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EDUCATION AS REHABILITATION FOR JUVENILE OFFENDERS:

A Review of the Literature

October 1985

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Program Services Unit
Division of Juvenile Rehabilitation

EDUCATION AS REHABILITATION FOR JUVENILE OFFENDERS:

A REVIEW OF THE LITERATURE

Edited by
John C. Steiger
and
David R. Guthmann

October 1985

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Program Services Unit
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Olympia, Washington 98504

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EDITED BY:
John C. Steiger
David R. Guthmann

OB-32
Olympia, WA 98504
206 753-2732
SCAN 234-2732

Preface

This paper presents both a summary and an annotated bibliography of recent literature on the value of education in the rehabilitation of juvenile offenders.

This review is the fifth in a series produced by the Division of Juvenile Rehabilitation, Program Services Unit. All reviews issued will be periodically updated and reissued, with the intent of providing a useful resource to those involved in the treatment of juvenile offenders.

We would like to acknowledge the effort of Denise Lishner in developing this report.

Other reviews:

The Sex Offender (October, 1984)

Social Skills Training for Juvenile Offenders (February, 1985)

The Treatment of Drug/Alcohol Abuse Among Juvenile Offenders (July, 1985)

Deterrence of Criminal Behavior (October, 1985)

SUMMARY OF RESEARCH LITERATURE:
EDUCATION AS A REHABILITATION TOOL

I. INTRODUCTION

Education is a key component in the rehabilitation of the juvenile offender within each of the program areas offered by the Washington State Division of Juvenile Rehabilitation. Each of the division's institutions and youth camps includes a comprehensive school program requiring attendance of all school-eligible youths. A strong emphasis is placed on school participation among youths assigned to parole status within the division; more than 50 percent of parolees are estimated to be enrolled in an education program at the end of parole (Guthmann, D., An Analysis of Community Transition Among Juveniles Paroled in Washington State, 1985). The division funds several alternative education programs, called Learning Centers, in communities across the state. Additional county-operated education programs are funded through the division's Consolidated Juvenile Services program.

This report was prepared to both provide information regarding the success of similar programs in other states and to elicit new ideas for educational programming for juvenile offenders. It is hoped that this review of research will provide valuable assistance in the development of educational programs for juvenile offenders throughout the state of Washington. The first section in the report reviews the research assessing the relationship between schooling and delinquency. Next, several previous reviews of education programs for offenders are discussed. A section summarizing several specific programs is then provided. Finally, an annotated bibliography, providing more specific reviews of individual articles, is offered.

II. LINK BETWEEN SCHOOL AND DELINQUENCY

While it is not clear whether school factors directly cause delinquency, most researchers concur that schooling, as currently organized, can contribute to the production of delinquent behavior (Coleman, 1972; Empey, 1978; Greenberg, 1977; Polk and Schafer, 1972; Reynolds et al, 1976; West and Farrington, 1973). Low intelligence is not generally viewed as a cause of delinquent acts (Gagne, 1977); however, numerous studies have found negative associations between school performance, as measured by grades and test scores, and delinquency (Bachman et al, 1978; Frease, 1973; Jensen, 1976). Haskell and Yablonsky (1970) report that most delinquents have a record of poor achievement, truancy, or both. A majority of institutionalized delinquents have failed school (Gagne, 1977).

Youths who experience academic success are less likely to be delinquent (Call, 1965; Jensen, 1976; Polk and Hafferty, 1966). Elliott and Voss (1974) found that delinquent behavior of youths who dropped out of school decreased after dropout. They concluded that poor school performance directly leads to dropout and delinquency. Rutter et al (1979) report that school variables have considerable impact on the overall level of

behavioral disturbance or scholastic achievement. Research on the organization of schools indicates that certain common school practices are associated with high rates of misbehavior and delinquency (Gottfredson, 1981; National Institute of Education, 1978; Rutter et al, 1979).

Most major theories of delinquency link aspects of schooling and delinquent behavior (Martin, Sechrest, and Redner, 1981). Educational institutions are viewed by theorists as negatively impacting youths by providing an inappropriate environment which promotes failure, labeling or tracking individuals, derogating self-esteem, isolating youths from prosocial role models, and failing to adequately socialize youths or to promote bonding. Numerous theorists agree that delinquency may be a reaction against school failure (Elliot and Voss, 1974; Glasser, 1969; Gold, 1978). These hypotheses suggest that educational approaches which promote successful experiences may be an effective strategy for reducing delinquency.

III. REVIEWS OF SCHOOL-BASED PREVENTION AND TREATMENT PROGRAMS

A variety of educational approaches have been employed with juvenile delinquents, with mixed success. In a review of educational programs for delinquent and maladjusted high school students, Kauffman and Nelson (1976) found that educational programs for delinquents are scarce, noting a shortage of qualified teachers, an inadequate mechanism for insuring that offenders remain in school, and reluctance of schools to undertake special programs for this population. The authors describe several innovative approaches, including a consultant-teacher approach offering counseling and problem solving skills, alternative schools, and learning environments utilizing a token economy and contingent access to privileges and reinforcers. The authors point out the absence of controlled research studies. Those evaluations which they did review demonstrated mixed results or limited, short-term benefits. The authors recommend preventive educational programming, specially trained teachers, early intervention, scientific evaluations, and general education reform.

Gagne (1977) reviewed the research on educational programs for delinquents and determined that the more promising approaches were group therapy in combination with remedial reading, short-term remedial reading programs based on behavioral modification principles, and individualized instruction in conjunction with a reinforcement schedule. It appears that programs that do employ behavioral techniques have generally been more successful in remediating delinquents' educational problems than in lowering recidivism (Gagne, 1977).

In a review of 16 studies using educational approaches to prevent or treat delinquency, Romig (1978) concluded that merely teaching academic skills will fail to reduce recidivism, yet under certain conditions education can rehabilitate juvenile delinquents. Romig lists several program ingredients for effective correctional education, including: teachers who are understanding, individualized diagnosis, specific learning goals, an individualized learning program, basic academic skills, multisensory teaching, high-interest and sequential material, rewards for attention and persistence, and differential reinforcement of learning performance.

A review of school-based delinquency prevention programs (Shorr, English, and Janvier, 1979) revealed some successful outcomes, especially for programs focusing on vocational skills to increase academic success. However, the program evaluations were frequently flawed, limiting interpretation of the findings.

IV. SPECIFIC EDUCATIONAL DELINQUENCY PREVENTION AND TREATMENT STRATEGIES

Alternative education has been advocated as a promising strategy for delinquency prevention and treatment (Hawkins and Wall, 1979). The premise is that individually tailored programs can generate successful educational experiences, and forestall failure and delinquency. Some recommended approaches for enhancing student achievement and preventing problem behavior are individualized instruction, clear rewards contingent on effort and proficiency, goal-oriented work, small school size, low student/teacher ratio, caring and competent teachers, and supportive administrators. Similarly, Bakal and Polsky (1979) claim that traditional educational programs have been ineffective with youthful offenders. They advocate individually tailored programs, with successful performance measured in terms of individual achievement, firmly set limits, intensive supervision, and participation by the student in establishing goals and monitoring progress.

Remedial education has long been employed in institutionalized settings as a rehabilitation strategy. Ayllon and Millan (1979) stress that remedial programs should be of highest priority in correctional efforts, since released offenders are frequently limited by the absence of educational and vocational skills. The authors describe two correctional programs for youthful offenders which offered positive incentives for learning academic skills. Improvements were noted in attitude and academic performance. A prison-based remedial program combined with problem-solving skills resulted in a lower rate of recidivism for program participants (Morin, 1981). However, the author notes that very few studies of rehabilitation through education have demonstrated success in attempts to improving post-release behavior.

Mesinger (n.d.) reports that an additional approach, the utilization of special education professionals in correctional settings, has been rarely used, and attributes this to perceived offender characteristics such as behavior management problems, severe learning handicaps, and poor motivation, apathy, or hostility. The author advocates special education, resource teachers skilled in interpreting education diagnosis, performance evaluations, and teaching in a performance-based system.

Another approach which has been used in rehabilitation programs is moral education. Larsen (1981) argues that teaching moral decision-making has special value to this population since it promotes responsible behavior and consideration for others. Scharf (in Morin, 1981) advocates the idea of fairness as the basis for educational reform of the prison.

Behavioral strategies, based on rewards for good behavior and punishments for poor behavior, have been widely used in correctional education programs and have demonstrated some positive outcomes (Gagne, 1977; Kandel and Ayllon, 1976; Martin, Sechrest, and Redner, 1981; Romig, 1978). Positive results have been found, at least in the short-term, when applying behavioral techniques to discrete behaviors (Shorr, English and Janvier, 1979). Token reinforcement systems with points earned for academic performance have been employed at Achievement Place (Phillips, 1968) and the CASE program (Cohen and Filipczak, 1971) with promising results, but long-term followup outcomes have not been reported. The effects of a token reinforcement program on the classroom behavior of 19 delinquent boys in a correctional institution showed mixed results for improving behavior (Holt, Hobbs and Hankins, 1979).

Evidence on the effectiveness of vocationally oriented educational approaches is mixed. Ahlstrom and Havighurst (in Kauffman and Nelson, 1976) studied maladjusted boys randomly assigned to work experiences in conjunction with an academic curriculum, or to regular classrooms. Results failed to support the hypothesis that better work role adjustments would be made by the experimental group. Shorr, et al. (1979), however, did find some evidence that vocational skills programs can lead to success.

Social skills training is another educational strategy which has been used in treating juvenile offenders. (For a more complete summary of this approach, see the social skills literature review by the Washington State Division of Juvenile Rehabilitation.) Social skills training programs targeting delinquents have demonstrated positive outcomes on a variety of measures including level of social skills (Klarreich, 1981; Ollendick and Hersen, 1979; Spence and Marziller, 1981), self-concept (Garber et al, n.d.), academic skills (Filipczak and Wodarski, 1979) and recidivism (Collingwood and Genthner, 1980; Hazel et al, 1981). Contradictory evidence has been reported, however, for both self-reported offenses and police convictions (Spence and Marziller, 1981).

V. PRACTICAL IMPLICATIONS

Much of the evidence on the value of education in the rehabilitation of juvenile offenders is mixed. Approaches that do appear to be successful include programs that motivate youths, programs that reinforce youths for skill acquisition, programs that promote successful experiences, individualized programs, and programs that teach useful skills to offenders. The most successful programs not only teach skills that are of practical use to the offender (e.g., social skills), but also provide programming that attempts to involve the youth in the learning process (via motivation techniques or the inclusion of successful experiences for students).

Hawkins and Wall (1979) provide a research-based checklist of program elements for the most successful alternative education for preventing delinquency. These elements, which also appear to be valuable in the context of programs aimed towards the rehabilitation of juvenile offenders, include:

1. Individualized instruction, tailored to the interests of students, whenever possible;
2. Attainable rewards based on effort and proficiency;
3. An emphasis on goal-oriented learning;
4. A small student population in the classroom;
5. A low student-teacher ratio;
6. Caring, competent teachers; and
7. A strong, supportive administrator.

In most instances, the Division of Juvenile Rehabilitation's programs feature the program elements suggested by the research literature. For example, the Learning Centers generally have less than ten students per teacher in the classroom. Ideally, this review not only serves as a validation of several programming practices currently operational in the division's education system, but also provides valuable input for additional revisions and improvements.

ANNOTATED BIBLIOGRAPHY OF RESEARCH LITERATURE

"Analysis of the Effect of Tutorial Contracting on the Academic Grades and Truancy Rates of Delinquent and Low Achieving Students," Offender Rehabilitation, 3 (3), 1979, 229-243.

Effectiveness of tutorial contracting on delinquent and low-achieving students is examined in three experiments with 124 children. In the first study, 20 elementary age students contracted for tutorial assistance and 20 students served as a control group. College students served as tutors and drew up contracts with prizes for earning good grades and behaving positively. A second study examined a similar program offered to junior high students. A third study included 24 boys and 10 girls in three detention centers. The results of each study demonstrated improvements among experimental group youths in terms of grades, behavior, and truancy.

Ayllon, Teodoro, and Millan, Michael A. "Remedial Education in Prison," Corrective Rehabilitation and Management: A Psychological Approach, New York: John Wiley & Sons, 1979.

The authors state that programs to remediate reading comprehension and basic mathematical skills should be of highest priority in all correctional efforts. The absence of options due to educational deficits appears to weigh heavily upon recidivism. Even prisoners who refrain from criminal activities when released find themselves limited by the absence of vocational and educational skills.

The authors review two programs. The EMLC project conducted at Draper Correctional Center in Alabama involved vocational, educational, and token economy programs. The MORE project provided a typical classroom program in a medium security correctional facility for youthful offenders 18-26, to provide offenders with functional skills as an alternative to crime. The projects, which included programmed instructional materials, were used to maximize the achievement of educational objectives. Educational deficiencies were diagnosed and were the basis for a prescribed remedial program. Curriculum materials were age, grade, and culture appropriate. A study schedule, which prescribes instructional models and is used to bring the student up to 12th grade level, was developed for each student.

Prison educational programs typically attract few inmates, and resistance to traditional motivational efforts is extensive. These two programs offered positive incentives for inmates who helped themselves. In the MORE program, each vocational trainee in the prison was assigned a two-hour daily period to attend school to learn those academic skills needed for vocational employment. Careful records were kept of students' progress, behaviorial requirements for rewards were defined, and immediate success

experiences were promoted. Inmate participation in the educational phases of rehabilitation were directly affected by the reward system, with improvements in attitude and academic progress demonstrated. The EMLC project provided different incentives including encouragement, earning points, and alternative leisure time activities. The percent of inmates participating in the educational program increased from 0 to 17 percent per day with the token economy, and this increased to 42 percent with further rewards. When the token economy system terminated, inmate participation returned to the zero level.

The authors compare three methods of instruction: (1) a teaching machine, (2) programmed textbook and (3) individual tutors. Nine inmates served as students for this study. (Data are presented for only seven students who completed the course--a very small sample for research purposes.) Indicators of the effectiveness of the three methods were three performance measures. The individual tutoring procedure produced the highest study rates, but no differences were found on test scores. The three methods were roughly equivalent in producing academic performance on basic academic material.

The authors recommend maximizing the effectiveness of rewards by basing rewards on performance.

Bakal, Yitzhak and Polsky, Howard W. An Innovative Education Model for Troubled Youths: The Experiential Learning Program in Reforming Corrections for Juvenile Offenders, Lexington, MA: D.C. Health & Co., 1979.

Traditional educational and job-training programs have been ineffective in their efforts to work with youthful offenders, and may in fact contribute to delinquent behavior by promoting frustration and failure. Even progressive special education programs usually exclude delinquents. Delinquents are left without the basic educational tools necessary for success. The failure of traditional programs is due largely to their inability to individualize the program of each student to address specific needs, and their failure to be comprehensive in scope. Delinquents especially need programs to meet their emotional, psychological, and everyday living needs. Individualization requires intensive evaluation of each student and programs tailored to the individual. Success should be measured in terms of individual achievement, not in relation to the performance of others.

Other important characteristics are flexibility, firmly set limits, intensive supervision, and participation by the student in establishing his or her program. Intensive supervision is needed to maintain accountability, an important motivational tool. Improvements should be reinforced. An active, experiential approach is advocated.

The Experiential Learning Program (ELP) in Massachusetts is an alternative program based on these principles. ELP, which works with 16 court committed youths who have failed in school, provides vocational training at job-training sites, decision-making skills, field trips, individual tutoring, and small group learning experiences. Students earn stipends for participation in required components. Staff help to determine the individual's interests and formulate plans. Students are accountable for meeting conditions as set forth in the individual's plan. The curriculum is aimed at cognitive, affective, life, moral, and aesthetic skills. Individual tutoring is the basic method for developing cognitive skills. Affective skills are taught through small group meetings, transactional analysis, values clarification exercises, role play and psychodrama, videotapes, and individual counseling. Life skills involve setting personal goals and carrying them out within accepted social roles. They are taught on field trips, on job sites, special group learning experiences, etc. Moral education is directed at helping the student understand rules and their place in society. Aesthetics are taught, through exposure to the arts, to develop interests in positive leisure-time pursuits.

Collingwood, Thomas R., and Genthner, Robert W. "Skills Training as Treatment for Juvenile Delinquents," Professional Psychology, 11 (4), 1980, 591-598.

Past treatment programs often focused on casework rather than specific skills training, and few programs appeared effective (Romig, 1978; Gibbons and Blake, 1976). The most effective programs appeared to be those which focused on skills deficits (Romig, 1978). Incarcerated youths trained in social skills showed reduced recidivism and runaway rates (Carkhuff, 1974).

The Youth Services Program discussed in this article treated youths in three stages: intake assessment, group skills training, and a follow-up phase. Youths who completed the program were compared with a comparison group (referrals who did not participate) and evidenced significantly fewer repeat offenses and less severe crimes. The program participants also improved functioning at school and home as rated by teachers and parents.

Culbertson, R. G., and Schrink, J. L. "The Juvenile Delinquent and His Environment," Fundamentals of Juvenile Criminal Behavior and Drug Abuse, Springfield, MA.: Charles C. Thomas, 1975.

The authors suggest that if a child comes from an inadequate family situation, entry into the school system will likely compound the child's problems. Polk and Schafer (1972) contend that organizational policies and procedures in many schools virtually guarantee the generation and continuance of delinquent behavior. The system defines some children, especially lower income and non-white students, as failures before the educational processes begin. These children internalize those definitions and see themselves

as failures. Poor schools are characterized by low teacher expectations, irrelevant curricula, and utilization of inappropriate teaching methods. The frequent use of suspensions and expulsions can further deprive a child of educational opportunities.

The authors call for building professional and personal relationships by criminal justice practitioners with educational personnel. Resources should be made available to probationers such as tutoring, jobs, in-school suspensions, and court-school conference committees.

Frease, Dean E. "Delinquency, Social Class and the Schools," Sociology and Social Research, 57 (4), 1973, 443-459.

Data from a study at 18 Oregon high schools (1,232 students) indicate that school was considered to be irrelevant by delinquent youths. Seventy-five percent of white collar youth who were failing in school were delinquent.

Filipczak, James, and Wodarski, John S. "Behaviorial Intervention in Public Schools: Implementing and Evaluating a Model," Corrective and Social Psychology, 25 (2), 1979, 1014-1113.

The PREP Project (Preparation through Responsive Education Programs) was directed at students experiencing academic and behaviorial problems in three school settings, and included academic training, interpersonal skills training, family liaison and skills training, and teacher/staff training. Small group instruction was individually paced with teacher reinforcement and clear classroom rules. Social skills focused on appropriate behaviors, small group interaction and leadership, personal behavior management, and related skills.

Significant increases were initially found for PREP students in academic skills but these were not maintained. Highly favorable outcomes were found in social behavior ratings while overall outcome for grades was mixed.

Gagne, Eve E. "Educating Delinquents: A Review of Research," Journal of Special Education, 11/1, 1977, 13-27.

Delinquency may be a reaction against school failure (Elliott and Voss, 1974; Koval and Polk, 1967). One of the earliest manifestations of delinquency is truancy (Glueck and Glueck, 1950). Delinquents are plagued with serious reading problems (Mulligan, 1969; West, 1969) and a majority of those who are institutionalized have failed in school (Critchley, 1968). Grades are a decisive factor in determining which group of emotionally disturbed children will later become delinquents (Empey, 1970). Dropping out of school seems to reduce the number of delinquent acts committed by low socioeconomic status youths (Elliott and Voss, 1974). Female delinquents seem to be underachievers (Cowie, Cowie, and Slater, 1968) and school grades are less important to female delinquents as compared to males (Coleman, 1961).

Low intelligence is not seen as a direct cause of delinquent acts (Beier, 1964; Goldstein, 1964), yet duller delinquents may have a higher probability of institutionalization (McCord, et al., 1959). Shaw and McCuen (1960) found that underachieving boys will begin underachieving in first grade, and their achievement lag will continue to increase up to grade 10. Poor readers tend to see themselves as inadequate and to be hostile and aggressive (Andrews, 1971). The Coleman Report (1966) noted a high correlation between achievement and a sense of personal control over the environment among students in a disadvantaged school setting.

Delinquent youngsters have been found to suffer from severe language disabilities which could retard reading achievement and verbal communication (Graubard, 1967). In another study, institutionalized delinquents were more likely to learn well only under reward conditions (Resnick, 1971). Although delinquents' performance on rote learning tasks can be improved through the use of goal setting (Gagne, 1975), some empirical evidence suggests that minimal feedback may increase the performance of goal-setting delinquents who are present-oriented.

Glasser (1969) notes that failure accounts for most students' school problems and advocates a system of peer-group control of behavior. Group therapy used in combination with remedial reading has resulted in greater improvement than either program alone (Roman, 1957).

Short-term remedial reading programs based on behavior modification principles have shown remarkable success with delinquents (Gormly and Nattoli, 1971; O'Donnell and DeLeon, 1973). Programs combining reading remediation, token reinforcement, and group counseling have lowered the rate of recidivism (Dorney, 1967), improved delinquents' behavior in classroom situations (Bednar, et al., 1970), and changed attitudes toward authority (Rice, 1970).

At least two comprehensive long-term programs have shown some success in educating delinquents while resulting in slightly lower recidivism rates. The CASE program (Contingencies Applicable to Special Education) of Cohen and Filipczak (1971) increased the intelligence scores of delinquents over a two-year period (though only 11 youths were included in the follow-up). Students selected classroom instruction or individualized instruction and earned points for academic work. The academic growth rate increased and the recidivism rate at one-year follow-up was considerably less than the norm for that age group, but near the norm by the third year.

Achievement Place, a community-based behavior modification group home improved self-esteem, decreased aggressive verbal behaviors, improved classroom behavior, and lowered school dropouts, as compared to a comparison group.

Behavior modification programs have been more successful in remediating delinquents' educational problems than in lowering the recidivism rate (Jeffrey and Jeffrey, 1970). Generally poor results have been found for educational programs which use no behavior modification. Although they indicated that they enjoyed their classes, delinquent-prone youths who had specially tailored curricula and skilled teachers offended at the same rate as those in regular education programs, and did not show significant academic improvement (Ahlstrom and Havighurst, 1971; Reckless and Dinitz, 1972).

The author suggests keeping all but serious offenders out of institutions since their effectiveness in educating delinquents and preventing recidivism (Graubard, 1964; Tutt, 1974) is in question.

Garber, Judy, Tapp, Jack T., Dunbar, Michael, Turkin, Steven K., and Jens, Kathy. A Psycho-Educational Therapy Program for Delinquent Boys: An Evaluation Report, (incomplete cite).

This program consisted of ten weeks of behavior training. Subjects were 20 males, ages 15-24, placed on probation for a first offense with no previous psychotherapy. Matched control group youths received traditional interventions.

Significant differences were found at post-test on three of 22 Tennessee self-concept measures and on four of 14 personal orientation inventory variables. The program appeared to improve sense of personal work and self-concept, but failed to change other dimensions.

Gottfredson, Gary D. "Schooling and Delinquency," in New Direction in the Rehabilitation of Criminal Offenders, Susan E. Martin, Lee B. Sechrest and Robin Redner, (Eds.), Washington, D.C.: National Academy Press, 1981, 424-469.

The premise of this article is that research on the relationship of schooling to youth crime might be used as a basis for developing strategies to prevent delinquency. There is evidence suggesting that participation in delinquent behavior increases through adolescence to peak at around 16 years of age and then drops. Compulsory attendance laws in most states require youths to attend school through age 16 or 17. It may be that delinquent behavior is a function of the ways youths are treated, the statuses they are accorded, or roles they are expected to play in the school setting.

The literature about the link between academic ability and delinquency is controversial. Hirschi and Hindelang (1977) report that commonly used measures of intelligence have modest negative correlations with delinquency, and ability measures may be more strongly associated with serious offenses. They show that statistically controlling for socioeconomic status or race makes the association disappear and suggest that the link between ability and delinquency may be indirect via attitudes toward school.

The associations of school grades and school participation with delinquency have been clearly demonstrated. Many studies have found negative associations between school performance (grades, educational tests, or liking for school) and delinquency (Bachman et al., 1978; Frease, 1973; Hirschi, 1969; Little, 1979; Polk and Schafer, 1972), though the magnitude of the association was overestimated in early reports. Theorists have little ideological difficulty in integrating school failure with a view that educational institutions harm individuals by providing an inappropriate environment or by labeling or tracking them in undesirable ways. Further, the socialization of lower class youths makes it difficult for them to adjust to school (a middle class institution), and such youths are more likely to show poor performance and rebellion.

Considerable attention has been focused on the potential link between specific learning disabilities and delinquency. These youths are often disruptive and ill-behaved in school as well as slow learners. Much of the evidence for a link between delinquency and learning disabilities is based on comparisons of institutionalized delinquency and normal populations. There is also evidence that ability, poor school performance, and impulsivity (Lefkowitz, 1968; Roberts et al., 1974) are associated characteristics found among youths with learning disabilities. Zimmerman et al. (1979) suggest that learning disabled youths may engage in no more delinquent behavior but are treated differently in the juvenile courts.

Elliot and Voss (1974) found that those who eventually drop out of high school show higher levels of self-reported and official delinquency while in school than those who persist in school, and students with high levels of delinquent behavior in school are less likely to remain in school. However, delinquent behavior decreases after drop out (Elliott and Voss, 1974), suggesting that poor school performance leads directly to drop out and delinquency. Additional researchers who suggest that schooling is a factor in the production of delinquency include Coleman (1972), Empey (1978), and Greenberg (1977).

Several major theories link schooling and delinquency. According to social disorganization theory, academic achievement is more of a middle class value, and lower class youths are more likely to have trouble in school and test school rules. Gottfredson and Daiger (1979) suggest that school governance practices, belief in conventional social rules in a school, and school disruptions are all strongly related to characteristics of the community in which the school is located. Social control theory assumes that delinquent acts result from the weakening of the bonds of an individual to society, and schools provide structures, incentives, and opportunities for those bonds to develop. Social learning theory suggests ways to strengthen the bond to society and thereby prevent delinquency. For example, alternative techniques include cooperative learning which increases the rewards and success experiences for all youths (Slavin, 1979). Similarly, tailoring the learning program based on the student's ability and social

skills has been proposed. However, it has also been suggested that tracking students isolates them from prosocial role models and leads to derogated self-concept. Altering schooling to provide for greater integration of youths with adults in career related activities is therefore advocated.

Large, longitudinal studies and improved theories are recommended.

Haskell, Martin, and Yablonsky, Lewis. "The School and Juvenile Delinquency," in Crime and Delinquency, Chicago: Rand McNally & Co., 1970.

Almost every delinquent has a record of poor achievement, truancy, or both, suggesting a failure of the school to meet the youth's needs. Kvaraceus (1970) found in a sample of 761 adjudicated children that very few went on to finish high school, and half never finished junior high. School marks were very low and truancy high. The authors suggest that the school curriculum is generally geared to the needs of the middle class child in terms of life experiences, capabilities, etc.

Problems in the school system that contribute to delinquency include exposure to frustrating experiences, failure to maintain interest among students, failure to provide a feeling of satisfaction among children, and failure to provide satisfying personal relationships between students and teachers.

Hawkins, J. David and Wall, John S. Delinquency Prevention through Alternative Education, Seattle, WA: Center for Law and Justice, NIJJDP, OJJDP, LEAA, U.S. D.O.J., 1979.

The rationale for an educational strategy is that nontraditional educational programs, tailored to the needs of students whose educational careers have been marked by academic failure and/or conflict, can increase educational success and forestall delinquent behavior. This paper examines aspects of alternative education programs that are most promising for preventing delinquency.

There is evidence that academic failure, truancy, vandalism, violence, delinquency, and dropping out are interrelated. Feldhusen, et al. (1973) found that aggressive and disruptive children achieved at significantly lower levels than their peers. Swift and Spivack (1973) found that students who achieved poorly in school were those engaged in problem behaviors in the classroom. A substantial body of literature has shown relationships between poor academic achievement in school and delinquent behavior outside the school (Elliott and Voss, 1973; Jensen, 1976; Silberberg, 1971). McPartland and McDill (1977) indicated that school factors play a direct role in school violence. Immediate school experiences are closely related to delinquent behavior (Hirschi, 1969; Linden, 1974; Polk and Schafer, 1972; Elliott and Voss, 1974). Elliott and Voss (1974) found that delinquent youths who dropped out of school were more delinquent before they left school than after dropping out.

Youths who experience academic success are less likely to be delinquent (Call, 1965; Jensen, 1976; Polk and Hafferty, 1966). Commitment to educational pursuits is an important factor; where commitment is low, delinquency is more likely (Elliott and Voss, 1974; Hirschi, 1969). Students who like school and have higher grades are less likely to have delinquent friends (Sakumoto, 1978).

Several elements of alternative education approaches appear promising for preventing problem behavior though few such programs have been evaluated.

1. Individualized instruction, tailored to the interests of students, to promote motivation, commitment, and success. Odell (1974) found lower delinquency rates in an alternative school integrating high interest materials into an individualized learning format.
2. Rewards that are attainable and clearly contingent on effort and proficiency. Goals should be established for each student with rewards linked to achievement. Rewards can include grades, token economies, and other systems. Long-term goals such as admission to GED testing should be established. Rewards for positive classroom behaviors can be used for classroom management (Jensen, 1975; McLaughlin, 1976).
3. Goal-oriented work and learning emphasis in the classrooms (Hurn, 1978; Romig, 1978).
4. Conducive physical and human factors.
 - a. Small student population in the program. Smaller schools are characterized by lower levels of student offenses (McPartland and McDill, 1977; U.S. Dept. of Health, Education and Welfare, 1978). Small size promotes personal attachments between students and teachers, and counters anonymity.
 - b. Low student - teacher ratio in the classroom for individualized attention and personal relationships.
 - c. Caring, competent teachers to promote trust and bonds.
 - d. A strong, supportive administrator to set the climate for the above elements.

Additional components:

1. Involving students (and their parents) in school decision-making to increase student commitment to school.

2. Supplemental social services such as counseling.
3. Vocationally oriented components, e.g., alternative learning centers which serve severely school-alienated youths and offer a job preparation program that leads to employment placement.
4. Peer counseling. (The results from studies have thus far been mixed.)
5. Student selection criteria and procedures.
6. Location. (However, no evaluations of comparative effectiveness of different locations have been conducted yet).
7. Learning models.
8. Primary grade alternatives such as individualized instruction and early intervention. Risk of this approach is possible stigmatization of students and identification of youths who would never be delinquent as predelinquents.

The Learning Alternatives Program in Tampa, Florida, an alternative high school for junior high students needing specialized educational and behavioral services, is described. The program involves low teacher/student ratio, individualized program, success experiences, coping and problem solving skills, job skills, counseling, and parent meetings. Evaluation showed a 91 percent reduction of court recorded delinquent offenses and 23 percent reduction in status offenses. Positive results were also found for suspensions, absences, and test scores.

Hazel, Stephen, Schumaker, Jean B., Sherman, James A., and Wildren, J. Sheldon. "Social Skills Training with Court-Adjudicated Youths," Child and Youth Services, V. 5, (3/4), 1982, 117-137.

The program integrated a problem-specific approach with a general skills training approach. Instruction, shaping, modeling, practice, and reinforcement were utilized. Youths were encouraged to apply skills they learned in the program to real life situations. Data from a study of social skills training among delinquents found less recidivism among program participants than control group youths (Hazel et al., 1981).

Holt, Michael M., Hobbs, Tom R., and Hankins, Ron. "The Effects of Token Reinforcement on Delinquents' Classroom Behavior," Psychology in the Schools, 13 (3), 1979, 341-347.

The effects of a token reinforcement program on the classroom behavior of 19 delinquent boys in a correctional institution were investigated. Appropriate classroom behavior was defined in terms of four categories:

on-time, on-task, social interaction, and assignment completion. A measure of total appropriate classroom behavior was calculated by summing the frequency of each behavior category. Withdrawal and reinstatement of token reinforcement procedures demonstrated that the program had an impact on appropriate classroom behavior; however, considerable variability of behaviors was observed. Token reinforcement was most effective at impacting on-time behavior; assignment behavior was similarly influenced but showed greater variability; on-task behavior was noticeably affected but subsequently decreased; and social interaction behavior appeared unrelated to reinforcement contingencies. These findings suggest that the use of global, composite measures may mask program effects on important component behaviors.

Kandell, Henry J., and Ayllon, Teodoro. "Rapid Educational Rehabilitation for Prison Inmates," Behavior Research and Therapy, Vol. 14, 1976, 323-331.

One of the major goals of prison is educational rehabilitation. Studies have shown that pre-delinquents and delinquents could be motivated to achieve in academic areas through use of an incentive system. In this study, the academic performance of two inmates were compared when two levels of incentives were made contingent on that performance. Results showed that the two inmates passed academic tests as much as nine times faster under an enriched schedule of incentives than a standard one. A standardized test confirmed academic advancement for both inmates.

Cohen et al. (1970), investigated effects of a reinforcement system on the number of academic units passed by 20 delinquents in a reformatory school. Effects of reinforcement were measured before and after the program and showed that an average improvement of 0.6 grade levels in language and 1.3 grade levels in spelling. Phillips (1968) used similar reinforcement programs and showed that pre-delinquents in a residential setting could be motivated to prepare homework with high accuracy. Clements and McKee (1968) discuss a system, where inmates contracted to perform certain amounts of work above baseline to earn rewards, which resulted in improved performance. Milan et al., (1974) showed reinforcement could improve inmates' participation in academic programs.

Kauffman, James M., and Nelson, C. Michael. "Educational Programming for Secondary School Age Delinquent and Maladjusted Pupils," Behavioral Disorders, 2 (1), 1976, 29-37.

This article reviews intervention programs that are primarily educational rather than psycho-social. Mackie (1969) found that only 12 percent of the estimated school-age emotionally disturbed and maladjusted children were receiving specialized education services--most of those were in residential programs. Recent, accurate data regarding the extent of specialized educational programs for secondary school-age delinquent youths are difficult

to obtain. Factors contributing to scarcity of specialized educational programs for delinquent children include structure of secondary education (e.g., emphasis on academic achievement), shortage of qualified teachers, an inadequate mechanism for insuring that offenders remain in school, and reluctance of schools to undertake special programs of this sort.

A sizeable proportion of problem children over 16 dropout at the urging of the school or with its approval. A viable option is the self-contained classroom where pupils are assigned to one special education teacher who has major responsibility for instruction in the academic area. The model may include a work-study component. On the other hand, Ahlstrom and Havighurst (1971) studied a large group of socially maladjusted boys in a large urban setting. Half were randomly assigned to work experiences and modified academic curriculum and half to regular classrooms. Both groups were followed for six years. Results failed to support the hypothesis that the work study group would make better progress toward work role adjustments in late adolescence.

New York's "600 Schools" (segregated day schools) serve 12 students per class. Homeroom teachers are responsible for all academic subjects. Curriculum is self-paced and instruction is provided in remedial reading, shop, music, and P.E. Some critics of this program object to stigmatization and labeling, and see such programs as dumping grounds for troublesome youths rather than rehabilitation programs.

Residential treatment services range from tutoring and participation in community school programs to on-campus educational programs in separate school facilities. Hawthorne Cedar Knolls combined industrial arts shop and basic academic programs for low motivated students. Youth House (a detention center in New York) offered highly flexible curriculum, emphasizing reading, communication skills, and social living.

Educational programs often are provided to adolescents and young adults who are incarcerated. One such program (Kreter, 1967) stressed job training, counseling, and academic remediation using vocational materials.

General innovative approaches to rehabilitating offenders include:

- a. Consultant teacher approach (stressing mental health support and problem-solving). Possible methods include mediators on specific problem behavior or crisis teachers to work with child directly. Programming Interpersonal Curricula for Adolescents (PICA) provided instruction in academic and interpersonal skills with classroom behavior managed by a reinforcement system--returning students to the regular classroom in the afternoon. Cohen, Filipczak, Slavin, and Boren (1971) reported large gains in achievement, school grades, and attendance, and fewer juvenile charges for youths in this program.
- b. Alternative schools (providing an alternative learning experience to conventional school programs).

1. Open school - Individualized and organized around student interest.
2. Schools without walls - Interaction with the community with experiential learning activities.
3. Continuation schools - Dropout centers, re-entry programs, adult high school, etc.
4. Multi-cultural schools - Programs that provide cultural curriculum in addition to the traditional program.
5. Schools within schools - Specialized offender programs located at traditional schools, which frequently include the eventual transition of students back into the traditional classroom.

Achievement Place (Phillips, 1968) is a structured home environment for pre-delinquent boys. It employs a sophisticated token system encompassing daily school performance, with points earned or lost for homework, grades, etc. Cohen and Filipczak (1971) reported a project conducted at the National Training School for Boys, Washington, D.C., where the goals were to increase academic skills and prepare students to return to the public school system or pass the G.E.D. The 24-hour learning environment used a token economy and contingent access to privileges and reinforcers, and provided individualized courses and skill levels determined by diagnostic tests.

The authors note an absence of controlled research, lack of long-term follow-up, ill-defined outcomes, etc. Few controlled evaluative studies of educational programs for delinquents have been conducted, and those that have been completed yielded inconclusive or conflicting results, or had only short-term benefits.

The authors recommend prioritization of educational programming for maladjusted and delinquent youth at all government levels, specially trained teachers, early intervention with problem children, scientific studies of new approaches, and general educational reform.

Kelly, Delos H. "Status Origins, Track Position, and Delinquent Involvement: A Self-Report Analysis," Sociological Quarterly, 16, Spring, 1975, 264-271.

Self-report data were collected from 173 seniors in two high schools to examine the predictive power of socioeconomic status as opposed to academic standing. Academic standing was the strongest predictor of delinquency, and was inversely related to delinquent involvement, with non-college bound students more likely to report delinquent activities.

Klarreich, S. H. "Group Training in Problem Solving Skills and Group Counseling: A Study Comparing Two Treatment Approaches with Adolescent Probationers," Corrective and Social Psychology, 22 (1), 1981, 1-13.

Sixty male probationers, ages 16-19, received group problem-solving training, and were compared to two control groups (group counseling and no-treatment). Group training in problem-solving skills resulted in significantly greater increases in self-satisfaction but less favorable results for other self-concept variables. A greater percentage of high responses were found for the skills group on progress checklists. Skills training had a slightly greater impact than the group counseling group but the difference between the groups was not significant.

Knudten, Richard D. "Delinquency Program in School: A Survey," Criminal Justice and Behavior, 2 (4), 1975, 346-357.

This paper reports on a survey of existing and proposed delinquency prevention programs in the public schools conducted in 1972-73 by Marquette University. Of the 39 state Boards of Education responding, 16 provided no program information or had no operating delinquency prevention programs. Existing school programs were many and varied, including programs to humanize the educational process and teach values, efforts to develop codes of conduct and delineate student rights, identification of delinquents, revision of curricular offerings, drug education, counseling, crisis assistance, truancy and dropout prevention efforts, security concerns, vocational education, work/study programs, alternative schools, special education, recreation, and other efforts.

Recommendations from respondents included early identification and intervention, coordination of efforts, a council of school administrators, parents and students to study disciplinary problems, prevention rather than remedial or rehabilitative efforts, caring school personnel, emotional maturation programs, decision-making, law education, group counseling, school guidance programs, and alternative schools.

The authors recommend redefining the mandate of government agencies to support delinquency prevention programs in schools, placing prevention specialists on school board staffs, training teachers and administrators in prevention, strengthening prevention within the alternative school movement, supporting police liaison efforts, stressing development of youth service bureaus, and providing incentives to schools to keep pre-delinquents and actual delinquents in school.

Larsen, John A. "Applying Kohlberg's Theory of Moral Development in Group Care Settings," Child Welfare, Vol. LX, No. 10, 1981, 659-668.

Kohlberg's work has special relevance to residential treatment because it provides a framework for understanding the moral decision-making process at various levels of development. Kohlberg's six-stage theory of cognitive

moral development is described. The moral development scale yields a measure of an individual's particular stage of moral reasoning. Development involves moving to the next stage of reasoning.

Moral development can be fostered in children in residential treatment through the efforts of individual staff members or through residential programming. Staff members should become familiar with moral development theory, distinguish moral reasoning from moral conduct, concentrate on understanding the child's moral reasoning instead of forcing the child to adopt adult thinking about moral issues, provide children with ongoing opportunities to discuss moral issues and solutions, and develop empathy. These techniques should promote responsible behavior, consideration for others, and thoughtful action on the part of the residents.

Martin, Susan E., Sechrest, Lee B., and Redner, Robin (Eds.). "Loci of Intervention and Promising Avenues of Research," in New Directions in the Rehabilitation of Criminal Offenders, Washington, D.C.: National Academy Press, 1981.

The authors look at family, school, workplace, and community as major loci of intervention. School-based educational interventions to prevent delinquency are worthy because: (1) rates of delinquent behavior among school-aged youth are high, (2) schools are a major institution in the lives of youths--intended to socialize and educate young people to participate in an orderly way in adult roles, (3) several theories of delinquency causation include schooling or educational experiences, (4) interventions designed to reduce disruptive behavior can sometimes be effectively implemented, (5) delinquency and subsequent adult crime have been linked with educational problems, and (6) reductions in disruptive behavior in schools would help to create a better learning environment.

The more difficultly a youth has in academic course work, the more likely a youth is to get into trouble with the law and be disruptive in school (Bachman et al., 1978; Hirschi, 1969). Applied behavior analysis has been employed in a variety of schools to alter disruptive behavior (Koegel and Rincover, 1974; O'Leary and O'Leary, 1977). Techniques have included teacher praise (Madsen et al., 1968), soft verbal reprimands (O'Leary et al., 1970), peer reinforcement (Solomon and Wahler, 1973), token reinforcements (Ayllon et al., 1972) and self-regulation (Bolstad and Johnson, 1972). Demonstrated success of a number of programs of this sort may be due to the focus on changing specific behaviors and carefully monitoring implementation.

Another approach is altered school organization. Strategies to promote successful school experiences include altered reward structures, integrating marginal students with successful students (Slavin, 1980), integrated services, and firmly enforced rules (Gottfredson et al., 1980; National Institute of Education, 1978). Research on alternative school environments, organizational patterns, and reorganized reward structures may be a more plausible approach to reducing delinquency than focusing on problem youths.

Mesing, John F. Juvenile Delinquents: A Relatively Untapped Population for Special Education Professionals, (Incomplete cite).

There has been no concerted effort to train special education professionals to work with youths in correctional schools. Delinquents in institutions offer a challenge to the best educator's skills in behavior management, academic diagnosis, and remedial instruction. A sample of youth from a youth learning center in Virginia was studied, and it was determined that 14 percent qualified as educable mental retarded, and the majority were so handicapped that they needed instruction in basic reading and arithmetic. Problems in educating these youths included motivation, behavior management, and academic remediation. Most youths in correctional schools are apathetic or hostile toward education. Special education teachers are needed who are skilled in interpreting educational diagnosis, performing evaluations, and teaching in a performance based system.

Morin, Lucien (Ed.). On Prison Education, Ottawa, CA.: Canadian Government Publishing Centre, 1981.

The educational model of criminality causation assumes a lag in learning, intellectual, and moral development. In 1980 a post-release study was completed of an educational program conducted in two Canadian prisons since 1972. Recidivism among persons who participated in the program for at least one year was 25 percent less than among those who participated in other programs. Post-secondary education directed at value change has been proposed as a rehabilitative device. However, such attempts have not consistently achieved great success as measured by post release behavior.

Duguid (1981) describes a University of Victoria program, which demonstrated 14 percent recidivism for participants of an education program (as compared to 52 percent for matched non-student prisoners). The program dealt with cognitive, moral, and socio-political development. Forster (1981) describes contents of present prison curriculum: remedial education, functional skills, life skills, recreational arts and crafts (therapeutic values, enhancement of self-image, etc.), and academic skills. Benefits of this program include self-assessment, sense of achievement, constructive use of time, new range of relationships, sense of membership, sense of progress and self-respect.

Ayers (1981) discusses appropriate and inappropriate intervention models. The education growth model assumes that prisoners are deficient in certain analytic problem-solving skills and interpersonal skills needed to function in society. Spivack, Platt, and Shure (1976) contend that delinquents suffer from cognitive deficits and a problem-solving approach is necessary for adjustment.

Lewis (1981) describes a humanities project which was part of the regular educational program at the state correctional institution at Camp Hill, Pennsylvania, for males under 21. The study design was experimental (random selection to humanities or non-treatment program). Psychological

measures were administered before and after program participation, and significant changes were found among the experimental group youths. At three-year follow-up, however, no significant differences were found for recidivism, employment, or attitudes and values. The author suggests that rehabilitation in a prison setting is an impossible task; one can provide opportunities but not impose them.

Duguid (1981) asserts that education can be used to enable criminals to make decisions which will not lead to further criminal activity. According to Duguid, prison education must have two essential elements--a concern with ethics and the development of critical thinking skills through issue-oriented curriculum. Exposure to role models, interaction with peers, and discussion of conflict are essential components of this curriculum.

Scharf (1981) proposes the idea of fairness as the basis for the educational reform of prisons. Quality education is the prisoner's right in a just society, according to this view.

Jennings (1981) discusses the effects of a "just community" program on the moral level of youthful offenders. A group home for ten delinquent boys based upon the just community concept was examined by Kohlberg, et al. (1975). The study compared residents of this program to a secure behavior modification unit and a transactional analysis program, using moral atmosphere interviews, and Kohlberg moral judgment interviews. The just community program involved public school, sports, and weekly community meetings to make and enforce rules. Greater improvement was found from pre to post test on moral maturity scores among just community residents. It is not known whether these changes led to a reduction of recidivism.

Nevin, Ann, Johnson, David W., and Johnson, Roger. "Effects of Group and Individual Contingencies on Academic Performance and Social Relations of Special Needs Students," Journal of Social Psychology, 116, 1982, 41-59.

Effects on individual and group contingencies were studied in terms of achievement, classroom behavior, acceptance of handicapped peers, and self-esteem of academically and socially handicapped students. Four studies are reviewed--including on four 1st graders, eleven 7th graders, five 9th graders, and five 1st graders who were low achieving students with disruptive behaviors and special needs. Group contingency procedures were compared to individual contingency procedures or no contingency procedures. The results were consistent, indicating that group contingencies (compared with individual or no contingencies) promote higher achievement, more appropriate behavior, greater social acceptance by non-handicapped peers, and higher self-esteem among disruptive and special need students.

Ollendick, Thomas H., and Hersen, Michael. "Social Skills Training for Juvenile Delinquents," Behavioral Research and Therapy, 17, 1979, 547-554.

Subjects of this study were 27 incarcerated male adolescents. Matched subjects were randomly assigned to social skills, discussion, and control groups. The treatment facility utilized fixed token economy and a behavior

contracting system. Social skills training was conducted in group sessions for ten weeks. The group dealt with alternative ways of dealing with interpersonal problems.

Assessment instruments included a locus of control scale, role play responses, and program behavior. The social skills group improved significantly more than the discussion and control groups on a number of measures. While the incidence of disruptive behavior did not change significantly, the mean difference scores favored the social skills group in all but one case. Appropriate interpersonal skills were learned, internal locus of control was increased, and greater institutional adjustment was found among the treatment group.

Perlstein, Gary, R., and Phelps, Thomas R. "Newgate: New Hope through Education" in Alternatives to Prison, Santa Monica, CA.: Goodyear, 1975.

Newgate offers post-secondary education, counseling, and follow-up services to offenders. The Upward Bound Oregon Prison Project began in 1967 giving, for the first time, maximum security prison inmates the opportunity for higher education and counseling in and out of the prison, with post-release support services. After an evaluation, the program was renamed Project Newgate. Operating as a residence program, it is located inside institutions with its own staff. Courses are designed to effect a smooth transition to college or work after release.

Romig, Dennis A. "Academic Education" in Justice for Our Children, Lexington, MA., D.C. Heath & Co., 1978.

The author reviews 16 studies which have used education as a method for helping delinquents. Bowman (1959) studied the effects of an innovative school program on 17 delinquents and 60 other 9th graders doing poorly in school. The control group was located in a regular program, while two treatment groups were placed in special classes designed to make school more pleasant and teach basic and practical skills. The results indicated that youths in the special program had a 33 percent decrease in delinquency while the control group's delinquency increased 300 percent over the two years. There was also a significant improvement in school attendance and job experiences for the experimental group youths, but not in terms of academic skills or drop out rate. It appeared that keeping youths in school and being supportive had positive effects (despite no improvements in academic skills).

Jacobson and McGee (1965) discuss a study evaluating the effects of an educational approach upon delinquent boys committed to a federal youth center (24 youths randomly assigned to an experimental group and 24 assigned to a control group). Treatment group youths attended a special reeducation program with understanding teachers, discussion groups, topics of interest to the students, and problem-solving skills training. No significant differences were found in academic achievement, community adjustment, or reincarceration rate. When followed by a traditional academic approach, however, treatment youths were more successful in the community.

Tyler and Brown (1968) used behavior modification in a current events course for delinquent youths in a Washington State institution to improve results. The study included 15 court-committed boys (nine experimental group youths and six control group youths, then reversed in later phases). Both groups received significantly higher scores when rewarded on a contingent basis. Teachers seemed to positively influence behavior when they planned exciting lessons. There were no differences across groups in terms of arrests.

Meichenbaum, Bowers, and Ross (1969) reported results of manipulation of teacher expectations upon institutionalized delinquent girls (six experimental group youths and eight control group youths). Treatment involved telling the girls' teachers that the experimental group youths were "late bloomers". No significant differences were found in teachers' levels of attention or interaction. The positive findings that were found for the experimental group youths were uncertain because of the extremely small period of time (two weeks) for which the youths were followed.

Knill (1970) looked at the effects of the manipulation of teacher expectations for male reformatory inmates. Teachers were told that the experimental group youths had untapped potential. There were 38 randomly selected experimental group youths and nine control group youths. No significant differences were found on ability, MMPI results, work, discipline, etc.

A behavior modification program was developed for delinquent boys in a programmed reading class by Bedman, Zelhart, Greathouse, and Weinberg (1970). The 32 boys were randomly assigned to a treatment group (which included reinforcement for increased attention, cooperation, and reading competence) or a control group. The reading achievement and general classroom behavior of the treatment group were significantly higher than the control group after 18 weeks. The authors state, "it can be concluded that where learning curricula for delinquent youths are systematic and sequential, and when rewards are provided by appropriate behavior and educational performance, the youths will make significant educational gains."

Halstead (1970) reported research designed to improve the reading ability of delinquent youths who were below average IQ. The study consisted of 12 experimental group youths and seven matched control group youths. Treatment involved an individualized education program based upon diagnosis at intake and included behavior modification, patterning exercises, responsive environment, and multiple sensory stimulation. The experimental group youths reading ability gain was statistically significant and over 100 percent better than the control group youths.

A study conducted by Reckless and Dinitz (1972) was designed to determine if teachers, trained to be role models and significant others for potentially delinquent boys, could intervene effectively. The study included 632 experimental group youths and 462 control group youths who were randomly assigned. Treatment involved special classes in the experimental group's

7th grade public school program. Results of the special program were negative during 7th grade and three-year follow-up, with no significant differences in dropout rate, attendance, grades, school achievement tests, and police contact rates. The study suggested that a positive relationship with staff is not a sufficient condition by itself to bring about rehabilitation.

Raffaele (1972) looked at the effects of educational contracts upon reading achievement, with a sample of 40 institutionalized male delinquents randomly assigned to eight groups (four treatment and four control groups). Two treatment groups included development of negotiating skills as needed to improve reading--one of the groups had a more experienced teacher. There were no significant differences between the two general approaches, but students with the experienced teacher scored higher.

Scheaf (1972) looked at effectiveness of paired learning approaches and discussion groups with delinquent youths. Sixty delinquent boys who were learning disabled were randomly assigned to two treatment groups and one control group. Treatment group one rewarded students for reading in pairs daily, treatment group two included a discussion group, and the control group included only traditional instruction. The two treatment groups had no additional effect on reading achievement.

Lewis (1973) tested the effects of a humanities program on juvenile offenders ages 15-21. Two groups of 59 control group youths were matched with 59 experimental group subjects. An experimental education program was conducted at a state correctional facility, in which humanities was taught in increasingly difficult stages. Positive effects were found for the experimental group youths while they were in custody, but not after a 33-month followup. Glaser (1974) notes that the contribution of educational programs is only significant when the individual achieves a diploma or certificate that improves opportunities, possibly explaining the failure of this program to have lasting effects.

An evaluation was conducted of a California Youth Authority program on subsequent parole performance (Ferdun, 1974). Eighty youths who were school achievers and stable were matched with 53 control group youths. The treatment youths were provided with tutoring and recreational activities. The treatment group youths coped better and attended school more than the control group youths, but no significant differences were found in recidivism rates.

Effects of different behavior modification contingencies upon school attendance was studied by Fo and O'Donnell (1974). Twenty-six preadolescents were randomly assigned to four groups. Treatment group youths were trained with the use of behavior modification techniques utilizing positive relationships between teachers and students. A significant increase in school attendance was found for the treatment group when approval and reinforcement were contingent upon performance. Some youths received rewards contingent upon improvement in grades while others participated

in a program only emphasizing positive teacher-student relationships. No significant differences were found over an 18 week period. The authors concluded that behavior modification techniques combined with quality teaching programs will result in increased achievement.

An intensive GED program in a juvenile court setting was evaluated by Odell (1974). Sixty boys with an average age of 16 were randomly assigned to one of four groups. Two control groups offered traditional casework or intensive counseling. Two experimental groups received the same treatment plus follow-up job and school placement, high interest subject matter, programmed learning, and a tutorial system allowing the youth to proceed at his/her own pace. At three, six, and nine-month follow-ups, the two treatment groups had a significantly higher degree of participation in school or work and were making higher salaries. Recidivism was significantly higher for the traditional casework and counseling groups than for the education-based groups.

Romig concludes that under certain conditions education can rehabilitate juvenile delinquents. (See Tables 3-1, 3-2, and 3-3.) Classroom education that includes at least four of the composite program ingredients is predicted to succeed. Classroom rehabilitation focusing on teaching of academic skills only will fail to reduce recidivism.

TABLE 3-1
EDUCATIONAL PROGRAMS SUMMARY

- A. What Worked:
1. Understanding teachers combined with basic academic and practical skills
 2. Understanding teachers combined with discussion group and academic skills
 3. Differential reinforcement
 4. Rewarding positive classroom behavior and learning
 5. Positive emotional support combined with individualized program
 6. Contingent social and material rewards
 7. Special G.E.D. program
- B. What Did Not Work:
1. Understanding teachers combined with discussion groups
 2. Manipulation of teacher expectancies
 3. Understanding teachers combined with role-model discussion groups
 4. Contract teaching without differential treatment
 5. Rewards for reading in pairs
 6. Discussion groups
 7. Participation in a humanities course
 8. Participation as student aides
 9. Contingent social and material rewards in improving school grades

TABLE 3-2
PROGRAM INGREDIENTS PRESENT IN THOSE STUDIES WHERE THE YOUTHS LEARNED

1. Special classes
2. Understanding teachers
3. Emphasis upon practical skills
4. Reading, writing, and arithmetic
5. Individualized pacing
6. Discussion group combined with academic skills
7. Differential reinforcement
8. Exciting lessons
9. Rewarding attention, cooperation, and persistence in class
10. Rewarding reading achievement
11. Individualized diagnosis
12. Individualized program
13. Behavior modification
14. Positive emotional support
15. Variety of delivery techniques
16. Multisensory teaching
17. Contingent social rewards
18. Contingent material rewards
19. High-interest material
20. Programmed learning
21. Individualized instruction
22. Specific learning goals

TABLE 3-3
COMPOSITE PROGRAM INGREDIENTS FOR EFFECTIVE CORRECTIONAL EDUCATION

1. Understanding teachers
2. Individualized diagnosis
3. Specific learning goals
4. Individualized program
5. Basic academic skills
6. Multisensory teaching
7. High-interest material
8. Sequential material
9. Initially rewarding attention and persistence
10. Differential reinforcement of learning performance

Rutter, Michael, and Giller, Henri. Juvenile Delinquency - Trends and Perspectives, London: Penguin, 1983.

There have been several attempts to use special education programs in schools to prevent problem behavior and delinquency, but most comparisons with control groups have shown no measurable benefits. One exception which showed positive results was the use of social workers in experimental schools (Rose and Marshall, 1974).

Pre-school programs may have beneficial effects on attitudes and behaviors (Schweinhart and Weikart, 1980), but enduring effects have not been demonstrated.

Several studies have shown large differences in delinquency rates between high schools serving similar areas (Power et al., 1972; Reynolds et al., 1976; Rutter et al., 1979). School factors may have played a part in influencing pupils' behavior in ways which affect the overall rates of conduct disturbance. However, methodological problems limit attempts to determine causality (e.g., selective intake of students to the schools).

Rutter et al. (1979) found that school variables, compared with family variables, account for only a small amount of variance in children's behavior or scholastic attainment from individual to individual. Nevertheless, school variables have a considerable impact on the overall level of behavioral disturbance or scholastic attainment in the school. In some schools there is a tendency for the student group as a whole to be better behaved or more generally disruptive. The authors suggest that school factors have a greater effect on children's behavior in the classroom than on delinquent activities outside the school. School processes associated with children's classroom behavior include styles and skills of classroom management, models of behavior provided by teachers, extent of reward and encouragement, giving students responsibility, degree of academic emphasis and levels of expectations for pupils, and variance in children's behavior or scholastic attainment.

Rutter, M., Maughan, B., Mortimore, P., Ouston, J., Smith, A. Fifteen Thousand Hours: Secondary Schools and Their Effects on Children, Cambridge, Mass.: Harvard University Press, 1979.

This book reviews studies linking schooling to delinquency rates (Power et al., 1967; Gath, 1977; West and Farrington, 1973; Reynolds et al., 1976) and those school features which may contribute to delinquency. Some features of good schools include small classrooms, time spent on subject, high teacher expectations, proactive classroom management, incentives, feedback, positive school climate, and so forth. However, evidence was presented indicating that school size, academic standing of the school, and teaching style were not related to delinquency.

The authors surveyed 20 schools in the London area in terms of delinquency rates, behavioral problems, and reading difficulties. Large differences were found across schools. Childrens' behavior and attainments were systematically related to measured characteristics of their schools. The authors suggest that anti-school peer group influences can be countered by increasing the rewards available to less able children.

Shorr, David, English, Don, and Janvier, Richard L. An Assessment of Evaluations of School-Based Delinquency Prevention, Center for Law and Justice, University of Washington, Seattle, 1979.

The authors reviewed 491 journal articles and 201 additional documents regarding school programs to prevent delinquency, school crime, and violence. Few evaluations assessing effectiveness were available. Program strategies included values education, counseling, alternative education, work/study, citizenship courses, crisis intervention skills, teaching teachers, involving students in school policy setting, and security precautions.

Three types of school-based prevention programs were reviewed:

a. Programs using contingency reinforcement.

This type of program is generally used for changing truant or disruptive classroom behavior, rather than dropout or general delinquent behavior. Positive results have been found when applying behavioral techniques to discrete behaviors (Brooks, 1975; Noonan and Thibaut, 1974; Reynolds, 1977; Graves, 1976; Stringer, 1978; Robertson, 1976). It is not known if effects are lasting, however.

b. School-based counseling oriented around prevention or dropping out.

Results of these programs are equivocal, and few evaluations were rigorous.

c. Alternative education.

Rationale is adjusting school situation to fit students' needs rather than vice versa.

The authors summarize several school-based delinquency prevention programs as follows:

Northampton (Social Research Associates, 1974)
Trained graduate students as crisis intervention counselors, and assigned each to 20 students. A small decrease in police contacts was found, with little effect on absenteeism and truancy. (Several methodological problems noted.)

Pilot and PEP (Goff, Hinsey, and Cline, 1972)

Involved self-contained classrooms, and individual and group counseling. Program results included improved attitudes and values and reduced disciplinary actions and court referrals. (No formal control group.)

Wood County (Staed, Southern, and Prentiss, 1978)

Adlerian counseling offered in school and at home. Teachers felt that students' behavior improved. (Weak research design.)

Kansas City Behavior Project

Treated mild disruptive behavior and provided positive learning experience for sixth graders through small group process. Positive results shown but eroded at follow-up.

Harlem Middle School

Designed to prevent dropout attitudes among youths in grades 6-8. Offered small group interaction sessions and positive reinforcement. No increases found in academic achievement or extracurricular participation, and truancy increased.

Teaching for Improved Life Adjustment (TILA)

Early intervention by teaching basic life skills. Results were inconclusive.

Berrien County (Boehm and Larsen, 1978)

A school-based peer group counseling program offering 9 to 18 weeks of peer group counseling. Results of pre/post questionnaires and school records indicated improved self-image, school attitude, and behavior. (Evaluation design was weak.)

Junior High Work Training Program

For disadvantaged students. Some improvements shown in attendance, but no improvement in job performance. (Small sample size and selection of only high potential participants noted.)

South Mountain High School

Individualized instruction, employment, and career skills offered. Reduced absence and dropout rates shown. (Research design inadequate.)

Career Intern Program

Individualized instruction, career counseling, and hands-on experience for inner-city youth. Results included decreased dropout, improved academic scores, and better attitudes toward school and career. (Evaluation was rigorous, but analysis was problematic.)

Neighborhood Youth Corps

Paid work experience provided to enable students to remain in school. Results disappointing. (Design was rigorous.)

Vocational Education in the Private Sector

Companies provided resources for worksites, and three types of work experiences. Improvements shown in academic performance and attendance. (Research problems noted.)

CoStar (Anderson, 1978)

(Community Opportunities for Success Training and Rehabilitation program). An alternative school in Vancouver, Washington, for students with juvenile court contact. Provided vocational testing and counseling, paid employment, and volunteer services. Results showed improved academic skills but little change in personality test scores. Participants had less juvenile court contact than non-enrollees. (Some evaluation flaws indicated.)

Focus (Schillinger, 1977)

A school-within-a-school for students doing poorly in traditional classroom, dropouts, court referrals, and youths with behavior problems. Involves family group interaction sessions, work experience, and academics. Participants showed improved academic skills, self-worth, and some reduction in court and law enforcement contacts.

AIMS (Readio, 1977)

(Assisting Individuals in Modern School Project) An alternative school for academically disadvantaged adolescents and juvenile offenders in Bellingham, Washington. Offers basic and life skills, arts and crafts, coursework electives, learning at own rate, pass/fail system, and 7:1 student/teacher ratio. Results included improved class attendance, greater completion of work, increased academic achievement, and moderate decrease in court referral rates. (Evaluation strong though some issues indicated.)

Bellingham Street Academy (Readio, 1976)

An alternative school serving court and school referrals, providing individualized programs, academic and vocational courses, non-competitive climate, and 12:1 student/teacher ratio. Study with comparison group of juvenile delinquents showed no statistical differences in delinquency or adult offenses.

School Crime Intervention (Brown and Wharton, 1978)

Involved student action teams, faculty training, better school-community relationships, and student-initiated activities. Resulted in reduced crime, vandalism, and suspensions and improved attendance, self-concept, and grades. (Selection bias and attrition noted.)

Lane County (Brewer et al., 1967)

A vocationally-oriented curriculum for academically disadvantaged youths in rural Oregon. Provides vocationally based training and work experience. Failed to reduce delinquency in two of three schools, with substantial reduction in the third school.

Oak Harbor (Readio, 1978)

An alternative school providing academic, vocational, and life skills development in a non-competitive atmosphere. Involved written contracts, counseling, and positive reinforcement. Improvements seen in attendance, test scores, and grades.

North Little Rock School

Weekly small group gatherings around activities of common interest and group sessions. Positive results obtained for truancy and GPA. (Research shortcomings indicated.)

Sunnyside (Pima County Project)

Goal was to develop strategies for truants and to improve school atmosphere and interpersonal skills. Few changes occurred at post-test.

Opportunities for Youth in Education (OYE)

Relevant curriculum based primary at Chicano population--utilizing increased family involvement. Improvements noted for attendance and dropout rates, and more participants were college bound. (Some methodological flaws noted.)

Focus Project

School within a school for low achievers and those with court or discipline referrals. Program involved family interaction sessions, work experience, and academic curriculum. Positive results on achievement, self-worth, and delinquency. (Program lacked a large number of participants.)

Upward Bound

Offered innovative curriculum, counseling, and cultural and recreational activities for underachievers. Evaluation found no relationship between participation and academic success. (Study was rigorous.)

Paducah (Louisville Consortium)

Provided personalized instruction, staff development, counseling, and parent involvement. Results included decreases in dropouts, suspensions, and discipline referrals and improvements in self-concept and academics. (No comparison group.)

KAPS

Program featured behavior modification, work-study, teacher "buddies," community liaison assistants, and staff training. Results were disappointing in terms of attendance and tardiness.

STAY

Helped low income students participate successfully in school through work-study programs, counselor guidance, social adjustment classes, curriculum and instructional revision, and after school activities. Results were not impressive, with increases in dropout and absenteeism rates.

Proponents of school-based programs with vocational emphasis cite attitude improvements (Gibboney, 1977), decreases in delinquent behavior (Anderson, 1978) increases in school retention rates (Woolfolk, 1971; Gibboney, 1977), and improved school attendance (Phoenix School District, 1975) with mixed results reported for attitudes (Anderson, 1978), attendance (Woolfolk, 1971) and dropout rates (Somers and Stromsdorfer, 1972). Most evaluations were flawed. Programs focusing on institutional change to increase academic success note improvements in academic achievement (Rodell, 1980; Readio, 1977; Brown and Wharton, 1978), attitudes (Brown and Wharton, 1978; Rojack and Erickson, 1978), attendance (Rodell, 1980; Readio, 1977; Brown and Wharton, 1978) and delinquent behavior (Readio, 1978; Brown and Wharton, 1978), but results are contradictory for achievement (Readio, 1976) and delinquent behavior (Readio, 1976; Brewer, 1967).

The reviewed studies suffered from a number of research problems including unequal pre and post periods, non-independent measures, and lack of control groups (or non-equivalent groups). Threats to internal validity included effects of history, maturation, testing, instrumentation, statistical regression, differential selection, etc.--most of which could have been eliminated by using a randomized control group.

Spence, Susan H., and Marziller, John S. "Social Skills Training with Adolescent Male Offenders II: Short Term, Long Term and Generalized Effects," Behavioral Research and Therapy, Vol. 19, 1981, 349-368.

Subjects were 76 adolescent male offenders ages 10-16 who demonstrated interpersonal skills deficits. They were randomly selected to Social Skills Training, a placebo group, or a control group. The social skills training group received 12 one-hour sessions over a six week period in small groups, involving use of instructions, discussions, modeling, role-playing, feedback, reinforcement, and homework tasks.

Social Skills Training resulted in improvements in some but not all skill areas. These were maintained at the three month follow-up. The social skills trained youths were significantly superior to placebo and control

group youths in terms of performance of basic skills at post-test, and evidenced less decline in social behavior for a short time period. However, little change was demonstrated on video-taped interview ratings, self-reported offenses, police convictions, or ratings of social workers.

Vintner, Robert D. "Education and Correctional Programs" in Time Out: A National Study of Juvenile Correctional Programs, University of Michigan: National Assessment of Juvenile Corrections, 1976.

Of the programs sampled, 15 of 16 institutions, 10 of 11 day treatment programs, and 2 of 13 group homes provided some educational facilities on their own grounds.

Schools were generally set up in one of three ways: a grade-level system, a non-grade-level system, or a combination of both. The grade-level system facilitated re-entry into community schools, and required less time for preparation of material. Use of a non-grade-level system provided more opportunities for overcoming difficulties encountered in previous schools, and promoted success.

Classroom subjects appeared to be more academic in focus than vocational. Individualized tutoring and programmed instruction were most often utilized. Supplementary education was offered most often in institutions. Of the 1,837 youths in the sample, only one-half of the youths in institutions had gone through eighth grade, compared with three-fourths of those in group homes and two-thirds in day treatment. The average grade retardation for institutional youths was almost two years. In institutions, 36 percent reported that their current school program was of little or no help, only 18 percent reported accordingly in day treatment or group homes. One-third of the institutionalized youths reported receiving little or no staff help with school.

These youths consistently showed serious difficulties with schooling. The overall findings seem to be discouraging. The authors blamed dissatisfaction with educational programs among institutionalized youths on the climate in the institution.

Wood, Paula C., Buescher, Thomas M., and Denison, Christina. Alternative Opportunity Program: Stemming Potential Delinquency in Young Adolescents, (incomplete cite).

The Alternative Opportunity Program is designed for junior high school students at risk of dropping out or becoming delinquents. Students are screened and participate voluntarily. Part of each day is spent in the regular school and part on the campus of Camp Oakland, a privately-funded treatment facility. The program consists of three major components: education, student support services, and guidance/management instruction for teachers and parents. Evaluation data show that grades and attendance improved with participation. Some of the crucial components of the program

appear to be the cooperation of regular school personnel, the voluntary nature of placement, inclusion of parents in counseling and support services, and the maintenance of a positive image for the program at the regular junior high school.