, urban educators stress the need for urban schools to continue to serve a broader social role, particularly since institutions such as the family, community, and church can no longer fulfill all their customary functions. Guidance counseling and social work, school lunches and other nutritional programs, immunizations, racial integration projects, parent and community liaison, and family life education, among others, are all suggested as crucial to meeting the long-term academic needs of many school children.

Although the reports propose uniform standards and a common curriculum, and have induced states to follow these recommendations without special provisions for students who have trouble with academic life, urban educators note that a general stiffening of requirements, without supplemental assistance, special learner-sensitive teaching.
devices, and other resources and services, will merely result in a greater rate of failure and dropping out for many students. As Valdivieso (1985) points out, many urban students tend to need special attention even with the existing curriculum; moreover, studies show that many minority students do better with alternative teaching strategies and a diverse curriculum; finally, a good deal of emerging literature points to a significant dropout problem, particularly among black and Hispanic students, and to the efficacy of special programs for dropouts.

The commission reports also argue strongly against vocational education or any and all forms of tracking that might create two classes of students. While urban educators applaud the concern for equality expressed in these recommendations, they note that beyond the rhetoric are very difficult decisions of educational management when the student population is highly diverse and pupils' skills and competencies varied. Though vocational education, bilingual education, and special education classes all tend to separate out students into rigid, often hierarchical groupings, some effort must be made to service the special needs of students who may not be able (without special assistance) or want to take on an academic course of study. Urban educators must weigh a number of choices in order to work out the most equitable and richest educational experience, given both the enormous resources and the problems of urban students.

Urban Minority Students and the Private Schools

Approximately 10 percent of all secondary students are enrolled in private schools (Coleman et al., 1980), with 6 percent in Catholic schools and 4 percent in other religious schools as well as elite and other independent nonparochial schools (Greeley, 1982). Although the total enrollment of private schools, like that of public schools, remained constant or declined between 1970 and 1980, the number of black, Hispanic and Asian American students in private (particularly Catholic) schools increased during this period (Slaughter & Schneider, 1985). In 1979, over 20 percent of the whites enrolled in schools in central cities were estimated to be attending private schools, while the corresponding rate for blacks was about 7 percent (U.S. Department of Education, 1983). Thirteen percent of all black school children in New York City currently attend private schools, compared to 33 percent of white children (New York Urban League, 1984).

Catholic schools have experienced a particularly high proportion of the minority enrollment. Black student enrollment rose from 5 percent to 8 percent of the total Catholic school enrollment in the 1970s, and the percentage of minority students in Catholic schools continues to increase (Bredeweg, 1984; Katzman, 1983). Nor are the new minority recruits to private schools largely middle class. One study of 64 inner-city private schools showed that over half of the parents had incomes of less than $15,000, and in Chicago 25 percent of the students in mostly black private non-Catholic schools are low income (Nathan, 1985). Receiving a quality education and learning in a desegregated environment appear to be two important reasons for making this choice (Greeley, 1982).

The literature on minorities in private schools generally seeks to answer one or more of several important policy-related questions: Which minorities are drawn to private schools, and why? What, if anything, makes these schools more successful in educating minority students? And what is
the likelihood of having a desegregated educational experience for a minority student in a private versus a public school?

Two major analyses of the 1980s (Coleman et al., 1980; Greeley, 1982) do, indeed, attempt to demonstrate the benefits of private over public schools, particularly for minority students. Although their conclusions have been criticized ("Controversies," 1982; "Evidence," 1981; Page & Keith, 1981), Coleman et al. (1980) maintain that private schools produce better cognitive outcomes than do public schools, that they offer a better chance for an integrated education than do public schools, and that tuition tax credits and educational vouchers for private schools might be useful policy alternatives for bringing more Hispanic and black students into the private schools. The criticisms of Coleman et al. and Greeley notwithstanding, it is clear that Catholic and other private schools teach a less diffuse range of subjects--with more concentration on academic subjects--that these schools tend to be smaller and to have smaller class sizes, and that they have a variety of clear and respected social order practices which public schools have difficulty establishing and enforcing.

On the other hand, while both Coleman et al. and Greeley argue that a black student has a greater chance of having white schoolmates in a private school than in a public school, new data collected by Katzman (1983) as well as by Slaughter and Schneider (1985) suggest that the possibility of blacks receiving an integrated education in private schools may, in fact, be declining. Based on an analysis of migration data on "black flight," Katzman argues that the suburbanization of middle-class black families has resulted not in the dispersal of the black population, but in black suburbs, and that these segregated suburbs lead to increasingly segregated private and public suburban schools. According to Slaughter and Schneider, who studied only "desegregated" private schools in the Chicago area, although the number of private schools with over 80 percent white students had declined since 1970, the number of private schools with over 80 percent black students had grown: in 1970 there were 17 schools that were over 80 percent black, while by 1981 there were 35 schools that were over 80 percent black. That is, the number of nearly all black private schools in the Chicago area had more than doubled in a ten-year period.

Although interview surveys suggest that tuition tax credits could result in more private school students from minority and working-class backgrounds (Williams et al. 1983; Coleman et al. 1980), which might, in turn, help to raise the achievement of minority youngsters, the problem of a desegregated education seems unlikely to be resolved through a private school strategy.

Effective Schooling Programs

The public and professional interest in effective schooling has been one of the most prominent developments affecting education--particularly urban education--in recent years. The "movement" began partly as a reaction to the cluster of studies from the mid 1960s and early 1970s (by Coleman, Jencks, Averch, and others) which claimed that schools did not make much difference and could not counteract the determinants of socioeconomic status and other student background characteristics.

Ron Edmonds (1979), who coined the term "instructionally effective schools," was one of the first to identify schools which had levels of student achievement higher than what was supposedly expected, given their
student composition. Other researchers did comparative studies of schools with similar students but dissimilar levels of achievement. From these studies, conducted largely on urban elementary schools, a fairly consistent set of school characteristics that correlated with high student achievement emerged. Although much of the research has definitional and methodological flaws, it makes common sense to believe that characteristics of effective schools described by the literature really are important, and are consistent with the findings about education from the increasingly sophisticated educational research of the past twenty years (MacKenzie, 1983).

Codiani and Wilbur (ERIC/CUE, 1983) extrapolate from 17 studies and literature reviews six commonly cited components of effective schools:

1. Strong administrative leadership
2. Positive school climate
3. Emphasis on basic skills
4. High expectations
5. Ongoing assessment
6. Staff development.

Codiani and Wilbur define "more effective schooling programs" as those which: (1) use student achievement as the measure of effectiveness, and (2) incorporate at least the components of strong administrative leadership, positive school climate, and high expectations into the program design. Using data from a number of more effective schooling programs, they describe a "generic" improvement process involving assessment, planning, implementation, and evaluation.

Still, there are several basic problems with the effective schooling effort. First, the programs spring from research on urban elementary schools; findings may not be appropriate to secondary schools or to schools in other environments. For our population of urban and minority students, secondary schools are substantially different from elementary schools. Being multifunctional, they do not have basic literacy as their sole or primary goal (Goodlad, 1984). Generally, secondary teachers are content-oriented, with greater loyalty to a department than to the school, and this undermines the principal's influence over class content and classroom management (Firestone & Herriott, 1982). There is less continuous personal contact and nurturance of individuals through programming and scheduling practices in secondary schools. Teacher autonomy and isolation and reliance upon contracted personnel procedures are all more pronounced among secondary teachers, making both formal and informal group problem solving less frequent. Students themselves are more mature and independent, able to negotiate their own engagement and thus affect school processes in divergent ways. Finally, secondary school principals have heavy managerial responsibilities that may legitimately divert them from sustained direct attention to curriculum and instruction. Given these differences between elementary and secondary schools, direct application in secondary schools of the "effective schools" literature based on research in elementary schools is questionable.

The second problem is that the research methodologies used in the effective schools studies are open to question. There is little consensus on the operational definitions of some of the variables under study, for example "climate" or "instructional leadership" (Cuban, 1984). It has been demonstrated that within-school variations are greater than those between schools, hence using data aggregated to the school level is problematic (Rowan, Bossert & Dwyer, 1983). Judging effectiveness on narrow measures of student achievement is the rule (with such notable exceptions as that of
Rutter et al., 1979), but such limited criteria may not result in findings that are generalizable over time and in different contexts (Lightfoot, 1983). The criteria used by the U.S. Department of Education in its Secondary School Recognition Program, or by the Ford Foundation in its own exemplar schools program, may be more useful as indicators of the objectives and complex features of successful secondary schools (Corcoran, 1984).

Third, the "effective schools" research describes "what schools have achieved" without specifying how they got there (Cuban, 1984; Purkey & Smith, 1983). The research shows correlates of achievement, but has not produced evidence of causality (Zerchykov, 1984) or of the magnitudes of effects resulting from specific acts (Rowan, Bossert & Dwyer, 1983). It is not clear, for example, whether effective principals precede effective teachers, or vice versa.

A final problem is that while advocates of the "effective schools" movement insist on the need for a central goal or sense of institutional mission, the research does not specify what it should be. In the midst of fundamental technological and demographic changes that call for a reconstruction of schooling, there is no model of appropriate goals that makes sense throughout the educational community.

Nonetheless, the effective schools research has succeeded in promoting public and professional confidence that schools can make a difference for students. This is due in part to the achievement gains that have been noted in effective schools. But it is also the result of the cultural symbol of an "effective school" as a place where real learning occurs.

Literacy and the Urban Student

There has recently been renewed interest in the national problem of student literacy. Although the largely urban-based effective schooling literature has used reading and mathematics scores as a barometer of school success (Benbow, 1980; Phi Delta Kappa, 1980), it offers little guidance for specific program design in teaching reading and other aspects of literacy; it assumes that these subjects, like all others, are taught successfully in those urban schools having such "effective schooling" characteristics as a strong principal, a good school climate, and so on. By implication, the proper management of instruction improves the reading and mathematics achievement of students.

**Reading.** The recent Commission on Reading (Anderson et al., 1985) relies on a great variety of research in both urban and nonurban settings to develop quite specific proposals for improving the teaching of reading to all students. Much of this research is both directly and indirectly relevant to the urban minority population.

According to research summarized by the Commission, two at-home factors contribute significantly to children's disposition to read: having conversations with parents, in which they learn to reflect upon experience and construct meaning from events; and being read to aloud, especially when the children are active participants, are engaged in discussions about the stories, learn to identify letters and words, and talk about what different words mean. (Reading and discussion at home is known to take place less often in low income urban minority families.)

According to Anderson et al. (1985), the literature indicates that
what the child who is least ready for systematic reading instruction needs most is ample experience with oral and printed language and early opportunities to begin to write. Listening comprehension in kindergarten and the first grade is a moderately good predictor of reading comprehension achieved by the third grade. Moreover, "oral language experience in the classroom is especially important for children who have not grown up with oral language that resembles the language of school and books" (Anderson, 1985, p. 30).

Once in the elementary grades, those children with parents who are actively involved in the child's growth as a reader are most likely to do well. On the other hand, the research indicates that teachers may actually undermine parental support by sending home worksheets and other homework that parents perceive as busy work, rather than asking students to read books and magazines in which parents can participate. Again, students who read better in the middle grades tend to come from homes where there are many books and opportunities to visit the library, and in which the parents and other siblings also read.

Throughout the teaching of reading, learning to write, important in its own right, must also be seen as a reading aid. Some research indicates the effectiveness of teaching writing even before a child is able to use a pencil well. An early study of minority children, for instance, showed the effectiveness of teaching preschoolers to use a typewriter as means of raising reading achievement (Moore & Anderson, 1968). Currently data are being gathered on the effectiveness of teaching preschoolers word processing.

The interconnections between writing and reading achievement cannot be overemphasized. Both activities are currently taught in highly truncated, uncreative forms (for example, through dull texts and too-simple worksheets), rather than in manners which encourage the exploration of real thinking, reading, and writing (Anderson et al., 1985).

With dialectically diverse minority children overemphasizing standard pronunciation when a child reads aloud can deter rather than help a child's learning to read (Anderson et al., 1985, p. 53). On the other hand, research on teaching writing to these students suggests the importance of pointing out to them the differences between the grammar of their native speech patterns and that of standard English (Ascher, 1982; Shaughnessy, 1977).

Another general finding by the Reading Commission, very relevant to urban minority students, is that placement is more important than ability in determining reading achievement. Low reading groups actually tend to have less engaged, on-task time than do higher reading groups. Since a disproportionate number of low socioeconomic minority students are placed in low reading groups, these students are in further jeopardy of becoming poor readers. In fact, as the Reading Commission points out, close teacher supervision in reading is particularly important for "low ability" students, who usually do less well than high-ability children when working alone or in small groups.

Mathematics. Although minority students are weak in higher mathematical skills, their problems with mathematics are no different from those of students in general. Performance on more sophisticated skills--items assessing deep understanding, such as problem solving that uses application of mathematics--are low for all students.

The problems students experience with mathematics may be related to problems in reading, since the ability to read and understand in English is
a prerequisite for higher mathematics achievement. Creswell (1983) found reading achievement to influence mathematics problem-solving, regardless of sex or ethnicity. A study of the mathematics reasoning of bilingual students also indicates that first language competence is important in a student's ability to reason mathematically in English, their second language (Dawe, 1983).

Research on all populations also shows that psychological factors such as anxiety and motivation are related to mathematics achievement. However, in a survey of 24 studies (Mathews, 1983), minorities actually appeared to like mathematics, to find it interesting, to have little mathematics anxiety, and to want to take more mathematics courses. On the other hand, this same research indicates that minorities may see mathematics as a white domain, that they are less likely than whites to understand its future value, and that they are negatively influenced by the school staff's attitudes toward them and their work. School factors enhancing minority mathematics achievement include good discipline and attendance, small class size, placement in a more advanced track, and materials that affirm the important role of minorities in mathematics (Mathews, 1983; Taylor, 1983).

The National Science Board Commission (1983) found that successful mathematics instructional programs include techniques motivating students; work offering sufficient time-on-task; high standards for participation and achievement; a coherent course of study with early "hands-on" experience; adequate resources; innovative use of available facilities; and extensive homework.

Although no single method has emerged as most effective, a variety of instructional methods do work. Moreover, the opportunity to learn mathematics through sufficient coursework is fundamental. Schools need to be flexibly organized so that all students, including low-achievers, can take a variety of individually-tailored mathematics programs that provide access to advanced mathematics learning.

Science. The reform commission reports of the 1980s have focused national concern on the teaching and learning of science. Achievement in science is seen as stagnant or declining; shortages of qualified teachers, low enrollments, inadequate budgets, outdated texts and teaching materials, and a decline in science emphasis have all been cited as possible causes.

Although the science scores of black students are generally lower than those of white students, like those of their white counterparts they show declines for top students and gains for students at the lower end since the mid 1970s (Holmes, 1982). From the early school years on, poor and minority students tend to have less classroom exposure to science and mathematics (Berryman, 1982). Although black students show more favorable attitudes toward science than whites, especially in the high school years (Fleming & Malone, 1982), this interest apparently does not correlate with having taken sufficient science in the elementary years, or to choosing the appropriate high school subjects to become a science major in college.

In its commission report, Educating Americans for the 21st Century, the National Science Foundation (1983) recommended that all K-6 students receive 60 minutes of mathematics and 30 minutes of science instruction daily. All 7th and 8th graders should take a year each of mathematics and science. At the secondary level, all students should receive three years of mathematics, three years of science and technology, and a semester of computer science. The NSF isolates four sources of science achievement for all students: early hands-on experience; disciplined and rigorous study;
substantial time on task and homework at all levels; and strong motivation and commitment by students, teachers, administrators, and parents.

A number of specific features have also been identified in elementary and secondary science programs as successful with minorities and other disadvantaged students (Malcolm et al., 1976; Olstad et al., 1981): immediate student involvement "doing" science in a laboratory in order to convey its utility; early recognition of deficiencies, careful groupings, and curriculum planning to create early success; clear, well-defined goals; sensitivity to student differences in selecting cues, processing information and analyzing data; and sensitivity to student differences in reactions to criticism and praise. When special programs for minorities and other disadvantaged students are institutionalized, continual monitoring must be conducted to ensure that all elements are maintained.

Compensatory Education Programs

Several recent reports evaluate the short-term as well as the more lasting benefits of compensatory education for both preschool and elementary students. While studies of the former show clear-cut and definite positive results for early childhood programs as much as fifteen years later, the latter, for a variety of reasons having to do with complicated issues of definition and programming, as well as, possibly, the older age of the students, show more ambiguous results.

Research on Preschool Programs. The recent Perry Preschool Project report (Berreuta-Clement et al., 1984) continues to study the 123 black youths from families of low socioeconomic status who, in 1962, at the ages of 3 and 4 were considered at risk of failing in school. At that time, these children were randomly divided into a control group (55 children) and an experimental group (65 children) who received a high quality preschool program. Earlier monographs on this project have reported findings through the end of preschool (Weikart et al., 1970), through fourth grade (Weikart et al., 1978), and through age 15 (Schweinhart & Weikart, 1980).

In brief, those children aged 3 and 4 who were assigned to the preschool group received the special cognitive curriculum (described by Weikart, 1970) for two years, while those children who were already four years old received the program for a year—actually, seven and a half months. During the program, classes were held for two and a half hours each morning, Monday through Friday, with a child-staff ratio of 5 or 6 to 1, and the children's parents received weekly visits of two and a half hours from the preschool teacher.

According to the authors of the most recent study, "Results to age 19 indicate lasting beneficial effects of preschool education" (Berreuta-Clement et al., 1984, p. 1). Preschool attendance altered performance at age 19 by a factor of nearly two on five major variables:

- The rates of employment and participation in college or vocational training were nearly double for those with preschool as compared with those without preschool education.
- The rate of teenage pregnancy (including live births) was slightly over half for those with preschool as compared to those without.
- The rate of attending special education classes for preschool attenders was only slightly over half of the rate for
Preschool attendance led to a reduction of 20 percentage points in the detention and arrest rate and nearly that much in the high school dropout rate.

Those who attended preschool did better on a test of functional attendance.

The researchers offer a complex model tracing the differential paths of preschool and nonpreschool students, noting that "the Perry Preschool program has had long-term impact because the immediate program effects were the first links in a chain of cause and effects that permanently changed the lives of the preschool subjects" (p. 79). The economic benefits of the preschool program to society at large are estimated to be over seven times the cost of one year of the program.

A second major longitudinal study by the Consortium for Longitudinal Studies (Lazar & Darlington, 1982) examines the average effects of eleven independently designed and implemented programs for low income, predominately black children (95 percent of the preschoolers were black). Among these eleven projects were several different types of programs, including center based, home based, and combined home and center programs. All operated for several hours a day for one year or at the most two. All had low student/staff ratios of 1 to 5 or at most 1 to 8. All of the eleven projects had conducted their own studies and had their own control groups. All had used both cognitive tests and measures of actual school performance.

Initiated in 1976, the Consortium pooled original data and conducted a collaborative follow-up of the original subjects, who were now 9-19 years old. A comparison between the preschool students and their peers indicates that the early childhood education programs had long-lasting effects in four areas: school competence, developed abilities, attitudes and values, and impact on the preschool graduates' families.

Children who attended were significantly less likely to be retained in grade level than were controls, and only half as likely to be in special education classes. These effects apparently operated for all children regardless of sex, ethnic background, initial ability level, or earlier family background factors.

Children who attended early childhood programs surpassed their controls on IQ tests for several years after the program had ended. However, the effect was not permanent: by 1976, there were no IQ differences between program graduates and controls.

In 1976, children who had attended early education programs were significantly more likely than were controls to give achievement-related reasons, such as school or work accomplishments, for being proud of themselves.

Program participation also increased mothers' satisfaction with the children's school performance, as well as the mothers' aspirations for their children.

In a similar model to that constructed by Berreuta-Clement et al., Lazar and Darlington present a model of the relationships among background variables, early educational participation, and either IQ scores at age 6 or noncognitive measures on later educational achievement. The researchers also attempt to answer the questions of whether certain types of curriculum are more successful and/or whether different types of low income children are more likely to gain from the preschool experience. On both scores, they reach a negative conclusion: "The results indicate that high-quality
programs with careful design and supervision, using a variety of strategies, can be effective and that these various strategies can be effective for different types of low-income children" (p. 65). Moreover, these educational benefits "are over and above any benefits such as health screening, nutritional supplementation, and family services that individual programs may also have provided" (p. 65-66). Finally, the researchers note that "early childhood education programs can mean dollar savings to school districts," and that it "can be advocated as one effective policy that may someday take its place within a coordinated set of public policies and private initiatives designed to address the needs of low-income families" (p. 66).

Two studies direct themselves specifically to the effectiveness of the national federal program, Head Start. Collins (1984) supplements the Consortium for Longitudinal Studies information with research on other Head Start projects gathered between 1965 and the time of his writing. Hubbell (1983) offers a literature review of 124 Head Start studies conducted between 1970 and 1983. While Hubbell directs some attention to the issue of Head Start's effectiveness in improving the academic performance of low-income children (slightly less than half of all studies show Head Starters maintaining their superiority in achievement tests into later school years, while a little over half show no difference between the two groups, according to Hubbell), both scholars also focus on the question of effective programmatic components. Since Head Start has varied enormously around the country on almost every programmatic variable, when the data are there (which isn't often), Head Start is, in fact, an excellent field for just such a study. As Collins notes, the issue is no longer whether Head Start works, but "First, 'How do we identify and put in place those combinations of program variables that lead to the greatest developmental gains at reasonable costs?' and second, 'How do we insure continuity of learning and developmental gains achieved in preschool and the home into the public schools?'" (p. 22).

According to Hubbell, the following programmatic variables can be isolated as effective, at least for a period of time and with some students:

1. Experimental interventions, such as time-limited cognitive skills training programs;
2. Special training to enhance perceptual abilities;
3. Experimental interventions in language, especially for bilingual children; and
4. Experimental tutoring.

Collins, on the other hand, laments the narrowness of questions asked by most Head Start researchers, who have neglected other program components, such as parental involvement, classroom composition, teacher training, teaching strategies, and the continuity of intervention over time. According to Collins, a consensus of other research is emerging on pivotal program variables, such as the need for extensive parental involvement, teacher training, carefully designed educational/developmental curriculum, and high-quality, cost-conscious program management and monitoring.

Research on Elementary School Compensatory Education. The major recent research project in the area of elementary compensatory education is the Sustaining Effects Study (Carter, 1983; 1984), which was directed to evaluating compensatory education as funded under Title I of the Elementary and Secondary Education Act. Starting in 1976-1977, data were collected on as many as 120,000 students in a representative sample of over 300
elementary schools throughout the country.

Through five overlapping substudies that used both quantitative and ethnographic techniques, the Sustaining Effects Study sought to ask a number of questions concerning the nature of compensatory education, who receives it, and its effectiveness, as well as more general questions on the interaction of student background, effective classroom practices, and student learning. The study's results offer a sobering picture of compensatory education as it operated under Title I--one that, as Carter implies, may well be generalizable to its more current operation under Chapter I.

Title I students received services costing about $400 more than regular students; most of these funds were for teachers, specialists, and aides. They also received more hours of instruction in reading and mathematics than regular students, although they had no net gain in total instruction. Title I students received their instructions in smaller classes than did regular students--often in a pullout setting. Although their special teachers tended to have less experience than regular teachers, they had taken somewhat more coursework and inservice training. Finally, Title I teachers, particularly as students moved from grades one through six, tended to use different teaching methods and techniques than did regular teachers. One example is the greater use of audio-visual equipment in instruction.

As to who was served by this special compensatory education treatment, the Sustaining Effects Study found significant numbers of both non-poor and achieving students receiving the program--in fact, more numerically than poor, low-achieving students. Among economically poor students (as defined by Federal standards) 40 percent received compensatory education (CE) and 60 percent did not; among low-achieving students (a year or more below grade level), 46 percent received CE and 59 percent did not. About 2 million low achieving students did not receive CE. Finally, among those students who were both poor and low achievers, 40 percent received CE and 60 percent did not. (Carter, 1984, p. 6).

Partly because of this complex mix of students, and partly because of funding cuts as well as promotional policies which prohibited some students from continuing CE a second year, the answer to "How effective is compensatory education?" is complicated. Statistical analyses show significant gains for the mathematical section of the Comprehensive Test of Basic Skills for Title I students in grades 1-6, relative to their needy peers not receiving services. For the reading section, significant gains were found for students in grades 1-3, but not in grades 4-6. It is noteworthy that the largest relative gains in both reading and math were in the first grade. Moreover, the rate of gain for Title I students was at least equal to that of regular students, whereas the rate of gain for needy students who did not receive Title I was less than for either Title I or regular students.

As for questions concerning who most benefits from compensatory education or how long students should receive it, again program variation makes the questions difficult to answer. Because students who were only moderately disadvantaged tended to be promoted out of Title I programs after one year, while extremely disadvantaged students tended to stay on in the program for as long as three years, one can only partly accurately say that Title I has greater effectiveness with moderately as compared to extremely disadvantaged students. Among those students promoted out, performance continued at new levels in the year after CE services were discontinued. However, by the time students reached high school, there was
no evidence of sustained or delayed effects of Title I.

Although Carter notes that "Title I was better defined as a funding program than as an educational program" (p. 11), the Sustaining Effects Study also investigated the effectiveness of a number of programmatic components. Summer school, for instance, was found to produce little, if any, results. Within the school year, the relationship between "opportunity to learn" and achievement was quite high for reading and math in the second grade for the poorer schools but not for the high achieving schools; it was quite high for both reading and math at the fifth grade level for all schools. The relationship to achievement gains was more moderate, although positive. Components of "the opportunity to learn" included effective instructional practices such as allocation of teachers' time and classroom management practices; resources such as a low student/staff ratio (although this only had an effect--and a moderate one at that--in the fifth grade); staff characteristics such as the number of years of teachers' and principals' experience and teachers' job satisfaction. The surprising negative relationship found between principal's instructional leadership and student achievement is explained by Carter as being due to the fact that "principals in poorer, lower achieving schools exert stronger instructional leadership" (p. 9).

Finally, as with the preschool studies, the Sustaining Effects Study sought to add information to the long debate over the relative effects of background and schooling. The method used was a path analysis describing the changing relationships between background, school learning, and achievement. As the analysis makes clear, the possibility of influencing future achievement is greatest in the first and second grades, since as the students progress through school their performance is progressively more related to the previous level of performance. Not unexpectedly, the study found the influence of school learning stronger for math than for reading.

School Disruption

Crime and violence in the schools continues to be perceived as a major concern. On the annual Gallup Poll of the Public's Attitudes toward Public Schools, student discipline has been ranked as the primary educational problem for 15 of the past 16 year (Baker, 1985). Common beliefs concerning the urban situation are that students are unruly, that learning cannot occur amidst the general level of disruption, and that the high incidence of crime makes schools unsafe and violent places in which to be. Below we review issues related to programs and practices described in the ERIC data base; this section surveys general crime and violence, drug usage, and suspensions.

Research shows that there may be some slight reduction in the level of school crime and disruption over the past few years (Baker, 1985; Cross & D'Alessandro, 1985). This may be attributable to several factors, including decreases in the cohort of juveniles in the "crime-prone" years, the return to relative calm after the turbulent social unrest of the 1960s and early 1970s, and the increased security measures adopted by schools. Furthermore, Cross and D'Alessandro (1985) and Schriro (1985) have claimed that the public perception of a problem and the fear of crime are actually worse problems than the actual levels of crime and disruption. It is also felt that there are flaws in measures of crime and disruption. These arise from a lack of a well-established classification system of student
offenses; inflated rates of increase due to earlier under-reporting by school administrators, followed by more accurate recent reporting by school security personnel; ideological bias in selecting data from which to make conclusions; and methodological inconsistencies in research reports (Cross & D'Alessandro, 1985).

The largest study of school crime ever undertaken (NIE, 1977) revealed that in 1976, every month 800,000 students stayed home from school at least once because of simple fear, and there were, among other crimes, 282,000 attacks on students and 2.4 million thefts of student property. A 1983 study showed slight decreases in violence against students, but theft and assaults against teachers rose significantly. While adolescent drug use is in a steady decline, recent data indicate that six percent of high school seniors use marijuana daily and over 25 percent use it occasionally (Lipsitz, 1985). Teachers continue to complain that student misbehavior interferes with teaching and learning and stress among teachers is often associated with student discipline problems.

Urban and predominately minority schools are by no means the only places where crime and disruption are problems. Casserly et al. (1980) indicate that 57 percent of the country's total losses due to vandalism occur in the suburbs, where only 38 percent of all schools are located. The NIE Safe School Study (1978) did not find a correlation between vandalism and numbers of minority students or the percent of students with parents on welfare or unemployed. Nevertheless, there are major levels of disruption in urban schools. A study of 600 public secondary schools (Gottfredson, 1983) found that schools with high rates of crime against teachers tend to be in urban areas, where high incidences of poverty and unemployment exist, and where many students are low-ability, from families on welfare and/or headed by females. Violence against both students and teachers was highest where many students were below level in reading and where there were high percentages of minority students—not a finding replicated in the NIE Safe Schools Study.

Discovering why school crime and misbehavior occur is difficult. Some correlates exist. The Safe School Study found that the risk of violence is higher in large classes, large schools, and in schools located in large communities. Discipline problems are more common among students who have "given up on school, don't care about grades, find courses irrelevant, and feel that nothing they do makes any difference" (Cross & D'Alessandro, 1985). Abuse of alcohol and drugs seems to be related to both low achievement and high incidence of delinquency. Moreover, there is a clear connection between a community's rate of crime and the rate of crime in its schools.

Kelly and Pink (1982) discuss the idea of individual students' responsibility for school crime and conclude that the social class of students is not an explanatory variable for school-based crime. Rather, all kinds of students respond in characteristic ways to school failure, and because the educational system is geared to produce both success and failure, the potential for crime is an inherent feature of schooling. Interestingly, several studies indicate that when delinquent students drop out of school, they cease being delinquent.

Research on effective schools indicates that school improvement programs and practices are related to decreasing violence (Schriro, 1985). It has been found that a school with a "humanitarian" climate, where teacher turnover is low and teachers identify with the school and are interested in students, has lower rates of vandalism (Zwier & Vroman, 1984). Other features of schools which affect school safety are: (1) the
leadership of the principal in setting expectations and rewarding good behavior and enforcing rules fairly; (2) teachers' role in setting high learning expectations and helping students achieve them; (3) precise curricular goals; (4) frequent evaluation to ensure that all students experience success (Schriro, 1985).

Similarly, alternative schools for problem students and juvenile offenders appear to work because they are different from most other schools. Specifically, the special environment and resultant experiences seem to have positive effects on students, and the effects are not mediated by the level of delinquency of the students' peers (Gold & Mann, 1982). Many of the positive characteristics of alternative schools closely parallel those of instructionally effective schools (Schriro, 1985).

These lines of research seem to suggest that controlling school crime and misbehavior is a matter of changing the schools. Although such "get tough" measures as increased security, use of non-glass materials for windows, student involvement in protecting school buildings, have reduced crime and vandalism (Zwier & Vaughan, 1980), they can also invite delinquent behavior.

Drug Use. Statistics on drug abuse tend to overrepresent minority students by relying on arrest and treatment data (minorities are apprehended more often), or by citing drug users as a percentage of the minority population (minorities are undercounted by the U.S. Census) (Humm-Delgado & Delgado, 1983). Despite this, there is concern about vulnerability of Hispanic youth, for example, to potential ill effects of substance abuse, in part because the stress of acculturation places stress on family relationships and weakens this one important resource for keeping students away from drugs. With the percentage of the Hispanic population under 19 years of age already exceeding that of blacks, and with a birth rate 75 percent greater than the national average, the number of Hispanics entering adolescence within the next decade will be large. Hispanic youth are at risk to suffer from the deleterious effects of substance abuse, including illness and higher probabilities of committing crimes and not finishing school. Substance abuse is associated with poor performance in school; strategies to guard against it should thus include upgrading the quality of schools and enhancing their relevance to the educational needs of Hispanics (Humm-Delgado & Delgado, 1983).

Similarly, studies have shown that black male drug users tend to have had school-related problems, and that a major factor in preventing drug usage is staying in school (Lee, 1983).

Suspensions. Indications are that minority students are suspended at rates out of proportion to their representation in the nation's population, and that this disproportion is increasing (Rossow, 1984).

The 1980 OCR survey showed that, while minorities accounted for 32 percent of the enrollment in the sample, they made up over 43 percent of the students suspended. The rate of minority suspensions varied throughout the country, implying that something other than the behavior of minority students was responsible for suspensions (Rossow, 1984). Wu et al. (1982) conducted a major secondary analysis of data from the NIE Safe School Study. They found that urban students have higher rates of suspension than suburban or rural students, that the rate for blacks is at least double that for whites, and that low socioeconomic students have higher rates as well.

Suspension has negative consequences, including loss in instructional
time (particularly bad for students with low achievement), isolation from peers and feelings of failure and rejection that may lead to dropping out, increases in levels of daytime juvenile delinquency and crime, and the loss of parental and community support for the schools (Chobot & Garibaldi, 1982).

Wu et al. (1982) found student misbehavior to be a basic determinant of suspensions; it also explains more about suspension at the junior high than the senior high level. But it is not the only factor. In urban areas, a school's rate of suspension is a stronger predictor of future or continued suspension than a student's antisocial attitudes. Except in urban junior high schools, more students are suspended in schools where the teachers are less personally interested in students. And in schools where teachers don't believe that students can solve problems by logical reasoning, an attitude found more in urban schools, teachers are less tolerant of misbehavior and students are suspended more often. This would indicate that teachers must be a primary focus of any efforts to reduce suspensions.

In addition, the researchers found that suspension rates increase in schools with high administrative centralization; in fact, this is the most powerful predictor of student suspensions in urban high schools—even more powerful than student attitudes and behavior. Well-governed schools, where there is fair and consistent enforcement of rules, suspend students less frequently. Although low-ability students do misbehave more, their higher rates of suspension are not completely explained by that factor. Similar to previously cited research, this study claims that the academic bias of schools cuts low-ability students out of the reward structure and that they respond to failure by misbehaving. The higher suspension rates for nonwhites cannot be explained by their antisocial behavior or by poverty-related problems. This is true even in schools with higher numbers of nonwhite teachers, so that it appears that an institutional racial bias operates despite the personnel involved.

Thus, once again, the conclusion is drawn that problems of disruption in schools may not be caused solely by student behavior, and that the appropriate and most promising practices, which relate to changing features of the schools themselves, may alleviate some of these problems.

Alternatives in Education

Providing alternatives in public schooling has done a great deal to change urban education. Different varieties of schools have been introduced into systems that were once fairly uniform, and new kinds of community involvement, student mixing, and parent participation have been among the results. While evidence about specific effects of alternative schools has been scant and sometimes uncertain, it is clear that many basic assumptions about school organization and responsiveness to public needs have begun to be challenged by the establishment of educational alternatives.

Two general factors are usually cited as reasons behind the emergence of alternatives to traditional schooling. The first has been the need to create appealing opportunities that would induce white parents particularly to enroll and keep their children in public schools. The second has been the need to address the problems of specific school populations, including potential dropouts, students with attendance or discipline problems, and
students who cannot learn in traditional settings. Ranging from the "free schools" for affluent students in the 1960s to programs that are more or less mandatory alternatives to suspension, these schools include schools-within-a school, schools without walls, and a variety of other structural as well as curricular alternatives.

A recent survey conducted by the Project on Alternatives in Education (Raywid, 1982) identified 2500 alternative schools at the secondary level alone and surmised that the actual number might be two to four times larger. Nor are alternative schools short-lived; at least half of those responding to the PAE survey were at least six years old. Forty-five percent of the surveyed schools had experienced enrollment increases—which is most likely a conservative measure of interest in alternative schools, since most have enrollment ceilings. Most alternative schools are small: 43 percent have fewer than 100 students, and only 17 percent enroll more than 500 students (most of these larger schools were found in urban areas). Their student-teacher ratios are typically low; more than half have fewer than 18 students per teacher. Because the schools usually have small budgets for facilities or supplies and equipment, 62 percent of the alternative schools surveyed by PAE had per pupil costs that were equal to or less than average expenditures in their school districts. However, about half of the alternative schools with concentrations of lower class students were more expensive to maintain, possibly indicating efforts to equalize educational opportunity. Many of these schools did rely on outside funding, especially from the Federal government (Blank et al., 1983).

There does not appear to be much racial segregation in alternative schools. However, there is some evidence of stratification by socioeconomic class; only slightly more than one-third of alternative schools enroll students of mixed social class (Raywid, 1982).

Alternatives appear to be educationally successful. Student attendance improves in 81 percent of the schools, improving sharply in 38 percent (these figures are even higher for programs aimed specifically at truants and dropouts). A study of New York City alternative schools (Foley & McConnaughy, 1982) found that students accumulated more credits in alternative schools than they had in regular school settings. Generally, attending an alternative school has been found to correlate with improved attitudes toward school learning, higher self-concept, better attendance and behavior, and improved academic achievement. Regarding the critical variable of attendance, alternative schools are most successful with lower-class students, low achievers or students with behavior problems, and students at the senior high school level.

Some of the features of alternative schools which seem to correlate with positive student effects are apparently beneficial for teachers as well. The PAE study (Raywid, 1982) found staff morale to be very high, with 90 percent of teachers reporting feeling real ownership of their programs and being willing to take on more work. Alternative school teachers generally have more autonomy and fulfill more diverse roles than in regular programs, and since teachers choose these school assignments, these may be desirable elements of teaching for some (Kleinbard, 1983). Burnout, however, is a well-known problem for many alternative school teachers (Ascher, 1981).

Successful alternative schools have positive human relations between staff and students (Foley & McConnaughy, 1982), few but good school rules, small size which limits bureaucratic obstacles, and flexibility in structuring learning methods to meet student needs (Raywid, 1982). In
almost direct contradiction to many reform emphases on uniformity and objective measurement of achievement, alternative forms of schooling demonstrate the importance of more subjective, climate-related features of schools. This is especially important at the secondary school level, when adolescent development focuses on identity formation as well as cognitive growth.

An early hope was that the alternative school, located at the periphery of a school system, would meet with successes that could foster change at the center. This hope has not been completely realized. With the continuation of stable alternative forms of schooling, there has been an institutionalization of variety within the school systems. But many of the structures and practices that appear to work well in the "alternative" settings have not been adopted by regular programs. Instead, there is often talk of developing two-tiered systems, where students enrolled in non-magnet, non-alternative schools are those left behind with inferior schooling. Because of this, it is crucial in urban schools that the choice of alternative and magnet schools be made available to all students in an equitable manner, especially with regard to the way schools are marketed, how students are screened and selected, and how they are treated after admission if performance or behavior is below standards (Ascher, 1981). Many districts, on the other hand, seem eager to push problem students into special schools or even to create schools specifically for those which the traditional system cannot handle. If the alternatives manage the problems, the rest of the system can remain intact; thus, instead of performing a reform function, alternatives may tend to conserve the status quo.

**Dropout Prevention Practices and Programs.**

Although we have made great strides as a nation in graduating students since the beginning of the century, when only 10 percent of all students were graduated from high school, the need for a high school degree as a requisite for even entry-level employment has also grown. Today, about 70 percent of our population holds high school diplomas. Among white students, 86 percent graduate from high school. Less reassuring is the fact that about 13 percent of black students drop out before high school graduation (over 20 percent among black males, and 14 percent among black females), while as much as 40 percent of all Hispanic students drop out before high school graduation—and most Hispanic dropouts do not even reach the eleventh grade.

In addition to often being from low income, minority backgrounds, the parents of high school dropouts generally do not themselves have high school diplomas, are often not native English speakers, are often single parents, and do not provide necessary support for academic progress (Hodgkinson, 1985). High school dropouts tend to have low basic academic skills, especially in reading and mathematics (Steinberg et al., 1982). On the other hand, there is evidence that these students are not less intelligent than those who graduate, and may even at times have higher IQ's (Sewell et al., 1981). While male dropouts tend to leave school for a job (which they, in fact, have trouble getting), female dropouts cite pregnancy and childbirth as a major reason for leaving (Hendricks & Montgomery, 1984; Steinberg, 1982). Both male and female dropouts are bored with and dislike school (Rumberger, 1983; Steinberg, 1982; Blank, 1981; Guttierrez & Montalvo, 1982).
Although there is little systematic information on dropout prevention programs, Hodgkinson (1985) reports on a state survey of such programs. Those judged particularly useful combine intensive, individualized training in the basic skills with work-related projects. "Vocational education and work-study strategies seem to work well, as does the 'alternative high school' pattern" (p. 12). The dropout prevention programs that succeed also offer sophisticated counseling, as well as efforts to coordinate the work of the family, school and social welfare agencies in keeping the students in school. Small settings with low student-teacher ratios, personalized attention to student needs, materials and teaching formats that focus on the immediate and practical and stress the basic academic skills, and consistent patterns of rewarding student achievement, are all components of successful dropout prevention programs.

Programs for Pregnant and Parenting Teenagers

The growing number of pregnancies and out-of-wedlock births to teenage mothers and fathers is a national problem. American teenagers become pregnant, give birth, and have abortions at a significantly higher rate than do adolescents in any other industrialized nation (Brozan, 1985). In 1978, for example, 1.3 million children were living with 1.1 million teenagers (Guttmacher, 1984). Although, beginning in the mid 1970s, an increasing number of public and private agencies have begun to intervene with programs aimed at both decreasing the incidence of teenage pregnancy and ameliorating some of the deleterious effects of teenage parenting, there is little systematic research about either the complex strands of causation behind the rising incidence of pregnant and parenting adolescents or the effectiveness of existing interventions. Equally important, those involved in research on the teenagers are rarely the same as those individuals planning programs. In fact, few program descriptions relate their chosen strategies more than casually to the known research on the characteristics and needs of the adolescents they serve.

In 1980, a review was conducted of state policies and programs connected with adolescent pregnancy and parenthood; the result was a proposal for clearer State-level policies and an interagency framework for service delivery (Alexander et al., 1980). While State Boards of Education increasingly recognize the problem of pregnant and parenting teens, the states tend to lack the data, funds, and interagency coordination to take a lead. A step toward solving this problem was taken by the Council of Chief State School Officers, which sponsored a 1984 conference on "Adolescent Pregnancy and Parenting: A Statewide Partnership for School Improvement," for which they also prepared topical papers on funding sources and equity issues (Brown & Dunkle, 1984; Dunkle, 1984).

In fact, both the Federal government and most states have been reluctant to pursue a vigorous policy regarding school-aged pregnant and parenting adolescents. Although many local school districts also remain unclear about "what responses may be needed, expected and tolerated" (Zellman, 1981b), schools are generally the setting in which initiative is taken. Of the approximately 25,000 public schools in this country, over a third now have sex education courses, and one in ten offers alternative options to schooling (Dryfoos, 1983), including evening classes and learning centers (McGee, 1982). The hundreds of school-based programs for pregnant students around the country offer counseling, social services,
educational classes (including academic preparation for a high school diploma or GED), information about child development, and family health, vocational education and life skills training); a small but significant number offer on-premise child care (McGee, 1982). In Michigan alone, more than sixty school districts have established educational programs for pregnant students in the past decade (McGee, 1982).

However, according to Zellman (1981a, p. vi), who reviewed Title IX programs around the nation, "Design of a special program usually depends on the personal views of the prime mover and the superintendent; few districts conduct a search for alternative program models."

**Corporate-School Alliances**

Several of the recent reform commission reports have advocated creating or improving business-school partnerships as part of improving the academic level of schooling. Yet the research on these partnerships continues to be scant, and what exists has not offered any conclusive demonstration in favor of its value for academic improvement.

Since the 1970s, a number of forms have been developed for business-school cooperation: Adopt-A-Schools, in which a company lends a "helping hand" by linking with a single school or school district; collaborative councils, in which representatives of industry, labor, and education meet for mutual planning; school-to-work transition programs planned and operated to varying degrees by a combination of school and employer; cooperative education programs, in which the employer provides paid opportunities for on-the-job learning and the school provides classroom instruction; experience-based career education, which is cooperative education for those aiming at a higher level of employment; and a varying mix of contracting--both in the direction of the school contracting to industry for training and business contracting to the schools for education. As these partnerships have increased over the last few years, there has also been increasing attention paid to them, and, as one researcher points out, "It is not always easy to separate the real trends from the ups and downs in the column inches written by researchers, evaluators, and reporters" (Barton, 1983, p. 57).

The current commission reports stress the need for raising academic standards--a priority which was quickly endorsed by educators from the national to local levels. Moreover, the common stance of business in this period has been that "All we want the schools to do is teach the basics; we will do the training" (cited in Barton, p.57). Of the current variety of school-business partnerships, the adopt-a-school programs tend to fall closest to meeting these conditions. For example, in the Boston Compact, a formal agreement was negotiated between Boston's business leadership and the public schools in which the schools pledged to raise academic standards and performance in four key areas, in return for which the business community committed itself to increasing to a given amount both summer jobs available to Boston students and full-time jobs for the city's high school graduates.

On the other side, there has been some concern about business encroachment onto instructional decisions, particularly in sensitive content areas. In Mann's survey of school-business partnerships in 23 cities across the nation, a third "reported business encroaching on the instructional prerogative of the school (almost always around the teaching
of capitalism)" (Mann, 1984, p. 39). Although superintendents in two cities also worried about "backdoor marketing to kids," the general advice was "to be able to walk away with the money" (p. 40).

In fact, however, the intervention of business into the academic side of schooling appears more generally to be limited to sponsoring Teacher-of-the-Year awards, to promoting better attendance through boosting school spirit, and generating other short-term projects. According to Mann (1984), few school-business partnerships deal either with classroom teaching or attempt to determine whether schools successfully educate children.

Although numbers are hard to find, there seems to be a paradox between business' stance on the need for the schools to deliver academically (rather than vocationally) and the actual attention business has given to programs at the vocational end of education--offering computers or training a few teachers in computer usage; lending executives as management consultants, as part-time teachers, or even as volunteer tutors; and creating jobs and work experience for students on-site at the companies. Although arriving at different dollar amounts, both Timpane (1982) and Mann (1964) also point out that the dollar amount actually being invested by business in education is startlingly small--at most half of one percent of any school's budget. In fact, Mann found that "Superintendents cannot now estimate the size of the voluntary fiscal commitment from private sources because, in most instances, the dollars are simply not worth tracking" (p. 32).

Still, despite cautionary caveats, the literature on school-business partnerships generally rides on a tide of enthusiasm when it comes to anticipating the possibilities for successful alliances. Perhaps the best justification for strengthening school-business partnerships is one given by Mann: that in an era of declining parent participation--an era in which parents are increasingly from powerless social groups--the schools need business as an ally in the competition for declining public monies.

**Practices to Increase Parent Participation**

Since the 1960s, educators have sought to increase parent participation in schools, for both political and educational reasons. At the same time, the precise role parents should play has been controversial and the benefits of parent involvement unclear. There has been a great deal of speculation, particularly concerning low income and minority parent participation: it is sometimes held that parents of disadvantaged students don't participate enough, or that their participation disrupts the school's agenda, or, conversely, that their involvement is the essential key to their children's achievement. On the other hand, in recent years, some educators have tended to avoid altogether the issue of participation of low income minority parents, since it can easily distract a school from acknowledging its own responsibility to educate students.

The literature on parent participation has become voluminous, but only a small body provides specific research information about the effectiveness of parents in one or more of the wide variety of roles they may play in public school and in the education of their children. The great variety of activities in which parents can and do participate, as well as the uncertainty about what exactly is conveyed by even such a simple task as a parent signing a homework sheet, makes the research difficult to generalize.
upon. Moreover, while single site studies may ostensibly be clear about
the type of participation being investigated, research reviews tend either
to lump together the entire phenomenon or to organize the varieties of
participation in incomparable ways.

Several studies, however, suggest that parent participation in schools
serving low SES and/or minority students enhances student performance. One
study (California, 1977) indicates that when low socioeconomic status
schools with high and low achievement are compared, principals report the
community as being more supportive in the high than in the low achieving
schools. Moreover, high achieving schools in low socioeconomic areas have
more adult volunteers than do the low achieving schools. A study of a
city-wide reading improvement project for low-income minority 6th grade
students found that background factors such as socioeconomic status,
health, ethnicity, attendance, and reading scores in the earlier grades
accounted for most of the variation in improvement (Armor et al., 1976).
However, community involvement variables also played an important role,
particularly in the black community, and, to a lesser extent, in the
Mexican American community. The researchers speculate that the differences
in the two types of communities were caused by two factors: that language
created barriers to communication in the Hispanic communities, and that
outreach programs in these communities were more directed to community than
to educational needs, whereas in the black community outreach programs were
more likely to include educational components.

Several studies that analyze a range of parental involvement
activities may be used to shed light on those activities which are more or
less useful to student achievement. According to research by Wagenaar
(1977) on 135 midwestern elementary schools, it appears that parental
decision-making, whether in policy or curriculum, is not particularly
related to student achievement. (It may be that even in those schools
where parents as a group exercise a strong decision-making role, only very
few individually do so.) Parent-school contacts also appear only
marginally effective, except perhaps to promote other forms of
participation. On the other hand, a wide ranging group of programs and
activities, such as community support and fundraising, attendance at school
meetings, and the number of school functions involving the community, do
appear to have a high correlation with achievement.

Based on a sample of 19 elementary schools which had shown a dramatic
improvement in their Michigan Educational Assessment Program test scores,
Clancy (1982) found that "improving" schools tended to have programs for
reaching and communicating with parents that were appropriate to the nature
of the community. These included community education programs, such as
arts and crafts classes and recreational activities, through which parents
could become familiar with the school staff and the school's objectives.
In addition, these community education programs had achieved overall
community support by serving adults other than public school parents, such
as senior citizens, nonparents, and parents of children in private schools.

Using data collected in second and third grade classrooms of 256
schools during an evaluation of California's Early Childhood Education
program, and controlling for socioeconomic status and prior achievement,
Herman and Yeh (1983) found that parent participation was strongly related
to student achievement. Moreover, through a path analysis, parent
participation was found to relate positively to both parents' perceptions
of their influence on school decision-making and the quality of parent-
teacher relations, as judged by both parties--though neither of these
subjective factors directly influenced students' achievement. Finally,
contrary to expectations, the amount of home-school communication—perhaps, as the researchers suggest, because it tended to be one-way—was related to achievement only indirectly as it influenced parent participation.

At-Home Learning Activities. By comparison with the research on parent participation in the schools, studies of parent involvement in at-home teaching are clean-cut as well as, often, experimental. Research on programs that foster parent involvement in at-home teaching tends to show that such programs are effective in improving intellectual functioning and achievement, particularly for low-income elementary school children (few studies go beyond the intermediate grades), and that their effects are sustained for at least one year, and in some cases for as long as three to five years after the end of the program (Becker, 1984; Cotton, 1982).

Most of the literature on academic learning through at-home activities, however, points to the need for more elaborate parental programs as well as parental education to help parents learn how to be more effectively involved (Becker & Epstein, 1982; Epstein, 1984; Gillum, 1977).

School Programs for New Groups -- Refugees

The first obstacle to be overcome by every Southeast Asian refugee new to schools in the United States is learning English. A second important and related problem is that of social and psychological adjustment. As with any family, the general well-being of refugee parents influences the school behavior of their children. However, in the case of refugees, acculturation often creates specific stresses that make it difficult for parents to give children the emotional support they need.

Stress and Children's Age of Migration. Based on her studies of Southeast Asian refugees as well as other refugee populations, Carlin (1979) offers several hypotheses concerning the age of migration and its attendant stresses for children.

Very young infants who arrived in the United States with their families have no memory of their country, the camps, or the trip, posits Carlin. Infants arriving between six months and two years present a unique problem. They seem to adjust quickly and well, but their memories are preverbal and for the most part come out only in nightmares. Since there is no way to deal with these preverbal memories, they may persist indefinitely, and this group may prove to have the most severe problems throughout their development. Children who arrived between twelve months and three years were in a period of rapid language acquisition, which was often disrupted or even stopped by trauma. Furthermore, these children changed language and habit systems before they were old enough to conceptualize the differences between former and current language experiences. Thus they are susceptible to language-learning problems and related neurotic behavior.

Children who were between three and ten years old when they arrived will have memories of their country, the war, and the long, difficult trip, as well as of their original language, food and customs. They will learn English as a second language, and their experiences of trauma and change can be dealt with verbally. The adjustment of youth who were between nine and fifteen at the time of arrival will be compounded by the identity confusions of adolescence. Conflicts about being Southeast Asian or
American are often shown by limit testing.

**Orientation and Counseling in the Schools.** Ellis (1980) notes that teachers and counselors need to be aware of critical areas of possible cultural conflict, such as more rapid rates of assimilation and language learning by children than by parents; cultural differences in learning styles (although what is studied at a given grade level is remarkably similar in Southeast Asia and the U.S., the method of teaching differs considerably); and different styles of social relationships (the apparently inappropriate smile of a Southeast Asian child may be his or her cultural way of expressing embarrassment). When infractions do occur, students should be handled fairly, as school staff would handle any student. First infractions should be responded to with warnings. Since Indochinese parents are concerned and deeply involved in their children's education, parents should be contacted, and an explanation should be given of what has happened. Finally, native speakers should be used whenever the problems are serious or there is the possibility of cultural and/or linguistic misunderstandings.

IV. CURRENT TRENDS IN EQUITY RESEARCH

Equity research is currently being conducted on an enormously wide variety of issues, including teacher hiring and promotion, school facilities, and educational resources, and extends not only to the minority populations with which we are concerned, but also to such special groups as the handicapped. However, four equity concerns which have received recent attention shall be highlighted here: desegregation effects, magnet schooling, bilingual education, and sex equity.

**Desegregation Effects**

Recent research on the effectiveness of desegregation has focused on several topics: (1) housing, (2) student options, (3) student attitudes, and (4) student achievement. Most of the research in all these areas is directed toward black students, with a smattering of studies on Hispanics and a small group of studies dealing with either of these two groups in comparison with whites.

**Housing.** Two recent studies show that, through the influence of schools both as employers and as respected community institutions which influence real estate values, cities that have desegregated schools develop a larger quantity of desegregated housing than do cities with segregated school systems (Pearce et al., 1984).

**Options.** As Braddock et al. (1984, p. 260) point out, "A major goal of public education in the United States has always been to facilitate the assimilation of minorities." Yet the authors note that the debate over the merits of desegregation have "virtually ignored the goal of assimilation." Research on possible links between desegregated schooling and opportunities for minorities is scarce. However, a number of studies offer evidence to suggest that "school desegregation leads to desegregation in later life--in
college, in social situations, and on the job" (Braddock et al. 1984, p. 260).

Green's analysis of data on black college freshmen (Green, cited in Braddock et al., 1984) shows that those from desegregated schools tended to make higher college grades and to have higher college graduation rates than blacks from segregated schools. Similarly, research by Crain and Mahard (1978) and Braddock and McPartland (1979) indicates that black students from Northern desegregated elementary and secondary schools are significantly more likely than black students from segregated Southern schools to graduate from four-year colleges, as well as to attend desegregated, predominately white colleges. Crain and Mahard note that the higher college graduation rates of black students from desegregated secondary schools than from segregated secondary schools is related partly to attending a four-year college, partly to making higher grades while there, and partly to not dropping out.

Several studies offer both direct and indirect evidence to suggest that school desegregation also plays a role in breaking down the racially segmented job market (McPartland & Braddock, 1981; Crain & Mahard, 1978). Corporations react more positively to black applicants from desegregated than from segregated schools (Crain, 1984; cited in Braddock et al., 1984). On the other side, minority males who have graduated from segregated schools tend to perceive more racism, both in college and in business settings, than do males who have graduated from desegregated schools (Crain, 1984, cited in Braddock, 1984). Moreover, Braddock and McPartland (1979) found that blacks from segregated schools who have white supervisors in the workplace have more negative feelings about those supervisors than do blacks from desegregated schools. Finally, and perhaps most importantly, Braddock et al. (1964) cite four separate studies which all show that black graduates of predominately white colleges and universities enjoy some degree of income advantage over their counterparts who had graduated from predominately black colleges.

**Attitudes.** Though studies in the area of black and white students' attitudes toward each other are few, and though one author has called the literature in this area a "methodological cesspool" (McConahay, 1981), three important hypotheses have been tentatively confirmed: First, white prejudice is reduced by genuine contact with blacks, particularly if it is based on equal status, involves commonalities, and deemphasizes competition (Amer, 1976; McConahay, 1981). Second, minority males (no work has been done on minority females) who have graduated from segregated schools perceive more racism in college and on the job than do minority male graduates of desegregated schools (Crain, 1984, cited in Braddock, 1984). Third, desegregation in the early grades is associated with better race relations in later years of schooling (Katz, 1976).

However, Mahard and Crain (1984) argue inferentially that in segregated schools a "ritualism" or behavioral conformity related to a low internal locus of control may hide private disbelief, thus making segregated blacks appear similar to whites in their esteem and aspirations, at the same time as it is clear that they are not acting on this esteem and aspirations in terms of work toward achievement. The authors also argue that this ritualism may be transformed into genuine hope and aspirations, as well as better performance, in a desegregated setting. Mahard and Crain's hypothesis is supported by several more recent studies (cited in Hare & Levine, 1984), which show a "learned helplessness" among minority students in segregated settings. In these cases, black students blame
their failure on luck and the task in order to protect their self esteem; and, in the higher grades, they make no effort since it may lead to failure, which will be perceived as a sign of low ability. Unfortunately, this dynamic, studied in segregated settings, has not been tested in a desegregated environment.

Achievement. For a number of years the opinion of a growing body of educational research has vacillated between two poles: that desegregation has no noticeable effect on black educational achievement vs. that it significantly raises the achievement of black students. All investigators surveying this area complain of methodological difficulties in most existing studies, and all surveys and meta-analyses find reason to eliminate large portions of the existing research. Moreover, some of the variations in results of the large-scale reviews and meta-analyses have been due to the studies chosen as sufficiently reliable for inclusion. For example, as Crain (1983) has pointed out, if all the studies of students desegregated in kindergarten or the first grade, where the effects are greater than at later periods of schooling, are eliminated, then the findings will be less positive than if other criteria are used for selection and/or elimination. Methodological balancing is necessary, eliminating some of the least reliable studies but retaining some of those with imperfect research designs which manipulate important variables.

Two recent large-scale reviews of the research attempt, not altogether successfully, to arrive at a definitive conclusion about the effects of desegregation on achievement. In both cases, many of the existing studies have been thrown out for methodological reasons, leaving only a small body of trustworthy studies (as defined by the joint authors in one case, and a panel in the other) upon which to base a meta-analysis.

Mahard and Crain (1984) base their analysis on 93 studies, divided into 323 samples of students—including both blacks and Hispanics. Of their 93 studies, 23 were of black and Hispanic students desegregated at either kindergarten or first grade and used minority students in a segregated school as a control group or compared scores to those of previous cohorts. According to Mahard and Crain, desegregation has a positive effect on the achievement of both black and Hispanic students, and the effect is stronger for Hispanics than for blacks. For both groups, the strong effects of desegregation occur in the earliest primary grades. However, the duration of desegregation does not appear to affect achievement. Rather, "desegregation creates a sudden burst of achievement growth lasting through the early grades of elementary school, but ... this higher level of achievement is merely maintained by the students and does not increase through the later years of elementary school" (p. 113).

Analyzing the effects of desegregation on different areas of achievement, Mahard and Crain found a slight tendency for mathematics gains to be greater than reading gains, but the difference was small and insignificant. Dividing the samples between districts where students showed small and large gains after desegregation, the researchers found that those students who showed the smallest gains had reading comprehension scores that lagged behind their scores in mathematics, spelling and vocabulary. In school districts where students experienced greater than normal gains, reading subtests scores outpaced scores in other subtests. Mahard and Crain hypothesize that, "minority students come into desegregated schools with difficulties in reading comprehension. Schools that are unable to provide help to those students will not find their performance helped by desegregation; those that are able to make a special
effort to deal with reading problems will find students benefiting from the entire curriculum and scoring well on all parts of the test" (p. 114). Although only a small sample of studies covered secondary school performance, their analysis tentatively indicates that when a bad racial climate inhibits the academic motivation of black students the effects appear most strongly in tests that measure material specifically taught in secondary school classes. On the other hand, in schools where a good climate enforces achievement, achievement gains are largest on subject matter tests.

Finally, Mahard and Crain note that "issues related to voluntary versus mandatory desegregation and one-way versus two-way busing seem irrelevant. Mandatory plans and voluntary plans show approximately equal achievement gains" (p. 117). They also find "no evidence of difference between the effects of desegregation on achievement scores in formerly black schools and its effects in formerly white schools" (p. 117).

The second major and recent review of the effects of desegregation on achievement was one commissioned by the National Institute of Education in the summer of 1982. The Institute commissioned a panel of six scholars who had reported opposing conclusions in the area, as well as one research methodologist who had not been identified as a desegregation researcher. The question was whether, under similar conditions, with the same set of data and common ground rules, reasons for differences in research findings might be clarified. Of a total of 157 empirical studies examining black achievement in desegregated schools, 19 were accepted for common analysis; however, panelists were allowed to add or delete from this common core.

In his review of the project, Cook (1983), as methodologist of the group, suggests that the only findings of the group as a whole are that (1) desegregation does not decrease achievement; (2) desegregation does not raise math achievement; and (3) desegregation may cause some increase in reading achievement—from 2 to 6 weeks. There was also some sense that desegregation might be more effective for raising the achievement of younger students than older. The group found no particular aspect of desegregation plans particularly salient in improving achievement, though all aspects were certainly not proved. In addition, Cook notes the generally low level of confidence among all the participants in their findings. Sixteen of the 19 studies were conducted in the 1960s, and most panelists dropped at least two studies from their individual meta-analyses.

The individual panelists are different in methodology, point of view, and results obtained:

Wortman (1983), who selected his own 31 studies for review (including 18 accepted by the panel), found an effect size of .2 of a standard deviation, or about two months, for achievement as a result of desegregation. Reading scores improved slightly more than math, though this depended somewhat on the length of desegregation. In contrast to the findings of Mahard and Crain, Wortman's analysis showed a curvilinear pattern of effects, with increases from K-7 and decreases from 8-12. Wortman also found no differences in effects for students desegregated one year and those desegregated more than one year. According to Wortman, there is some support for the idea that the effect of desegregation is the greatest in the most integrated communities.

Armor (1983), who dropped two of the 19 studies and added a third, found that in the overwhelming majority of studies, if taken individually, no effects of desegregation could be shown. Combining them, he found an average size effect for reading of .06 of a standard deviation, and .01 for math. Armor found no evidence for Mahard's and Crain's belief in the
effectiveness of early desegregation. However, his data suggest that achievement may improve with two years of being in a desegregated school, although there is a decline in the third year.

Stephan (1983), like most of the other panelists, noted the enormous difficulty of evaluating the great diversity of programs. Dropping four of the 19 studies, his analysis was based on only the remaining 15. For Stephen, desegregation improves reading scores somewhat (5-6 weeks), but does not improve math achievement. Moreover, desegregation does not increase black self-esteem, and in some cases decreases it. Nor are race relations improved by desegregation.

Miller (1982), who dropped three studies, found that the effect of desegregation on verbal achievement was significant, as was its effect on the pooled verbal and math achievement. The mathematics effect size, however, was not significant. Miller also notes that comparing the small gains of black students with the larger gains made by whites suggests that these gains may not be attributable to desegregation. Miller suggests that the intervening affect variables of anxiety, expectations, and so forth may explain the gains.

Walberg (1982) reacted to his assignment by including several meta-analyses in addition to the one he did with the 19 studies. His conclusion was that the amount and quality of instruction, constructive classroom morale, stimulation in the home environment, and other such productivity factors, are more effective in increasing black achievement than is school desegregation.

Finally, Crain (1983) had such methodological objections to the 19 studies chosen that he refused to engage in their analysis. Rather, Crain's paper is a critique of the study's problems and a rationale for his decision to stand by his own and Mayard's conclusions.

Magnet Schools

Research on magnet schools has focused on two aspects: their effectiveness as a school improvement strategy and their success in furthering school desegregation. In both areas, the research is generally limited to case histories and evaluations of single schools or districts. Until now, only two multi-district studies have been completed, one by Royster et al. (1979) and one by Blank et al. (1983). These two studies are somewhat different in their scope and methodology: while Blank et al. focus more heavily on school effectiveness factors, Royster et al. subsume school effectiveness under their analysis of desegregation; of the two studies, the one by Blank et al. is far more positive in its evaluation of magnets in the arenas of both school improvement and desegregation. In addition to these two major documents of primary research, Rossell (1979; 1985) is the sole researcher to have systematically reviewed the single site studies in order to arrive at some conclusions about magnet schools--particularly regarding their effectiveness as a desegregation strategy.

According to Blank et al., magnet schools share a number of characteristics with "effective schools": they tend to have strong leadership, a cohesive curriculum, high expectations, and a consensus among faculty, students and parents about the goals of their schools. Blank et al. also found that students in over 80 percent of the 46 magnet school programs they studied equaled or exceeded the reading achievement scores for their districts, and 41 percent exceeded district averages by 10 points
or more in mathematics achievement.

Both Blank et al. and Royster et al. deal with the issue of magnet school selectivity. While Blank et al. note that 75 percent of the magnets they studied were "moderately selective," they argue that the relationship between magnet school selectivity and educational quality was not as great as one might expect. Magnet schools that were rated as having a high quality of education had both average- and high-ability students. While all six of the highly selective magnets were rated as having a high quality of education, 46 percent of the other magnets were also rated highly on educational quality. More important, the magnets with the highest academic achievement were not highly selective.

In a somewhat different vein, Royster et al. discuss the "creaming" of good teachers and principals that is part of creating a magnet. According to the authors, there is evidence for the "creaming" of students as well. (Some school districts' magnets also serve as a "last chance" for students with behavioral and learning difficulties.) A study of magnet school selectivity in Philadelphia (Comerford, 1981) indicates that whatever the capacity of magnets to generate a better learning atmosphere, magnets do select students who have somewhat higher achievement as well as higher socioeconomic levels than students who do not "choose" to come to magnets.

While Blank et al. call magnets a "flexible tool for desegregation," both Royster et al. and Rossell are less confident in the desegregation capabilities of magnet schools. In fact, while Royster et al. found magnets to serve 30-40 percent of the districts' students in three cities, 12 percent in three more cities, and 2-8 percent in the remaining 12 cities under study, Blank et al. found them to serve an average of only 13.7 percent of the districts' enrollments they studied. That is, magnets are probably relatively powerless tools for desegregation, since they only serve a small proportion of any district's students.

In a useful research analysis, Rossell (1985) draws together both the multi-district studies and a number of single-site evaluations in order to suggest conditions under which magnets might be made most effective for desegregation purposes. Because, as a number of desegregation experts have pointed out, a school's "magnetism" is really only at issue when the school is in a black neighborhood, Rossell focuses specifically on a number of factors which may make a historically black school in a predominately black neighborhood attractive to whites. Rossell suggests that schools in black neighborhoods should be projected, and widely publicized, to be predominately white, and the more racially isolated the school the higher this projected white percentage should be. These schools should offer a nontraditional curriculum at the elementary level (a curriculum most appealing to whites) and be highly academically oriented at the secondary level. Popular white teachers and a popular white principal should be hired, the pupil-teacher ratio should be kept low, and the physical plant should be made as new and attractive as possible.

Researchers disagree about whether magnets must be placed within comprehensive desegregation plans if they are to be effective. A number of them have dealt with the question of whether magnets can be effective as part of voluntary desegregation plans, or whether the plan must be a mandatory one in order for magnets to "magnetize" white students. Based on a review of 33 studies, Rossell (1985) concludes that magnets only begin to have real desegregation power in the context of district-wide mandatory plans. However, there are two caveats to this position. The first is that voluntary techniques may work slightly better than mandatory plans in districts with less than one-third minority students; the second is that,
at least initially, mandatory plans produce more white flight than do voluntary plans. However, most studies show that the more extensive the mandatory plan, the greater the interracial exposure, even when white flight is taken into account (Hochschild, 1984; Rossell, 1985; Rossell & Hawley, 1983).

Bilingual Education

In 1984, amendments (P.L. 98-511) were added to the Bilingual Education Act, Title VII of the Elementary and Secondary Education Act. These most recent amendments recognize that there are large and growing numbers of children of limited English proficiency, and that the Federal government has a continuing obligation to meet their needs for equal educational opportunity. However, the amendments also recognize that in some school districts the establishment of bilingual education programs may be administratively impractical "due to the presence of small numbers of students of a particular native language or because personnel who are qualified to provide bilingual instruction services are unavailable." Further, they make clear the importance of strengthening research in the field so as to better identify and promote those programs and instructional practices which result in effective education. They suggest new directions both regarding the improvement of evaluative data on program results, and in creating alternative approaches to the education of limited English proficient students, especially when school districts have extreme problems.

Transitional bilingual education (TBE) has been the predominant form of bilingual education in the United States, despite the lack of a research base validating it, either when it was first incorporated into Federal guidelines or after a period of implementation (Troike, 1978). Accordingly, much of the existing research on language instruction pertains to TBE, especially since 1978, when a research program directed specifically to TBE was initiated as Part C of Title VII. Findings about the effectiveness of TBE vary. Some well-designed studies have shown positive outcomes regarding English language acquisition; others show no particular benefits of TBE, and, in a few studies, TBE has been shown to be less effective than immersion programs or English (ESL). Most methodologically valid studies show no specific effect of TBE on content area learning. This can be interpreted as a positive response, since it "demonstrates that learning in two languages does not interfere with a student's academic and cognitive performance" (Zappert & Cruz, 1977).

Other forms of bilingual education have also shown to have positive outcomes regarding both English language acquisition and content learning. Bilingual education in general has shown positive (or at least neutral) effects regarding cognitive development; attitudes toward schooling, towards one's own culture, and towards other ethnic groups; readiness for schooling; school attendance; and self-concept (e.g., see Troike, 1978; Zappert & Cruz, 1977). The positive findings of research on forms of bilingual education other than TBE are supported by over a decade of fruitful research on second language acquisition (NACCBE, 1985). The current view is that language learning proceeds best through natural, meaningful communication, such as that provided in ESL or structured immersion programs; however, this view is modified by evidence that a significant degree of prior development of the first language is necessary.
to facilitate new learning (Krashen, 1981).

The issue of how bilingual education dovetails with desegregation remains complex. Clearly, bilingual education as it has generally come to be instituted separates out non-English proficient and other minority students. Thus the law has deemed that it is not a substitute for desegregation (Epstein, 1977). However, it has also been maintained that with proper administrative planning, bilingual education and desegregation need not conflict (Cardenas, 1984). The Lau Centers were established throughout the country in 1974 to provide assistance in a number of ways, including the working out of a balance of bilingual education and desegregation goals.

Sex Equity

Recent literature regarding sex equity in education has focused on such issues as teacher expectations, and access to and use of computers.

Although previous sex equity literature has claimed that teachers do not maintain gender biases with regard to student occupational aspirations, Moore and Johnson (1983) demonstrate significant categorical differences for race, sex, and occupational aspirations of students. These expectations are consistent with traditional male and female occupational categories, such as white collar/clerical occupations for females and unskilled laborer/skilled worker and managerial occupations for males.

Teachers have been found to treat boys differently from girls (Grayson & Martin, 1984; Sadker, Sadker & Bauchner, 1984). Males were found to receive more criticism, a higher average number of sustaining questions (teachers ask male students more consecutive questions), more feedback (McDermott, 1983), more remedial and intellectual attention, and more conduct interaction (Sadker, Sadker & Bauchner, 1984).

Teachers also treat students differently based upon their expectations of student performance. McDermott (1983) found that students for whom teachers had high expectations received more feedback than low expectation students, and students for whom teachers had low expectations received more criticism than high expectation students. The only exception to this bias was with regard to high expectation girls, who received still less attention than low expectation girls (McDermott, 1984; Grayson & Martin, 1984).

Computers. Recently a wealth of literature has developed regarding computers and equity in the school. This literature indicates that: (1) while females share as much interest in computers as boys, they do not have equal access to computers both in and outside of school (Lockheed & Frankt, 1984; Schubert, 1984; Shuchat, 1984; Anderson et al., 1984); (2) software is male-oriented (Fisher, 1984; Lockheed & Frankt, 1984); and (3) although computers are wrongly considered math-related, females shy away from them for this reason (Lockheed & Frankt, 1984; Shuchat, 1984).

V. CONCLUSION

Urban students constitute an increasingly important sector of our nation's educational system. Not only are they a numerically growing
group, but culturally and socioeconomically they present a new challenge. Only insofar as public schools can serve these students, both in their advanced literacy needs and in preparation as responsible adults and workers, can American be said to be educating its youth.

There are small encouraging signs that the schools are, in fact, educating urban students better than was the case a decade ago. Dropout rates for all groups but Hispanics are down, and standardized achievement test scores have risen slightly—largely because of the increases by black students. Though data on the success of compensatory education programs are clouded by the management of the program itself, it is clear that, when extra resources are offered, poor and low-achieving students can make greater progress than they otherwise might. Analyses from preschool compensatory education show clear signs of long-term effectiveness in a wide variety of cognitive as well as social areas. This is one area where results are most encouraging and clearcut. Studies of helping parents to participate in schooling through at-home teaching show this as another effective means of enhancing the effectiveness of schooling for urban students.

Yet the special needs of many urban students are far from being met: at a most basic level is the assurance of such basic needs as housing, nutrition and health care—all of which clearly effect schooling. Although in the current political climate the schools are seen as having taken on too broad a mandate, it is clear that without some attention to these basic needs, little education can take place. Programs for dropouts, for pregnant teenagers, for new refugees, and for other special interest groups are also a central part of urban schooling. Information on the effectiveness of different programmatic variations in each of these areas is new, and more research needs to be done so that limited resources are used to the best advantage.

Equity continues to be one of the main issues facing urban education. Segregation in our inner schools is a growing problem, and with cities becoming more highly concentrated in their minority populations, the problem is not likely to be alleviated—except through staunch commitments to metropolitan desegregation plans. On the other side, beyond the claims of justice, desegregation does seem to have some positive effect on black students' achievement. Magnet schools, currently the most widely practiced desegregation strategy, appear to be educationally effective, although only a powerful desegregation tool when the number of minorities to be desegregated is small or when used in coordination with a mandatory desegregation plan.

Though bilingual-bicultural education has lost political ground, research demonstrates that some form of first language learning has a positive effect on all learning in English. This is an important research finding, since Hispanics will soon be our largest minority group, and since a large proportion of Hispanics speak Spanish as their first language and, without special attention, become semi-literate in two languages. The dovetailing of bilingual education with desegregation remains a complex managerial issue, although there are increasingly sophisticated methods to deal with the problem.

Finally, offering female urban students an education equitable to that received by males continues to be a subtle problem in such major areas as textbooks, teachers' attitudes, and the increasingly important area of computer usage.
APPENDIX A

REFERENCES ON DEMOGRAPHY *

Minorities in higher education: Second annual status report. 

Washington, DC: Author.

college achievement. New York, NY: College Entrance Examination 
Board. (ERIC Document Reproduction Service No. ED 230 665)

polarization: Is it occurring among Blacks? Paper presented at the 
annual meeting of the American Sociological Association, San 
Francisco, CA. (ERIC Document Reproduction Service No. ED 223 743)

Washington, DC: National Center for Educational Information.

Hodgkinson, H. L. (1985). All one system: Demographics of education, 
kindergarten through graduate school. Washington, DC: Institute for 
Educational Leadership. (ERIC Document Reproduction Service No. UD 024 387)

annual conference of the National Association of Pacific/Asian 
American Education, New Orleans, LA. (ERIC Document Reproduction 
Service No. ED 245 017)

DC: Congressional Budget Office.

to 1982. A statistical view. Special Publication. Suitfod, MD: 
Bureau of the Census, Population Division. (ERIC Document 
Reproduction Service No. ED 244 022)

*Documents with an ED number may be read in microfiche in any library, 
information center, or other institution that has an ERIC microfiche 
collection. They may also be purchased in either microfiche or paper copy 
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REFERENCES *


* Documents with and ED number may be read in microfiche in any library, information center, or other institution that has an ERIC microfiche collection. They may also be purchased in either microfiche or paper copy from ERIC Document Reproduction Service (EDRS), P. O. Box 190, Arlington, VA, 22210.


Controversies: High school and beyond. (1982, January/February). A series of articles on *Public and private schools*, including: J. Coleman, S. Kilgore, & T. Hoffer, Public and private schools (pp. 4-9); D. Ravitch, What makes a good school? (pp. 10-11); G. E. Thomas, Neither direction nor alternatives (pp. 11-14); and R. L. Crain & W. D. Hawley, Standards of research (pp. 14-21). *Society, 10*(2), 4-21.


Dunkle, M. C. (1984, January). Teenage pregnancy and parenting:
Evaluating school policies and programs from a sex equity perspective. Washington, DC: Council of Chief State School Officers, Resource Center on Sex Equity.


Evidence, analysis and unanswered questions. (1981, November). A series of critiques of Public and private schools, including: R. Murname, Evidence, analysis and unanswered questions (pp. 483-489); J. Braddock, II, The issue is still equality of educational opportunity (pp. 490-496); A. S. Bryk, Disciplined inquiry or policy argument (pp. 497-509); C. Finn, Jr., Why public and private schools matter (pp. 510-514); J. W. Gurthrie & A. Zusman, Unasked questions (pp. 515-518); B. Heyns, Policy implications of the public and private school debate (pp. 519-525); and J. Coleman, T. Hoffer, & S. Kilgore, Questions and answers: Our response (pp. 525-545). Harvard Educational Review, 51(4), 483-545.


Herman, J. L., & Yeh, J. P. (1983). Some effects of parent involvement in


theoretical framework. Los Angeles, CA: Evaluation, Dissemination and Assessment Center, California State University.


Washington, DC: National Institute of Education, U.S. Department of
Education. (ERIC Document Reproduction Service No. ED 238 999 through
239 005)

Schirro, D. (1985). Safe schools, sound schools: Learning in a non-
disruptive environment. New York, NY: Teachers College, ERIC
Clearinghouse on Urban Education. (ERIC Document Reproduction Service
No. ED 253 602)

insights into traditional patterns. Paper presented at the annual
meeting of the American Educational Research Association, New Orleans,
LA. (ERIC Document Reproduction Service No. ED 244 598)

effects of the Perry Preschool Program on youths through age 15.
Ypsilanti, MI: High Scope Educational Research Foundation. (ERIC
Document Reproduction Service No. ED 204 426)

Psychological, academic and vocational factors. Urban Review,
16(1), 65-76.


Computing Teacher, 11(8), 31-34.

Slaughter, D. T., & Schneider, B. (1985, Spring-Summer). Parental
goals and Black student achievement in urban private elementary
schools: A synopsis of preliminary research findings. The Journal of
Intergroup Relations, 13(1), 24-33.

issue. Paper presented at the National Women's Studies Association
Conference, Columbus, OH. (ERIC Document Reproduction Service No. ED
240 015)

out among language minority youths: A review of the literature.
Los Alamitos, CA: National Center for Bilingual Research (ERIC
Document Reproduction Service No. ED 241 831)

desegregation on black students. Washington, DC: National Institute
of Education. (ERIC Document Reproduction Service No. ED 239 001)

Teacher, 76(1), 12-17.


