This document presents the executive summary of a research project undertaken to provide a national overview of the dimensions of the dropout problem, focusing specifically on gender differences; and to identify strategies that are being used to address the dropout problem, assess effectiveness of these strategies, and suggest ways that these strategies could be implemented elsewhere. It describes a research review and site visits to nine dropout programs. Findings are reported in two sections. The first section examines data on dropouts and presents major findings about differences in the dropout problem between males and females in the areas of the magnitude of the dropout problem, characteristics of school dropouts and returners, reasons students drop out of school, and consequences of dropping out of school. Findings related to promising education strategies are presented in the second section. General observations are discussed and guidelines are recommended for program designers to use in structuring dropout prevention efforts, including: (1) direct dropout prevention efforts at younger students who are potential dropouts; (2) establish linkages between different levels of schooling to facilitate student transition; (3) keep dropout prevention programs small in size; (4) focus programs initially on basic skills; (5) provide students with concerned adults; (6) provide students with regular feedback about progress; and (7) link job training to long-term employment. Recommendations for federal policy are made. (NB)
DROPPING OUT OF SCHOOL
EXECUTIVE SUMMARY

Joel D. Sherman
PELAVIN ASSOCIATES, INC.

December 1987
EXECUTIVE SUMMARY

I. OVERVIEW

The problem of school dropouts has become a critical concern to policymakers at the Federal, state, and local levels in recent years. It is estimated that between 290,000 and 325,000 girls and between 325,000 and 375,000 boys drop out of school each year. In addition, there are approximately 2.1 million females and 2.3 million males between the ages of 16 and 24 who are not enrolled in high school and have not completed a high school diploma. While females drop out of school at slightly lower rates than males, students of both sexes in some central cities and some rural areas drop out at rates that are three to four times the national average.

Although there has been extensive research on the problem of school dropouts, much of the research has focused on the scope of the problem, rather than on potential solutions. Recently, a number of studies have begun to examine different strategies for serving dropout-prone youth, but this limited body of research has produced different assessments of our knowledge of "what works" in dropout prevention. Some researchers suggest that we still know relatively little about what works in dropout prevention and recovery (General Accounting Office, 1986; Intercultural Development Research Association, 1986); others suggest that there are promising practices that schools might use in working with dropout-prone youth (Orr, 1987); still others suggest that we currently know enough about what works in dropout prevention to develop strategies for effectively dealing with the dropout problem (Hahn and Danzberger, 1987).
This study was undertaken for the U.S. Department of Education with funding from the Women's Educational Equity Act (WEEA) Program for two major purposes. The first was to provide a national overview of the dimensions of the dropout problem, focusing specifically on differences in the problem between young men and women. The second and overriding purpose was to identify strategies that are currently being used to address the dropout problem, to assess the effectiveness of these strategies, and to suggest ways that these strategies could be implemented.

Although the study was concerned with programs that serve dropout-prone youth and school dropouts, particular emphasis was placed on reviewing strategies for serving female students. In this area, the study attempted to determine whether special techniques are used in regular dropout programs to help female youth stay in school or whether programs deal with the problems of male and female students in similar ways. It did not, however, examine dropout prevention practices in programs that were specifically designed to serve female students, e.g., pregnancy and parenting programs, as these programs were reviewed in a separate study funded by the WEEA Program (Earle, Roach, and Fraser, 1987).

To achieve the study's objectives, several activities were conducted. The first was a review of the dropout prevention literature. This review was designed to assess the magnitude of the dropout problem and the consequences of dropping out of school for male and female youth. A second purpose of this review was to identify practices that appear to be characteristic of effective programs and to guide the selection of programs to study in greater depth through site visits. The second
activity consisted of site visits to a selected set of nine programs that show evidence of success in addressing some aspect of the dropout problem. This set included seven dropout prevention programs, which focused on in-school youths at risk of dropping out, and two dropout recovery programs, which assisted out-of-school youths to return to school and complete a high school education or an equivalent certificate.

The programs selected for the site visits include:

**Middle School Prevention Programs**

**Model School Adjustment Program** - Broward County, Florida. A prevention program for sixth-graders in the Driftwood Middle School that includes peer tutoring, individual and group counseling, and parent counseling;

**Valued Youth Partnership** - San Antonio, Texas. A school-based youth tutoring program involving high-risk junior and senior high school students;

**High School Prevention Programs**

**Dropout Prevention Program** - New York City. A program funded by the New York City Board of Education in 10 high schools and 29 middle schools that involves both high school reorganizations and a case management approach to student services;

**LaGuardia Middle College High School** - Queens, New York. An alternative high school in which students take courses at a community college and receive intense personal counseling;

**Peninsula Academies** - Menlo Park, California. A program that integrates academic courses and technical training in computers and electronics in high schools and works collaboratively with high-tech firms to provide mentors and internships to students;

**Project COFFEE** - North Oxford, Massachusetts. A regional, occupational training and instructional program with close ties with the local business community;

**Satellite Academy** - New York City. An alternative high school with four campuses in three boroughs of the city;
Recovery Programs for Dropouts

Educational Clinics - Washington State. A state-funded dropout recovery program that involves diagnosis of students' educational needs and a short-term program aimed at returning students to regular classroom programs or obtaining a General Educational Development (GED) certificate;

Second Chance Pilot Project - Colorado. A state-funded dropout recovery program operated by school districts to prepare students for a regular high school diploma or an alternative certificate.

The programs selected for this study serve students at different stages of their school careers and employ a variety of strategies to prevent them from dropping out or to help them return to school and complete a high school education or an equivalency certificate. However, it should be noted that the study focused only on supplemental programs for dropout-prone youth, rather than on comprehensive approaches to the dropout problem. It did not review the effects of school-wide activities, such as changing the basic academic curriculum and improving school discipline. Nor did it study school districts which have fundamentally restructured the size, staffing, or operations of a school or schools. These solutions may be needed in cases where schools have extremely high dropout rates.

The programs included here are designed to deal with the specific problems of dropout-prone youth and school dropouts -- not to address or correct the problems of schools. It is, of course, recognized that the success or failure of these programs has implications for schools themselves.
II. FINDINGS OF THE STUDY: DATA ON DROPOUTS

An Overview of the Dropout Problem

The research on school dropouts suggests that male and female youth drop out of school at slightly different rates and for different reasons. Some of the consequences of dropping out are similar for both young men and women: higher rates of unemployment and lower wage earnings. However, completion of high school or an equivalent diploma appears to be associated with higher levels of employment for females and relatively higher wage earnings for younger white females. The major findings about differences in the dropout problem between males and females are presented below.

The Magnitude of the Dropout Problem

Estimates of the number of school dropouts and the dropout rate in different national surveys vary significantly. However, they all support the following conclusions about the dimensions of the country’s dropout problem.

- Between 600,000 and 700,000 youths and young adults between the ages of 14 and 24 drop out of school each year. These include 325,000 to 375,000 males and 290,000 to 325,000 females. At the present time, there are about 4.3 million people between the ages of 16 and 24 who are neither enrolled in high school nor have completed a high school diploma or its equivalent.

- Males currently drop out of school at a higher rate than females. However, this appears to be a reversal of the pattern of earlier years. Up through the late 1970s, the dropout rate for females exceeded the rate for males. A rise in the dropout rate for males up through the early 1980s, coupled with a steady decline in the dropout rate for females, has produced lower dropout rates for females.
Minorities drop out of school at higher rates than whites. Since the mid-1970s, however, the dropout rate between blacks and whites has narrowed significantly. The rate for Hispanics, in contrast, has remained at consistently high levels. Hispanics currently drop out of school at more than twice the rate of whites.

The current dropout rate is estimated in most national surveys of individuals to be between 13 and 18 percent. Data provided by state education agencies to the U.S. Department of Education estimate the dropout rate at 25 percent or higher. The difference may be due, at least in part, to the methods used to calculate the rates.

Overall, the number of dropouts has declined steadily since the early 1970s. From 1974 to 1985, the number of high school dropouts age 14-to-24 declined by about 26 percent - from about 930,000 to about 690,000.

Dropout rates have declined dramatically over the last decade. Data from the Current Population Survey (CPS) indicate that dropout rates in the mid-1980s are only about 85 percent of the rates in the mid-1970s.

Dropout rates are considerably higher than the national average in many of the nation's largest urban areas and in some rural regions of the country. In some central city and rural school districts, dropout rates are between three and four times the national average rate.

Although a sizable proportion of American youth permanently terminate their formal education before completing high school, many students who drop out of school eventually return to complete high school or obtain an alternative credential. The research suggests that:

Nearly 40 percent of school dropouts may return to school and complete the requirements to graduate high school or obtain an alternative certificate. Students who have completed more of their education before dropping out, i.e., juniors and seniors, are more likely to return to school than students who dropped out in earlier years.

Males are more likely than females to return to school and complete a high school diploma or an equivalent certificate. Some evidence suggests that the return to school is primarily a phenomenon associated with white males, as this is the only group in the population which shows a consistent decline in the dropout rate with the aging of the population.
Many dropouts who complete their high school education do not return to a regular school program. Many complete an alternative program or pass a General Equivalency Development (GED) test. The number of people taking the GED increased tenfold from 1961 to 1985.

Characteristics of School Dropouts and Returners

Research on school dropouts has begun to explore the relationships between student background characteristics, school experiences, and out-of-school behavior with dropout rates. It has also begun to differentiate male and female dropouts and the factors that may affect their respective decisions to leave school. The research finds that:

- Dropouts come disproportionately from families that are low in socioeconomic status, single-parent, headed by females, and large size. Parents and older siblings are also likely to be school dropouts.

- Completion of a high school education by both parents -- but especially the mother -- has a particularly strong relationship with dropout rates for females. Girls whose mothers are high school dropouts drop out of school at almost 2 1/2 times the rate of girls whose mothers have completed high school. Mother's education has a particularly strong association with dropout rates for white females.

- Females drop out at lower rates than males where mothers only worked while the children were in elementary school or only in high school, but at about the same rate as males where mothers worked both in elementary and high school. Mother's employment may therefore have a less adverse effect on females' than males' decisions to leave school.

- Dropouts have a school history that is marked by low academic achievement, low test scores, and retention in earlier grades. They also are more likely to have a record of high absenteeism, truancy and disciplinary actions.

- Females with the lowest academic ability drop out of school at a lower rate than males with the lowest ability academic ability. However, females with the lowest academic ability drop out at nearly ten times the rate of females with the highest ability; for males, the ratio is only a little over seven to one.
o Students who are married, have children, or both, drop out of school at much higher rates than the rest of the student population. In the High School and Beyond surveys, females who were married or had children accounted for over 40 percent of the female dropouts.

o Students who work for pay drop out of school at slightly higher rates than those who do not work. However, the dropout rate for females increases with relatively fewer hours of employment, while for males it increases significantly only with longer hours of work.

o Students with the characteristics most strongly associated with dropping out are those least likely to return to school once they have dropped out. Individuals most likely to return to school are male, white, higher in academic ability, and from families of higher socioeconomic status.

Reasons Students Drop Out of School

Students drop out of school for a variety of reasons. These include problems with school, economic problems, and a variety of family-related concerns. While some of these reasons apply to both males and females, some reasons for dropping out apply more to one sex than the other. The research finds:

o Females report marriage or plans for marriage over four times as frequently as males as the reason for leaving high school. A large proportion of females also cite pregnancy as a reason for discontinuing their high school education.

o Economic factors motivate males' decisions to leave high school more than females'. The opportunity to work is reported much more frequently by males than females as their reason for dropping out of school. Males also report the need to provide family support more frequently than females.

o Males are more likely than females to cite the inability to "get along with teachers" and discipline problems such as suspension or expulsion from school as a reason for dropping out of school.
Consequences of Dropping Out of School

Dropping out of school has significant potential consequences for both the individual and society. Conversely, completion of high school is associated with personal and labor market benefits. Research also suggests that, in some areas, there are differential benefits for males and females. It finds:

- Completion of a high school education is associated with higher rates of employment for all segments of the population. In 1986, the employment rate for young adults age 18 to 24 who had completed four years of high school was about 44 percent higher than the employment rate of dropouts; for adults age 25 to 44, the employment rate for graduates was 36 percent higher than the rate for dropouts; for 45-to-64-year-olds, it was 28 percent higher.

- While employment rates for males are consistently higher than rates for females -- both for dropouts and for high school graduates -- completion of high school reduces the gap in employment rates between males and females. In March 1986, the employment rate of female dropouts age 18 to 24 was only 68 percent of the employment rate of male dropouts; for graduates, the female employment rate was 83 percent of the male rate. Among 25-to-44-year-olds, the employment rate of female dropouts was only 62 percent of the male rate, but the rate for female graduates was 76 percent of the male rate. For adults age 45 to 64, the female employment rate increased from 58 percent of the male rate for dropouts to 69 percent of the male rate for high school graduates.

- Although white females have an employment rate that is closer to that of white males, completion of high school reduces the gap in employment rates between males and females more for minorities than for whites. For black females age 18 to 24, the employment rate for dropouts was only 45 percent of the rate of black males, while for high school graduates, it was 72 percent of the male rate. Similarly for Hispanics, the female rate of employment increased from 50 percent of the male rate for dropouts to 78 percent for graduates.

- Completion of high school is associated with a shift in employment from the lowest-paying positions as operators, laborers and service workers to higher-paying positions, mostly in sales, precision production, technical fields, and administrative support. Males, however, tend to move more into higher-paying technical and sales positions, while females move
more into lower-paying administrative support positions. Thus, while high school completion works to the advantage of both males and females in the types of employment available to them, males appear to benefit more than females in the types of jobs that a high school diploma opens up to them.

- High school graduates earn more money than high school dropouts over a course of a lifetime. Estimates of the difference in lifetime earnings for males ranges from $260,000 to $585,000 and for females from $170,000 to about $300,000.

- Although completion of high school improves the earnings of both males and females, it improves the earnings of females relative to males most among whites in the younger age group. For young minorities and for older age groups in the civilian labor force, completion of a high school education does not appear to reduce the earnings gap between males and females.

- High school dropouts produce a range of negative consequences for society. It was estimated in 1972 that high school dropouts cost the nation annually about $77 billion: $71 billion in lost tax revenue, $3 billion in welfare and unemployment costs, and $3 billion in crime prevention costs. A more recent estimate suggests a loss of about $68 billion in tax revenues to all levels of government from the high school class of 1981 alone.
III. FINDINGS OF THE STUDY:
PROMISING EDUCATION STRATEGIES

The literature on dropout prevention and the site visits to a sample of promising dropout prevention and recovery programs provide some insights into ways that programs are currently structured and some strategies for structuring future programs.

General Observations

Dropout prevention programs that are not designed specifically for female students, e.g., pregnant and parenting programs, do not appear to treat female students differently than males. Interviews with staff at the programs included in this study did not elicit any special procedures for identifying girls who are at risk of dropping out nor any special interventions focused on the needs of female students. However, the programs did not appear to focus on the special needs of boys either. Essentially, the programs treated girls in much the same way as boys and, in general, appeared to serve them both equally well. It was not possible to assess from this study whether the practices observed represent the best approach to addressing the unique problems of female students. However, Earle, Roach and Fraser (1987) suggest special components targeted specifically at female students, e.g., collaborative group projects, remedial instruction in abstract spatial reasoning, and special encouragement for females to take courses in math and science, that should be included in dropout prevention programs.

A second observation is that "effective" or "successful" dropout prevention programs appear to have many of the characteristics of
effective schools more generally -- in particular, energetic leadership by school principals. In the dropout prevention programs included in this study, the principal was almost always an "entrepreneur" who was willing to take risks, to try out new ideas, and to seek out resources in the larger community to meet the needs of his or her students. The principal also exercised a collegial style of leadership, working closely with teachers and program staff to plan program services and implement the program. This leadership style worked to create a greater esprit de corps in the school and generated more of a commitment to the program itself.

Recommended Practices

The literature review and the site visits also identified some unique aspects of the dropout problem that can be addressed by including particular components or features in dropout prevention programs. Based on this research, it is therefore recommended that program designers structure dropout prevention efforts using the following guidelines.

**EARLY INTERVENTION**

Direct dropout prevention efforts at younger students who evidence the characteristics of potential dropouts.

For many dropouts, prevention efforts in high school come too late in their education careers to help them stay in school. Program staff in programs included in the study consistently stated that dropout prevention efforts needed to begin at a much earlier stage than high school. The upper elementary grades were seen by some program staff as an appropriate age to begin dropout prevention efforts, while others saw the need for this type of intervention even earlier in students' school careers.

Two of the programs reviewed here specifically take this approach to dropout prevention. The Model School Adjustment Program in the Driftwood Middle School in Broward County, Florida provides...
sixth-graders who have a record of academic and behavioral problems in elementary school with peer tutoring to help them improve their basic skills and peer and family counseling to help them work through their personal and family problems. The Valued Youth Partnership in San Antonio, Texas, pays junior high school and high school students minimum wage pay for work as tutors to elementary school children as a means to enhance the tutors' self-esteem and improve the academic skills of both tutors and the younger children.

**SCHOOL-TO-SCHOOL LINKAGES**

Establish linkages between the different levels of schooling (elementary-middle-secondary) to facilitate students' transitions from school to school.

Dropout-prone youth often have serious problems making the transition from elementary school to middle school and then making the next transition to high school. The first transition is difficult because students are moving from a smaller school with self-contained classes to much larger schools with departmentalized programming; the second, because students who continue to do poorly in school may not feel prepared and thus may not even begin to attend high school.

The programs in this study use a variety of techniques to link school levels and to facilitate students' transitions to the next school. In Theodore Roosevelt High School in the Bronx, New York, an "articulation" coordinator from the high school makes visits to feeder junior high schools to explain the high school program and answer students' questions about the school. In Far Rockaway High School in Queens, New York, a community-based organization provides support services to students in the feeder junior high school as well as the high school, thus helping dropout-prone students ease their way into the high school even before they arrive.

**SMALL PROGRAMS AND CLASSES**

Keep dropout prevention programs small in size and organize student instruction in small classes.

Many students who drop out of school have been alienated by large bureaucratic institutions where
they cannot be distinguished from hundreds of other students. To address this problem, several of the dropout prevention programs have established policies to keep the programs smaller and to create a more supportive environment for students. Satellite Academy, for example, when faced with greater demand for places in the school, opted to open branch campuses, rather than expand a single campus. LaGuardia Middle College High School has similarly opted to keep student enrollment at a maximum of 500 students to ensure personalized attention.

Programs to assist out-of-school youth return to school and complete their high school education are also small in size by design. Educational Clinics, Inc., one of the larger dropout recovery programs funded in Washington State, keeps student enrollment at a maximum of 100 to 125 students to promote a more personalized learning environment.

Many students also drop out of school because they have been unable to function successfully in large classes where they did not receive individualized instruction and personal attention. Small class size works to overcome some of the students' disaffection with school by allowing teachers to use a more interactive style, to individualize their program of instruction, and to experiment with different approaches to working with students.

Small class size is a characteristic of a number of the programs included in this study, but it is especially prevalent in the dropout recovery programs. Most classes in the Educational Clinics in Washington State contain between five and ten students. Similarly, the Second Chance Centers visited in Colorado organize classes with fewer than 20 students to allow teachers to individualize student programs and to match their instructional approaches with student learning styles.

Focus dropout prevention programs on basic skills as an initial step in improving academic performance.

Most dropout-prone youth are deficient in basic skills and, as a result, have been retained in
grade at least once or twice over their school careers. To redress this problem, almost all of the programs in this study concentrate academic coursework on basic skills in core subject areas. Program staff stress that while they would like to provide a more enriched curriculum that develops skills in critical thinking and analysis, students seem to be able to motivate themselves better to remain in school when they can master basic skills and pass competency tests. The dropout recovery programs are particularly oriented towards the acquisition of basic skills, especially for older students who have too few credits for a regular diploma and who need to work towards a GED.

Instruction in basic skills is also an important adjunct to job training efforts aimed at dropout prevention or recovery. The literature in this area finds that job training alone is not sufficient to help dropout-prone youth and school dropouts complete school. However, job training, in combination with basic skills, enhances students' chances of finishing school and obtaining jobs requiring higher-level skills.

The Peninsula Academies in California best illustrate the strategy of integrating instruction in basic skills with technical training oriented towards careers in the computer and electronics fields. Students receive instruction in core academic courses that are tailored to providing students with the skills needed to get and keep a job in these fields. This instruction is supplemented with vocational training and internships with local high-tech firms that are potential employers of program graduates.

**CONCERNED ADULTS**

Provide students with adults (teachers, counselors, volunteers) who can establish a personal relationship with their students and who can provide them with the support they need to deal with personal as well as academic problems.

Many students who drop out of school frequently do not have the parental support they need to help them with their personal and academic needs. Many also feel alienated by schools where they tend to get lost in a large, impersonal institution. Program staff stated time and again in this study...
that many students they worked with rarely had an adult who took an active interest in their academic progress and personal development. The program was the first opportunity for them to develop a relationship with an adult who cared and who could work closely with them to help them succeed in school.

The programs in this study designate different individuals to establish a one-to-one, “caring” relationship with students. At the Peninsula Academies in California, these adults are mentors from private industry; at Far Rockaway High School, they are case managers from a community-based organization providing support services to students in the school; in other programs, they are the students’ teachers or counselors. In all the programs, however, students are given the opportunity to work with an adult who takes an active interest in their personal development.

**REINFORCEMENT AND FEEDBACK**

Provide students with regular feedback about their progress to help stimulate improvements in school work and behavior.

Many students who drop out of school have developed a poor self-image because of their failure to make adequate progress in their school work. To address this problem, many of the dropout programs visited attempt to provide regular reinforcement of students’ academic progress and rewards for significant improvements in their work or behavior.

Feedback is provided in several ways. In Project COFFEE, in North Oxford, Massachusetts, students receive a mark every day for the work they complete. Similarly, in the Model School Adjustment Program, peer tutors and classroom teachers fill out a report form every day in which students are rated on their work and behavior. When students receive a certain number of points, they are eligible for free passes to the movies or fast-food restaurants. Even some dropout recovery programs use regular appraisal of students’ progress as a way to keep students going. A Denver high school participating in Colorado’s Second Chance Program keeps a record of each student’s academic progress and moves students to a higher level of work each time the student passes a skills test.
Many students with a history of school failure drop out of school because they are unable to see the linkage between education and future employment. Preparation for the world of work is therefore a central component of two dropout prevention programs visited in this study. The Peninsula Academies provide an integrated program of academic coursework and vocational training in computers and electronics that prepares students for careers with high-tech firms in the San Francisco Bay area. Through a collaboration with private firms such as Hewlett-Packard and Xerox, the program provides students with technical training, career counseling, internships, and work experience in the high-tech field. Project COFFEE also uses a collaborative arrangement with the Digital Equipment Corporation and other local companies to provide students with training and hands-on work experience in a number of career areas, including word processing, computer maintenance and repair, horticulture and agriculture, and building maintenance and repair.

In summary, the literature and the site visits identify a number of promising strategies and practices that could be used effectively to help dropout-prone youth remain in school and dropouts return to school to complete their education. School officials, however, must be flexible in incorporating these components into their own dropout prevention initiatives. They must recognize that different students may need different types of services to help them remain in school and that an "exemplary" program's features may need to be adapted to their school's particular circumstances.
Recommendations for Federal Policy

The programs included for site visits in this study were selected, at least in part, because they provided empirical evidence to indicate that they were successful in addressing some aspect of the dropout problem. However, a review of information from nearly 500 dropout prevention programs found that very few programs maintain data on program effects. Moreover, even where schools do evaluate the effects of their programs, they usually implement weak evaluation designs. As a result, there is relatively little hard evidence about "what works" in dropout prevention. Thus, while the literature and the site visits suggest some promising practices for dropout prevention, most of the practices suggested above need further empirical validation before it can be established with certainty that they "work" and should be used more widely. It is therefore recommended that the Federal Government pursue the following policy to support the development of effective dropout interventions.

**DEMONSTRATION PROGRAMS**

The Federal Government should provide funding for demonstration programs to test the viability of alternative intervention models in preventing school dropouts.

**PROGRAM EVALUATION**

The demonstration program should incorporate a rigorous evaluation component that would assess the relative effectiveness of different types of interventions.

**PLANNED VARIATION**

The demonstration should include planned variation to determine the types of strategies that are most appropriate for different settings and different populations.

These steps will ensure the identification of interventions that have the greatest potential for success.