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AUTHOR Wang, M. C.; Haertel, G. D.; Walberg, H. J.
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ABSTRACT

Across the United States, innovative school-linked health and human service programs are being implemented to provide assistance to children and youth in high-risk contexts. The programs have sometimes been hampered by limited resources and isolation from other service providers. The development of collaborative programs promises to overcome some of these problems. This paper is a first attempt to establish an empirical database that documents the relative effects of collaborative school-linked services for children and their families. Three features that have been identified for collaborative programs are: joint development of an agreement on common goals and objectives; shared responsibility for the attainment of goals; and shared work to attain goals using the collaborators' expertise. There is no single model for collaborative school-linked services; programs should emerge from the needs of the populations they serve. The report summarizes evidence from 44 sources that describes collaborative school-linked programs. These studies are grouped into the six program areas of: (1) parent education and school readiness; (2) pregnancy prevention and parenting; (3) dropout prevention; (4) chemical dependency abuse and prevention; (5) integrated services; and (6) parent involvement. A review of these programs indicates that the complexities of the problems of at-risk children defy simple solutions, and that resources must be gathered from the community to address them. Empirical results from collaborative school programs are positive, but must be regarded cautiously until further evaluations are completed. (Contains 1 table and 31 references.) (SLD)

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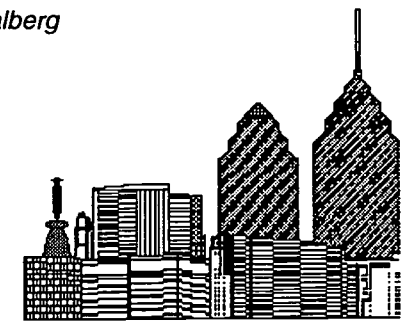
by M.C. Wang, G. D. Haertel, & H.J. Walberg



The National Center on Education in the Inner Cities

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 # 93-5e

The Effectiveness of Collaborative School-Linked Services

Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg

Across the U.S., innovative school-linked health and human service programs are being implemented to provide assistance to children and youth in high-risk contexts. These programs reach out to families beset by urgent problems including poverty, teenage pregnancy, single parenthood, substance abuse, limited health care, and inadequate and unaffordable housing (Levy & Copple, 1989). These problems place children at risk of school failure and, by necessity, place schools at the nexus of interconnected social problems.

For many years private and public community agencies provided psychological, financial, medical, and job training assistance to individuals and families in at-risk circumstances. These individual agencies, however, often have heavy caseloads, limited resources, and are isolated from other service providers (Chang, Gardner, Watahara, Brown, & Robles, 1991). Increasingly, educators have cautioned that schools alone cannot respond to all these problems (Council of Chief State School Officers, 1989). Kirst (1991a) argues that more systematic social policies must be developed. Schools, according to Kirst, can no longer rely on their own school boards and property taxes to guarantee the well- being of students. The creation of interagency collaborative health and human service programs can provide a high-quality response to the problems faced by students in at-risk contexts. These collaborative programs would be linked to schools and other service agencies to prevent the overburdening of schools or any single agency.

Interagency collaborative programs reach out to those at greatest risk and mobilize resources to reduce and prevent school dropout, substance abuse, juvenile delinquency, teen pregnancy, and other forms of modern morbidity. Nearly all school-linked programs develop mechanisms for effective communication, coordinated service delivery, and mobilization of resources of communities.

Most of these innovative collaborative programs, although enthusiastically embraced, have not provided evidence of replicable, long-term, beneficial effects on students. The lack of empirical information documenting the near- and long-term impact of these innovations is a source of concern.

Schorr (1988) concludes that: "Many Americans have soured on throwing money at human problems that seem only to get worse. They are not hard-hearted, but don't want to be soft-headed either" (p. xvii). Increasingly, policymakers recognize the high cost of social programs that are not evaluated for their immediate, intermediate, and long-term effects. In addition, evaluators often only assess the impact of narrowly defined services, but fail to assess the combined effects of multifocus interventions. Policymakers, school practitioners, and service delivery agencies do not have adequate information about program features and the implementation of innovative programs. This chapter presents a first attempt at establishing an empirical database documenting the relative effects of collaborative school-linked services serving children and their families in at-risk contexts.

A Chronology of Collaborative School-Linked Services

Since the 1890s, improving the plight of poor children and youth has been a goal of the U.S. public school system (Tyack, 1992). During the past century, social reformers advocated schools as the coordinating organizations that could orchestrate community services and remedy a wide range of social ills. Tyack (1992) documents historically the waxing and waning popularity of collaborative programs to meet the needs of students and their families. He finds that the past century has demonstrated that school reform, including the provision of health and human services, typically occurs from the top down, with advice from the community being ignored and programs intended for the poor frequently rooted in the wealthiest communities.

Reformers in the 1890s campaigned for medical and dental examinations, school lunches, summer academic programs, recreational activities, and school-based child welfare officers. Many of the health-oriented programs were based on a philosophy of improving the human capital of the nation's children and ensuring equal educational opportunity for them. However, reformers were not convinced of the capacity of parents, especially immigrant parents, to provide for all their children's needs. Sadly enough, social reformers rarely sought input from parents as they designed and implemented these new services.

Tyack (1992) notes that, while parents recognized the value of health and medical services provided, some parents found these programs intrusive and sometimes fought these reforms to preserve their own authority and ethnic, religious, or community values. Reactions to these programs varied. Conservatives expressed concern that the school's academic mission would be diluted. Progressive educators lauded the new services and believed that without these services students would drop out of school. Financial officers were apprehensive about identifying sources of money to support the new services. Despite these varied reactions, collaborative school-linked services were entrenched in our nation's public schools by the end of the 1930s.

During the Great Depression, budgets and staffs for school-based services, especially health services, increased (Tyack, 1992). By 1940, almost all cities with populations more than 30,000 had some form of public health service (70% run by the schools, 20% by health departments, and 10% by a collaboration of both). Other services, such as lunches and mental health, did not enjoy such sustained commitment. During the late 1940s, school lunches became the norm, despite conservative fears of excessive state control.

During the 1960s, education was viewed as a vanguard against poverty, and funding for school-based social services was increased. The collaborative programs established after World War II involved a greater degree of community participation. The enlarged role of the community, however, sometimes spawned conflicts among community groups, school officials, and service agencies. Despite these difficulties, Lyndon Johnson's "War on Poverty" had reached millions of children by 1970, and collaborative programs had found a niche in public schools. Collaborative programs received support from influential community groups; did not clash with prevailing instructional approaches; and met some of the needs of poor children.

Collaborative programs were transformed as they became established in the public schools (Tyack, 1992). In an attempt to address truancy, for example, some school social workers became part

of the schools' bureaucracy. This change represented a shifting of goals among school social workers. Some social workers began to employ models from community mental health agencies, while others began to work with more privileged clients. To ensure the political viability of new social services, legislators often generalized such programs. Thus, although services were delivered best in wealthy communities with large property tax bases, both the children of the wealthy and the poor became recipients of collaborative interagency services.

During the late 1960s and early 1980s, the role of the schools shifted toward producing students who could succeed in a competitive global marketplace. This shift, combined with significant budget cutbacks, reduced some of the social services provided. Despite the reduction in services, teachers accounted for 70% of all school employees in 1950, but only 52% by 1986, indicating that schools had become multipurpose institutions that looked beyond the academic performance of their students (Tyack, 1992).

Schools have become the location of choice for collaborative programs. Larson et al. (1992) argued that schools are enduring institutions that play a critical role in the life of communities. Having played this role in the past (Tyack, 1992), they can deliver services to children and their families in a less stigmatizing manner.

Not everyone views collaborative school-linked services as a panacea. In the controversial book *Losing Ground*, Charles Murray (1986) argued that government services, including school-linked programs, produced long-term negative consequences for recipients. He maintained, for example, that school-based health clinics contribute to the increase in the number of unmarried pregnant teenagers. Murray cautioned policymakers of the unintended effects that may emerge as government services proliferate.

Solutions other than collaborative school-linked programs have been proposed to reduce risk factors. Kirst (1991b) identified the use of vouchers, tax credits, a negative income tax, and less costly

approaches (such as traditional parental care for children) to ameliorate the myriad social ills surrounding students in at-risk contexts.

The Status of Collaborative School-Linked Services

In *Within Our Reach: Breaking the Cycle of Disadvantage*, Lisbeth Schorr (1988) gathered, over the course of 20 years, information from researchers, practitioners, administrators, and public policy analysts supporting the efficacy of collaborative programs. She identified risks that affect the lives of children, including premature birth; poor health and nutrition; child abuse; teenage pregnancy; delinquency; family stress; academic failure; persistent poverty; inaccessible social and health services; and inadequate housing, medical treatment, and schools. She argued that these risks require a societal response, not simply a response from the affected child or family.

Schorr held that there is plenty of information available on both risk factors and effective interventions to guide action. She identified three principles that capture the role and function of collaborations in breaking the cycle of disadvantage: (a) a call for intensive, comprehensive services that address the need of the "whole" child and the community; (b) a recognition that the family should be supported, not displaced, by other social institutions; and (c) a shift in efforts from remediation to early intervention and eventually to prevention. She is one of many advocates calling for collaborative integrated services to supplement the schools' role in society (see Behrman, 1992; Chang, Gardner, Watahara, Brown, & Robles, 1991; Hodgkinson, 1989; Melaville & Blank, 1991; Morrill & Gerry, 1991; National Commission on Children, 1991).

Levy and Copple (1989) documented the groundswell of state-level efforts to develop collaborative integrated services from 1975 to 1989. They record that in that 14-year period, 15 written agreements were prepared; 20 interagency commissions were formed to coordinate state and local agencies; 88 committees, commissions, and task forces were convened; and 63 collaborative programs and projects were implemented. The 24th annual Gallup poll provided further evidence of the popularity

of collaborative integrated services: 77% of adults favored using schools as centers to provide health and social welfare services by various government agencies ("Public in Poll," 1992).

Rationale for Collaborative School-Linked Services

Three features of collaborative programs have been identified: joint development of an agreement on common goals and objectives, shared responsibility for the attainment of goals, and shared work to attain goals using the collaborators' expertise (Bruner, 1991). Morrill (1992) asserted that collaboration requires concerted action, not just communication, among committed partners. In this chapter, collaboration is defined as the process of achieving a goal that could not be attained efficiently by an individual or organization acting alone.

Data on the incidence and costs of children's problems show an increase in some problems, such as delinquency and the need for foster care; other problems, such as dropout and teenage pregnancy rates, though decreasing, require higher benefit expenditures and result in reduced student productivity (Larson, Gomby, Shiono, Lewit, & Behrman, 1992). Such evidence supports the need for systemic responses to these problems. Melaville and Blank (1991) characterized the current system of organized services for children as crisis oriented, compartmentalized, disconnected, and decontextualized.

Instrumentalism and incrementalism are dominant political beliefs evidenced in policy toward at-risk children (Kirst & Kelly, 1992). Instrumentalism justifies social interventions by the economic or social returns they produce; as such, it becomes useful for society to invest in school-linked services as a method for meeting the needs of underprivileged families. Incrementalism justifies social interventions only in cases of extreme parental and familial dysfunction. These political beliefs support the use of collaborative school-linked services as a strategy to meet the complex needs of children and their families.

Key Features of Collaborative School-Linked Programs

Collaborative school-linked services can help guarantee the educational accomplishment of children (Wang, Haertel, & Walberg, 1993) by providing access to medical, psychological, and economic

resources that are necessary--but not sufficient--conditions for academic success. Many types of collaborative school-linked programs have been targeted toward the needs of students in at-risk contexts (Levy & Shepardson, 1992; Wang, 1990). Within GOALS 2000, the educational reform package supported by the Clinton administration, a number of projects include schools as centers of community services (U.S. Department of Education, 1993). Current collaborative programs include those directed at parents of young children, teenage parents, pregnant teenagers, dropouts, homeless children, and alcohol and drug abusers.

There is no single model for collaborative school-linked services (Levy & Shepardson, 1992), rather, new programs emerge out of the needs of children and families in local communities. Collaborative school-linked services can be described in terms of their goals, the services offered, the location of services, and the service providers. Another key feature of school-linked programs is whether they provide services alone, curriculum and instruction, or both.

Curriculum-based programs provide knowledge to recipients. Dropout programs, for example, may provide remedial instruction in basic skills, while teenage pregnancy prevention programs may provide information on conception, contraception, and pregnancy. Other curriculum-based collaboratives include programs that teach new mothers and fathers about their children's developmental stages, supply information on the effects of drug use, or provide educational activities for preschool children. Other curriculum-based programs not only present information but teach new skills. One example is the drug prevention program that not only provides knowledge about the effects of drug use, but also teaches refusal and coping skills.

Some collaborative school-linked programs are not curriculum based, but rather extend services to targeted clientele. These types of collaborative programs may provide health and mental health care, recreation, housing, day care, substance abuse treatment, transportation to appointments, and other services. Some programs provide both curriculum and services.

Collaborators in these programs also vary. Early collaborative programs brought teachers and parents together to improve the academic achievement of children. Other collaborative programs involve health care workers, social workers, psychologists, university researchers, business people, community volunteers, and peers.

Levels of Collaboration

Bruner (1991) identified four levels of collaboration that can occur in organizations. The first level describes interagency collaboration at the administrative level, often at top managerial levels in state and local governments. This level of collaboration often results in the creation of task forces, coordinating councils, changes in staff organization, or incentives and job evaluation systems to promote interagency collaboration. The second level of collaboration involves giving incentives to service delivery workers for working jointly with staff in other agencies. The third level of collaboration involves changes within a single agency. At this level, service workers are encouraged to help clients by going beyond procedures and rigidly applied rules. Supervisors are encouraged to interact collegially with service workers and handle individual cases in ways that promote a balance of responsibility and authority. The fourth level of collaboration exists between the client or family and service workers, in which they work jointly to identify needs and set goals in order to increase the self-sufficiency of the client.

Identifying Current Programs

This chapter summarizes evidence presented in 44 sources describing one or more collaborative school-linked programs. The literature search, selection of criteria, and coding procedures are described below.

The Literature Search

A search was made of practitioner and research journals in education, public health, public policy, and social services. A key article, "Evaluation of School-Linked Services" (Gomby & Larson, 1992),

identified 16 current collaborative programs. In addition, a search of the Educational Resource Information Clearinghouse (ERIC) and the 1992 annual conference program of the American Educational Research Association (AERA) was conducted and relevant papers were secured. Finally, 45 different organizations were contacted, including state and local agencies as well as project staffs. These efforts resulted in the identification of fugitive documents that were available only from the agency sources and not yet available in libraries.

Selection of Sources

A few basic criteria were used for the selection of sources for this study. All sources had to present results from programs involving school-based collaboration. In any single program, the school could be involved as the provider of academic services, the central location where families access social and health services, or the goal of the program (that is, readiness programs prepare children for success in school). The programs selected involved students from preschool to high school. Collaboration or integration among institutions and agencies was a primary aspect of programs selected. All the programs were designed to impact the lives of children or their families; were implemented in the past decade; and contained an outcome-based evaluation or some measurement of short-term, intermediate, or long-term results. Some evaluations contained process or implementation data, but process data were not required for a study or evaluation to be included.

Coding Procedures

The types of sources selected included narrative reviews, interventions, program evaluations, meta-analyses, and correlational studies. All were published since 1983. Ten features were coded for each source, including (1) type of source (for example, narrative review, program evaluation); (2) sample size, referring to the total number of clients or program sites (for meta-analyses and quantitative syntheses, the sample size refers to the number of studies analyzed); (3) at-risk contexts served by each program; (4) program goals; (5) outcomes; (6) collaborators or partners in the program; (7) type of

evidence reported (that is, numerical—including frequencies, percentages, means, and standard deviations; statistical—including hypothesis and significance testing; or qualitative—including anecdotes, client statements, or administrator perceptions); (8) data collection tools (that is, school records, interviews, performance tests, achievement tests); (9) nature of cost data (that is, none, minimal, and cost-effectiveness or cost-benefit analysis); and (10) curriculum-based versus services orientation or both.

The 44 sources identified were then divided into 6 categories: parent education and school readiness; teen pregnancy prevention and parenting; dropout prevention; chemical dependency and prevention; integrated services (programs designed to integrate services from a variety of different agencies and address multiple risk factors), and parent involvement. A list of bibliographic citations for each of the 44 sources synthesized is available from the Temple University Center for Research in Human Development and Education.[1]

Key Features of Six Program Areas

The 44 sources for the present review were organized under six programmatic areas. For each area, the at-risk context, goals, collaborators, and curriculum-based versus service orientation are reported in Table 15.1.

At-Risk Contexts. Many of the collaborative school-linked programs are targeted for urban, low-achieving, economically and socially disadvantaged children and youth and their families. However, the Dropout Prevention, Teen Pregnancy, and Chemical Dependency program areas are targeted for all students.

Goals. Parent Education and School Readiness, Teen Pregnancy Prevention and Parenting, Dropout Prevention, and Parent Involvement programs all focus resources on improving students' academic achievement. In addition, many of these programs have goals that focus on parental

[1] Bibliographic citations are available from Dr. Margaret C. Wang, Director, Temple University Center for Research in Human Development and Education, Ritter Hall Annex, 9th Floor, 13th Street & Cecil B. Moore Ave., Philadelphia, PA 19122.

competencies, family literacy, and child development and the provision of mental health and health services. Selected programs such as Teen Pregnancy and Chemical Dependency have particular goals associated with the program's special emphasis (for example, information on birth control; providing knowledge about alcohol and drugs).

Collaborators. Across all program areas, the most typical collaborators include schools, families, and social and health care workers. A supportive but less central role has been played by universities, private foundations, religious institutions, the media, law enforcement, and the business community. In the area of Chemical Dependency Abuse and Prevention, peers have played a key role in modeling refusal and coping skills, and in distributing current information on alcohol and drug abuse and prevention.

Curriculum Versus Service Orientation. In most collaborative school-linked programs, both curriculum and services are offered as part of the programmatic intervention. Parent Involvement programs are the exception, relying primarily on curricular interventions. The curriculum presented in most collaborative programs provides knowledge and new skills in the program's area of emphasis. Services most typically involve health care, transportation to appointments, and counseling.

Effectiveness of Collaborative School-Linked Programs

Each of the 44 sources identified in the literature search was categorized into one of the six program areas, coded, and its outcomes analyzed. A total of 176 outcomes were identified and examined across the 6 program areas. Of these, 140 (or 80%) indicated that the interventions produced positive results; 29 (or 16%) reported no evidence of change; and 7 (or 4%) indicated that the interventions produced negative results. These counts provide information only on the direction of the outcomes, not the magnitude of the program effects. Thus, both small, insignificant improvements and large, statistically significant effects are all counted as positive results, regardless of the size of the improvements. Nevertheless, these overwhelmingly positive results point to the success of programs that

promote collaborative school-linked services. The total number of outcomes and percentage of positive outcomes within each program are presented below.

Programmatic Area	Total No. Outcomes	No. Positive Outcomes (Pct.)
Parent Education and School Readiness	48	38 (79%)
Pregnancy Prevention and Parenting	6	5 (83%)
Dropout Prevention	36	26 (72%)
Chemical Dependency Abuse and Prevention	27	21 (78%)
Integrated Services	37	35 (95%)
Parent Involvement	22	15 (68%)

The percentage of positive outcomes ranged from 95% in Integrated Services to 68% in Parent Involvement programs. Even 68% is strong testimony to the efficacy of collaborative school-linked programs.

Effects on Program Participants' Cognition, Affect, and Behavior

The five types of outcomes commonly utilized in the research studies and evaluations of these collaborative school-linked programs are: attendance; achievement test scores, grade point average, and academic grades; reduced behavioral problems; self-esteem; and dropout rates.

In Parent Education and School Readiness programs there were positive outcomes reported for attendance (N=2), academic performance (N=6), reduced behavioral problems (N=5), self-esteem (N=2), and dropout rates (N=1). No negative outcomes were reported.

Results for Pregnancy Prevention and Parenting programs were very sparse. Although these programs attended, appropriately so, to reductions in pregnancy rates and increased knowledge of sexuality and child-rearing practices, they did not report the impact of their programs on most of the other common outcomes. They only reported a positive outcome on dropout rates (N=1). No negative outcomes were reported.

Dropout Prevention programs reported a positive impact of their programs on three of the outcomes: attendance (N=6), academic performance (N=7), and self-esteem (N=5). One negative outcome was reported (academic performance; N=1).

Chemical Dependency Abuse and Prevention programs also reported positive outcomes for attendance (N=2), academic performance (N=2), reduced behavior problems (N=2), and self-esteem (N=1). However, there were few instances of each type of outcome. Only one negative outcome was reported (self-esteem; N=1).

Studies of integrated service programs have employed research and evaluation designs that captured student performance using a wide range of outcomes. Integrated service programs reported positive outcomes in attendance (N=4), academic performance (N=8), reduced behavior problems (N=6), self-esteem N=2), and dropout rates (N=6). One negative outcome was reported (attendance; N=1).

Of the five most common outcomes reported (attendance, academic performance, reduced behavioral problems, self-esteem, and dropout rates), Parent Involvement programs have reported primarily academic outcomes. They document improved achievement outcomes (N=6) and attendance (N=1). No negative outcomes were reported.

Of all the documents measured by these collaborative programs, the most frequently examined was the academic performance of participants and the least examined was dropout rates. The total number of outcomes and percentage of positive outcomes by outcome types are presented below:

Type of Outcome	Total No. Outcomes	No. Positive Outcomes (Pct.)
Attendance	18	15 (83%)
Academic Performance (Achievement, GPA, Academic Grades)	36	29 (81%)
Reduced Behavior Problems	17	13 (76%)
Self-Esteem	12	10 (83%)
Dropouts	9	8 (89%)

Attainment of Program Goals

In addition to the programs' impact on students' cognitions, affect, and behaviors, each program was designed to attain specific goals, such as delay of first usage of drugs and alcohol, or reduction of pregnancy rates. The success of each of the programmatic areas in attaining its particular goals is presented below.

Programmatic Area	Total No. Outcomes	No. Positive Outcomes (Pct.)
Parent Education and School Readiness	30	22 (73%)
Pregnancy Prevention and Parenting	5	4 (80%)
Dropout Prevention	11	8 (73%)
Chemical Dependency Abuse and Prevention	19	14 (74%)
Integrated Services	9	9 (100%)
Parent Involvement	10	8 (80%)

These results indicate that collaborative programs largely achieve the goals they set forth. The effectiveness of each programmatic area is described below.

Parent Education and School Readiness. Eight sources were examined in this program area. These sources reviewed results from 18 programs. Results from the programs indicated program-favoring effects on maternal behaviors and mother-child interactions, while the effects on infant development were more modest. Program-favoring effects were also documented by an increase in community resources and parental participation in job training and employment. However, there were more mixed effects on

parental teaching skills; some programs were more successful than others, depending on the amount of time spent on maternal interactions and other specific behaviors. Overall, the programs demonstrated success in influencing the outcome domains closest to their emphases, for example, children's readiness for school, parenting skills, maternal development, and use of community resources. The long-term effects of these programs are more equivocal. Earlier evaluations of preschool programs have provided evidence that academic advantages fade over time but social and behavioral changes, such as incidence of grade retention, special education placement, and reduction of dropout rates, support the long-term effectiveness of parent education and school readiness programs (Lazar, Darlington, Murray, Royce, & Snipper, 1982).

Teen Pregnancy Prevention and Parenting. Five sources were identified describing results from seven collaborative programs. Results documented that clients' knowledge about pregnancy, reproduction, and birth control increased in all seven programs. One program showed evidence of a decreased willingness to engage in sexual activity at a young age. Generally, however, client attitudes toward the risk of additional pregnancies were not studied. Of the three programs that examined school retention of pregnant teenagers, all showed positive effects for immediate retention after the child's birth. Only one program examined the retention of mothers 46 months after delivery. Forty-six months after delivery, client dropout rate was comparable to pregnant teenagers who had not been enrolled in the program. Some increased concern about employment and decreased job turnover among the teenage parents were also documented. Two of the five programs for teenage parents that examined pregnancy rates showed a decline. Results from the two pregnancy prevention programs documented delayed age of first intercourse, decreased pregnancy rates, and increased use of birth control clinics and contraceptives.

Dropout Prevention. The overall national dropout rate has declined and, in the early 1990s, was at an all-time low (Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). In contrast, however, dropout

rates in urban areas have remained high, focusing attention on the need for innovative programs. In this programmatic area, 8 sources were identified and 25 collaborative programs were described.

All but one of the programs increased students' attendance rates, and most increased students' grade point averages and the number of credits earned. Of the studies that examined dropout rates, a decrease was noted. Only one program assessed the longitudinal effects of a prevention program on dropout rates, and it demonstrated a continuous decrease in dropout rates. Behavioral indices across all programs revealed weak effects, including no evidence of decreased suspensions and disciplinary referrals and low graduation rates. In addition, participating students did not have more definite graduation plans as a result of the program intervention. The study by Wehlage et al. (1989) explored the psychological effects of 14 dropout prevention programs. Their results revealed modest positive effects on social bonding, sociocentric reasoning, self-esteem, locus of control, and academic self-concept.

Chemical Dependency Abuse and Prevention. Nine alcohol and drug abuse sources were reviewed and they included results from 171 programs; results from a meta-analysis contributed data from 143 research studies and evaluations.

Students' use of drugs decreases as a result of participating in chemical dependency programs. The effectiveness of these programs on alcohol use is less clear. It appears that the most effective alcohol and drug prevention programs are those that deliver knowledge about the effects of alcohol and drugs to students in combination with refusal and coping skills.

Based on results of a meta-analysis of 143 programs, Tobler (1986) documents the superiority of chemical dependency programs that involve peers as collaborators. The superior effects of peer programs reflect the special influence peers have on one another's behavior and the value of specific skills training. Peer programs are successful at modifying student behavior regardless of the drug being used. Chemical dependency programs that use peers as collaborators are likely to decrease student drug use—or at lease decrease the likelihood that students will try new drugs.

Integrated Services. The six sources in this programmatic area reviewed results from six collaborative programs. Outcomes measured by the programs were diverse; a few used institutional change as evidence of program success, but most relied on student outcomes including grades, attendance, attitudes, and noncompliant behavior. Other outcomes included degree of parental involvement, teacher attitudes, number of services provided to clients, and number of referrals.

Among the types of institutional change that have been documented are: the linking of existing institutions, joint planning and budgeting sessions, creating a management information system, hiring of case managers, and the forming of business/school compacts.

Based on results presented in these programs, integrated services programs have positive effects on students' achievement tests, grades, dropout rates, and attendance. Of utmost importance is the finding that all of the six programs show large numbers of services being provided to children and families in at-risk circumstances. A second important outcome, which is rarely reported, is the effect of these programs on teachers. In the Jewish Family and Children's Services (1991) project, teachers reported that their knowledge of child development and sense of responsibility toward the children increased with program implementation. The evaluation conducted by Philliber Research Associates (1991), moreover, suggested that children who received intensive case management exhibited higher academic achievement and better work habits despite increased absenteeism.

Parent Involvement. The eight sources reviewed in this programmatic area represent results from more than 240 parent involvement programs. Two of the eight sources were meta-analyses: Graue, Weinstein, and Walberg (1983) summarized results from 29 programs and White, Taylor, and Moss (1992) from over 200 programs. The remaining six sources reviewed included four program evaluations, one correlational research study, and one intervention study.

Results from the studies suggest that parent involvement programs have weak to moderate positive effects on improving children's academic performance. Although these programs improved parental involvement in children's education, their impact on academic achievement was mixed.

The two meta-analyses provide conflicting evidence about the effects of parent involvement programs. Graue et al. (1983) found that programs to improve parent involvement and home environments in elementary school have large effects on children's academic learning. On the other hand, employing results from early intervention programs for preschoolers, White et al. (1992) concluded that "average effect sizes of treatment versus no-treatment studies in which parents are involved are about the same as the average effect sizes of treatment versus no-treatment studies in which parents are not involved" (p. 118). Based on these findings, they concluded that there is no basis for parent involvement programs to claim cost effectiveness.

Evaluating Collaborative School-Linked Programs

Many studies of collaborative school-linked programs suffer from high attrition, control groups that are not comparable, and a wide range of unique outcomes, some of which are based on measures of unknown reliability and validity. Little implementation of process data is reported. In addition, many evaluation reports do not document the magnitude of program effects nor include information on costs, making it difficult to judge the practical significance of the programs.

Oftentimes collaborative school-linked programs make use of varied (and sometimes conflicting) goals, assumptions, definitions, procedures, and analytic tools. Additionally, studies of these programs often are designed by teams of researchers from several disciplines and social and health care agencies which hold a service delivery perspective.

Innovative programs are designed to achieve specific outcomes. Systematic evaluation of the program's implementation is central to the validation and improvement of the program. The traditional treatment/yield paradigm and classic pre- and posttest control group experimental designs, while useful

from a conclusion-oriented evaluation perspective, are not sufficient in determining whether a program has been successfully implemented. Evaluations must include documentation of: What elements of the program need to be implemented (and at what levels) to make the program work? What are the critical features of the programs that should be observed to validate program implementation? What barriers interfere with the successful implementation of the program?

Evaluating the collaborativeness of these programs posts major challenge. There are few direct measures of collaborativeness. Should it be measured by linkages among institutions, by the accessibility of services to clients, or by the satisfaction of the collaborators?

The evaluation of collaborative school-linked programs requires identifying a wide range of client outcomes. Not only should evaluators be concerned with process and implementation data, but also with the measurement of improvement in student academic achievement, school attendance, graduation rates, decreased pregnancy rates, coping skills, reduced behavioral problems, and other cognitive, affective, and behavioral outcomes. Most importantly, collaborative programs need to document whether their clients are able to readily access more community resources.

As with most reform efforts with broad agendas, collaborative school-linked programs are faced with many, often competing, demands. Strategic planning, responsible implementation, and, above all, practical wisdom are required as these innovative programs unfold.

Conclusions

Five conclusions are drawn from the current review of collaborative school-linked programs.

- The challenges that face children, youth, and families in at-risk contexts are generated from a mix of cultural, economic, political, and health problems. The complexity of these conditions defies simple solutions. To solve these problems resources must be gathered from the community--public and private agencies, local and state health and human services departments, and businesses and religious institutions--and coordinated with the resources available in schools;

- Narrow plans that reform a school's instructional program alone will not solve these problems. Policymakers, practitioners, and the public must be made aware of the importance of integrating community resources with the educational resources available in schools;
- Empirical results from current collaborative school-linked programs are positive, but have to be regarded cautiously. Many of these programs have not been rigorously evaluated. Evaluation and research studies of these programs often contain inadequate descriptions of the program components, use a limited number of outcomes, have few direct measures of collaboration, do not collect process or implementation data, do not have comparable control groups, have high rates of attrition, and report little data on program costs. The studies of collaborative school-linked services that are available are those that are published. Given that published evaluations and studies generally report positive results, the results reported in this chapter may be biased in a positive direction. Further research and more rigorous evaluation is needed to arrive at general policy conclusions;
- Better implementation data are needed to validate the effectiveness of these programs. Evaluation reports must include documentation of: linkages among agencies, the changing roles of administrators in schools and service agencies as they collaborate, the changing role of staff, and the establishment of a management information system; and
- There is little communication among researchers, policy analysts, policymakers, and practitioners concerning the growing knowledge base on collaborative school-linked services. Operational strategies and tactics need to be identified to support collaborative school-linked services. These strategies should link district administrators, middle management, principals, teachers, and service delivery agencies so that key information is accessible to all collaborators.

Collaborative school-linked services are becoming a common feature of the educational reform landscape. Although the programs demonstrate positive outcomes, the results must be treated with guarded optimism until results from more rigorous evaluation and research studies are available.

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Table 15.1: Key Features of Six Program Areas

Program Area	At-Risk Context	Goals	Collaborators	Curriculum vs. Service Orientation
Parent Education & School Readiness (8 sources; 18 programs reviewed)	Uneducated, low-income families with young children often in urban areas; teenage parents.	Parental competencies; family literacy; children's academic achievement; provision of health and social services.	Social and health-care workers, schools, private foundations.	Both—(a) curriculum includes child development, child rearing practices, & parental self-help; (b) services include home visits by nurses & social workers, transportation to appointments, counseling, health screening, access to resource centers.
Teen Pregnancy Prevention & Parenting (5 sources; 7 programs reviewed)	First-time, unmarried, low income, pregnant teenagers, a few designed for ethnic minorities in urban areas.	Pregnancy Prevention: provide information about birth control, sex, & pregnancy in order to prevent pregnancy; provide contraceptives. Teenage Parenting: provide knowledge about pregnancy, birth control, child development, & parenting skills; promote completion of mother's high school education, promote employability & job skills for mothers.	Schools, home nurses, Planned Parenthood; other health and human service agencies; obstetricians, midwives, pediatricians, and nutritionists; university medical schools.	Pregnancy Prevention Programs: Both—(a) curriculum includes information on birth control, sexuality, and family life education; (b) services include counseling, medical exams, and contraceptives. Teenage Parenting: Both—(a) curriculum includes information on birth control, sexuality, childcare, & health education, prenatal care, job training; (b) services include prenatal care, transit to appointments, nurse home visitations, parenting programs.
Dropout Prevention (8 sources; 25 programs reviewed)	High school students often in urban areas, with history of high absenteeism and course failure; also students not able to conform to school expectations; sometimes students involved in criminal activity, chemical dependency or teenage pregnancy.	Increase student attendance; reduce dropping out; identify & contact truant students; increase students' academic performance; increase probability of students attending college or entering job market.	Schools; parents; juvenile justice departments; businesses; social services; and occasionally universities and colleges.	Both—(a) curriculum includes remedial basic skills and vocational education programs; (b) services include counseling, mentoring, health services, phone calls for absenteeism, preparation for GED, and coordination of Job Training Partnerships Act.
Chemical Dependency Abuse and Prevention (8 sources; 171 programs reviewed)	All students; some designed especially for urban minorities; Native Americans and children of alcoholics.	Reduce consumption of alcohol & drugs; increase knowledge about alcohol & drugs; promote coping skills against pressure to abuse substances; teach responsible drinking habits, develop self-esteem.	Peers; schools; community and social agencies; media; counselors; health care workers; police and businesses.	Both—(a) curriculum includes information on alcohol & drugs; social and decision-making skills; (b) services include peer & other counseling, alcohol- and drug-free activities; and support groups.
Integrated Services (6 sources; 6 programs reviewed)	Wide range urban & rural students; delinquent children; children from dysfunctional families; urban minorities; low-achieving youth.	Coordinate services (often coordinating services is an intermediate goal toward ends such as lowering dropout rates); oftentimes a single program encompasses multiple goals.	Schools; universities; businesses; state & local governments; foundations and nonprofit agencies; health and mental health care providers; community and religious institutions; parents; peers.	Both—(a) curriculum includes a variety of knowledge & skills; (b) services include vocational counseling, health care, health and mental health services, and case management.
Parent Involvement (8 sources; over 240 programs reviewed)	Families of children from preschool to high school; frequently, urban, economically and socially disadvantaged families.	Foster greater parental concern for children's educational achievement; improve academic achievement; encourage greater parent involvement in children's education; create more intellectually stimulating home environment; foster close family relationships.	Schools; parents; mental health providers; businesses; media; universities.	Primarily curriculum—parenting skills; child development information.

The National Center on Education in the Inner Cities

The National Center on Education in the Inner Cities (CEIC) was established on November 1, 1990 by the Temple University Center for Research in Human Development and Education (CRHDE) in collaboration with the University of Illinois at Chicago and the University of Houston. CEIC is guided by a mission to conduct a program of research and development that seeks to improve the capacity for education in the inner cities.

A major premise of the work of CEIC is that the challenges facing today's children, youth, and families stem from a variety of political and health pressures; their solutions are by nature complex and require long-term programs of study that apply knowledge and expertise from many disciplines and professions. While not forgetting for a moment the risks, complexity, and history of the urban plight, CEIC aims to build on the resilience and "positives" of inner-city life in a program of research and development that takes bold steps to address the question, "What conditions are required to cause massive improvements in the learning and achievement of children and youth in this nation's inner cities?" This question provides the framework for the intersection of various CEIC projects/studies into a coherent program of research and development.

Grounded in theory, research, and practical know-how, the interdisciplinary teams of CEIC researchers engage in studies of exemplary practices as well as primary research that includes longitudinal studies and field-based experiments. CEIC is organized into four programs: three research and development programs and a program for dissemination and utilization. The first research and development program focuses on the *family* as an agent in the education process; the second concentrates on the *school* and factors that foster student resilience and learning success; the third addresses the *community* and its relevance to improving educational outcomes in inner cities. The focus of the *dissemination and utilization* program is not only to increase awareness of the issues CEIC is researching, but, more importantly, to ensure that CEIC's findings are known and used to ensure the educational success of inner-city children, youth, and families.

CEIC Senior Researchers

Margaret C. Wang
Director, CEIC and CRHDE
Professor of Educational Psychology
Temple University

Aquiles Iglesias, *Associate Director and Senior Research Associate*, CEIC
Associate Professor and Chair,
Speech-Language-Hearing
Temple University

Leo Rigsby, *Associate Director and Senior Research Associate*, CEIC
Associate Professor of Sociology
Temple University

Lascelles Anderson
Senior Research Associate
Professor and Director,
Center for Urban
Educational Research and
Development
University of Illinois
at Chicago

David Bartelt
Senior Research Associate
Associate Professor of
Geography and Urban
Studies and Director,
Institute for Public
Policy Studies
Temple University

William Boyd
Senior Research Associate
Professor of Education
Pennsylvania State
University

Gayle Dakof
Research Associate
Visiting Assistant Professor
of Counseling Psychology
Temple University

H. Jerome Freiberg
Senior Research Associate
Professor of Curriculum
and Instruction
University of Houston

Michael Goetz
Research Associate
Associate Professor
of Economics
Temple University

Geneva Haertel
Research Associate
CRHDE
Temple University

Shwu-Yong Huang
Research Associate
University of Houston

Howard Liddle
Senior Research Associate
Professor of Counseling
Psychology
Temple University

Diana Oxley
Senior Research Associate
CRHDE
Temple University

Maynard C. Reynolds
Senior Research Associate
Professor Emeritus of
Educational Psychology
University of Minnesota

William Stull
Senior Research Associate
Professor and Chair,
Department of Economics
Temple University

Ronald Taylor
Senior Research Associate
Associate Professor
of Psychology
Temple University

Herbert J. Walberg
Senior Research Associate
Research Professor
of Education
University of Illinois
at Chicago

Hersholt Waxman
Senior Research Associate
Associate Dean for Research
and Associate Professor of
Curriculum and Instruction
University of Houston

Kenneth Wong
Senior Research Associate
Associate Professor
Department of Education
and Social Sciences
University of Chicago

William Yancey
Senior Research Associate
Professor of Sociology
Temple University

Andrea Zetlin
Senior Research Associate
Associate Professor
Special Education
California State University,
Los Angeles

FOR MORE INFORMATION, CONTACT JESSE R. SHAFER, INFORMATION SERVICES COORDINATOR (215/204-3000)

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