In view of current interest in and the legislative push for collaborative reforms in education, this paper reviews quantitative and qualitative evidence on the effectiveness of providing school-linked comprehensive services for elementary school students and their families. A preliminary taxonomy of features of collaborative school-linked services is presented. After a review of the literature, six urban sites were selected that represented three important dimensions of school-linked services: (1) single-site versus multisite programs; (2) publicly versus privately sponsored programs; and (3) direct service providers versus referral networks. All six programs had clearly defined goals that guided the collaboratives' actions. Each had identified its clientele carefully. In all six collaboratives, case management and the use of interdisciplinary teams to link students to services were used for service delivery. In all six sites, prevention was emphasized, and all six programs focused on multiple, rather than single, problems. Two-thirds of the programs mentioned stakeholder participation as a key to successful planning. A procedure that was essential to successful implementation was the sharing of client and family confidential material among the cooperating agencies and the school. Based on successful practices in these programs, 17 are made for program implementation or replication. (Contains 2 tables and 13 references.) (SLD)
Effective Features of Collaborative School-Linked Services for Children in Elementary School: What Do We Know From Research and Practice?

by Margaret C. Wang, Geneva D. Haertel & Herbert J. Walberg

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INTRODUCTION

The educational reforms of the 1990s have been marked by more coherency than earlier waves of school reform. The establishment of national education goals, identification of content and student performance standards, and development of state-level curriculum frameworks and new forms of assessment have all served as tools to systematically reinforce reform efforts and to upgrade our nation's schools. No effort, however, has captured the essence of systemic reform more completely than the implementation of collaborative school-linked services.

Collaborative school-linked services require altering the way services are delivered. Service integration calls for service providers to work together in coherent ways to bring improved educational, medical, mental health, and legal services to students and their families. Inherent in the concept of school-linked services is the recasting of children's services from the perspective of overcoming children's "academic," "physical," or "physiological" problems to "cases" of children and families with a variety of needs. Labels and artificially separate categories of problems are replaced with a broad-based working framework that redefines client needs and increases interprofessional collaboration.

Public schools in the 1990s, especially those in urban areas, are challenged to effectively serve large numbers of children placed in a variety of at-risk circumstances. The quality of life available to these children and their families has been threatened by poverty, lack of employment opportunities, disorderly and stressful environments, poor health care, children borne by children, and highly fragmented patterns of services (Wang, Haertel, & Walberg, 1994). Increasingly, researchers and practitioners have been identifying factors that strengthen the resources and protective mechanisms and foster healthy development and learning success among children in at-risk circumstances. New research studies have focused on the ecology of cities and point to the role of communities in fostering resilience (Masten, 1994; Wang, Haertel, & Walberg, 1994).

Attention is being paid to ways to coordinate school and community services in order to make a more integrated network of resources and protective mechanisms available to children and their families. Students facing many adversities benefit from increased access to the range of services provided in collaborative arrangements. Public schools, especially those serving families in at-risk circumstances, are candidates for school-linked services. Collaborative networks are believed to reduce the co-occurring risks that surround these children and their families.

When school-linked services are successfully implemented, communitarian values replace concerns for bureaucratic expediency, which have been the predominant focus of efforts to improve social service delivery and school operations. School improvement efforts of the past three decades, for example, have contributed much to the bureaucratization of public schools, which, in turn, has contributed not only to excessive regulations, but also to a sense of isolation among teachers. The isolation faced by teachers has been well documented (Bird & Little, 1986; Lortie, 1975; Rosenholtz, 1985). Goodlad (1984) provides a compelling, sometimes discouraging description of 38 U.S. schools. He captures teachers' isolation by characterizing classrooms as cells in which teachers practice their craft. The separate classrooms are symbolic of the relative isolation teachers experience from one another and from sources of ideas beyond their own background experience. Teachers traditionally have been cut off from other teachers and certainly other professionals in detecting student problems and discerning solutions. Flinders (1988) points out that teachers sometimes isolate themselves in an effort to preserve the time and energy needed to respond to instructional demands. However, this self-imposed isolation ultimately undermines the quality of instruction teachers can deliver by reducing the new ideas available to them.
While teachers understandably place students' instructional problems near the top of their list of concerns, other issues such as students' medical needs, family illiteracy and dysfunction, and poverty do not receive attention. Collaborative school-linked services can reduce the burden on classroom teachers to deal effectively with problems that are outside the purview of instruction, but which, if unattended, indirectly reduce children's potential to learn. Collaborative school-linked services make a variety of resources more accessible to children and their families.

In the light of burgeoning interest and the current legislative push for collaborative reforms, this paper reviews both quantitative and qualitative evidence on the effectiveness of providing school-linked comprehensive services for elementary school children and families. A preliminary taxonomy of features of collaborative school-linked services is presented. Several imperatives to successful implementation of school-linked comprehensive services programs are discussed.

COLLABORATIVE SCHOOL-LINKED SERVICES FOR ELEMENTARY SCHOOL CHILDREN: THE STATE OF THE PRACTICE

Although there has been widespread interest and actual implementation of coordinated school-linked comprehensive services for children and youth placed in a variety of risk circumstances across the country, the research base on the implementation and effects of coordinated school-linked services is glaringly lacking. Wang, Haertel, and Walberg (1993) reviewed 44 articles, book chapters, and monographs that reported results of several hundred collaborative programs, which spanned preschool through high school. Program areas most directly serving K-6 students included: Parent Education and School Readiness; Teen Pregnancy Prevention and Parenting; Dropout Prevention; Chemical Dependency Abuse and Prevention; Integrated Services; and Parent Involvement.

Although early results from quantitative and qualitative studies have shown a pattern of positive program outcomes, little light was shed on the day-to-day practices that are implemented in collaborative programs. Toward these ends, six case descriptions of school-linked programs were developed in an effort to identify practices, policies, and implementation requirements of effective school-linked programs for elementary school children and their families. The selection and description of program sites and the results of the cross-site analyses are summarized below.

Selection and Description of Program Sites

In order to better understand what contributes to the success of collaborative school-linked services, a literature search was conducted to identify case studies, program descriptions, and evaluations of K-6 collaborative school-linked programs. Only programs that had been implemented since 1988 were considered for inclusion. Approximately one dozen documents were located that contained enough detail to permit some analysis of features that contributed to their success or failure. Of these 12 programs, six were selected that represented three important dimensions of collaborative school-linked services: (a) single- versus multisite programs; (b) publicly versus privately sponsored programs; and (c) direct service providers versus referral networks. The anonymity of the six sites has been preserved because, although we had access to print documents describing program operations, we have not yet conducted on-site observations nor interviews to verify the presence or absence of features that were not discussed in the print documents. Some general characteristics that briefly describe each of the program sites are presented below.
Case #1: School District-Sponsored, Single-Site Program

The program site is an elementary school in a midsize city in the western part of the country. The school serves a poor neighborhood that is ethnically diverse. Implemented approximately three years ago, the program was funded by private foundations, state and local government agencies, and the Department of Health and Human Services. The primary goal of the program is to provide educational, medical, mental health, and counseling services to children and their families, relying on city and county agencies, as well as the local school. Case management is the primary method for service provision.

Case #2: State-Sponsored, Multisite Program

This multisite program serves elementary, intermediate, and high schools in a large western state. Over 70% of the schools served are K-6. The program's primary goal is to reduce the fragmentation of the educational, medical, mental health, and social services provided to children and their families. Students served are from diverse ethnic backgrounds. They exhibit high poverty levels, and many are linguistic minorities. Funding was available from a state initiative for approximately $20 million that supported a large number of multiple-year grants. There was no single model of school-linked services that was implemented in these many sites. Some programs, for example, relied on close relationships among family advocates, students, and their families, while others relied on referral systems and medical screening programs that addressed multiple sites. Nearly all program sites employed case management.

Case #3: Alternative School, Single-Site Program

This K-6 alternative school located in a large urban city on the east coast serves approximately 400 ethnically diverse students. Most students are from impoverished families. The full-service school has two campuses: one urban, the other in a residential campus in a pastoral setting. The school is founded on a philosophy of meeting the needs of the "whole child," in terms of her/his academic, emotional, and physical well being. School personnel have a strong child development orientation that permeates the school culture. This year-round school has a site-based management governance structure. The school has a health clinic on site, as well as a family center and a resource center. An extended day program is offered. Parent involvement is a prominent component of the alternative school. The school is funded by a combination of district funds and support from a nonprofit organization. Case management is employed.

Case #4: Privately Sponsored, Multisite Program

This program focuses on sixth graders in six elementary schools. The east coast urban community served by these schools has a high unemployment rate. The community has been troubled by youth who are substance abusers, school dropouts, teenage parents, and violent offenders. The program was implemented in 1990. Its overall goal is to provide a variety of care for students and families through the delivery of social and health services. The school has also developed an extensive curriculum to help students achieve career and life goals. After-school programs and a parent and community outreach program are also available. Funding for the program is provided by private foundations, state/local matching funds, and in-kind resources. Case management is a key component in the program.

Case #5: Privately Sponsored, Single-Site Program

This single-site elementary program is located in a large, urban, southeastern city. The community served by the program is besieged by poverty, homelessness, high mobility, evictions, and hunger. The program was implemented in 1991. Its goal is to enhance health care, social services, and
educational services for students, their families, and the community. The program emphasizes multidimensional outcomes for students, parents, the school, and community. A critical component of the program is a referral and information network that is composed of a family advocate and other community members. Case management is practiced. Funding is provided by a grant from a private foundation, and assistance from the public schools, a local university, and the State Department of Health and Rehabilitative Services.

Case #6: State-Sponsored, Multisite Program

This multisite program is located in the southeast. Approximately 130 centers located at or near schools have implemented this program. Initiated in 1988, the program encourages children and their families to overcome children's learning problems by addressing medical and psychological needs. The program uses an interdisciplinary team and provides referrals to medical and mental health services. Case management is used. All students in the area served by the school are eligible for services. Approximately 20% of the students are eligible for free school meals. The program was funded through a $10 million appropriation from the state legislature, state appropriations through school districts, and a private foundation.

A Taxonomy of Features of Collaborative School-Linked Services

A taxonomy of features of collaborative school-linked services was identified, based on the research synthesis (Wang, Haertel, & Walberg, 1993) and a review of selected background articles specifically addressing the design and implementation features that are most likely to foster effective collaborative programs. (The articles reviewed are listed in Table 1.) These features were classified into seven broad categories that are briefly described below.

The scope of the collaborative features within each category is specified. These categories are not exclusive; thus, some features appear in more than one category. For example, "provision of services beyond the school day and school year" is a feature of collaboratives categorized within "Location of Services" and "Changing Roles of Schools and School Personnel."

I. General Characteristics that Foster Effective Collaborative School-Linked Services

A variety of characteristics associated with successful school-linked collaboratives were identified, including underlying philosophy; general operating mechanisms; common-sense practices; features of facilities; orientation toward clients; orientation toward collaborators; and governance structures.

II. Coordinating Multiple Agencies

This category covers issues related to the involvement and management of agencies and institutions representing diverse professions that must work together to meet the goals of the collaborative program. Among the leading concerns are screening clients, confidentiality, case management, data collection, identification of evaluation criteria, and shared management of the collaborative's procedures and operations.

III. Location of Services

Where the services provided by a collaborative school-linked program are located is a critical feature of these programs. Some programs provide direct services in schools or other nearby sites; other programs provide referral networks to specialized providers at a number of separate locations. This
category includes different types of location sites; availability of services (hours and days); and provision of outreach to students, families, and community members.

IV. Changing Roles of Schools and School Personnel

The roles of teachers, school administrators, and agencies are distinguished. The types of expanding services provided by the collaboratives are identified, and the impact of these new services on school personnel's existing roles is articulated.

V. Role of Collaboratives Toward Families

Characteristics of collaboratives that provide services to families are listed. Issues of cultural sensitivity, availability of services, expanded services, and identification of outcomes used in evaluating impact are included.

VI. Financing of Collaboratives

Approaches to financing collaboratives are identified. Innovative uses of money and nonmoney resources, budget reallocations, and other techniques to increase funding and conserve existing resources are listed.

VII. Guidelines for Evaluation

This category covers theoretical, methodological, and practical features that are used in formative (process) and summative (impact) evaluations of collaborative school-linked services.

Salient Features Included in the Design of Six Collaborative School-Linked Programs Serving Elementary School Children and Families

Table 2 is a matrix of collaborative features employed in the design of the six programs included in our analysis of effective collaborative school-linked programs for elementary school children and families. The rows are the features identified in our taxonomy of collaborative school-linked services. The six columns represent the six collaborative program sites. As previously noted, these program sites represent a range of applications. They were selected for our review because they have been widely employed in school-linked services. Nevertheless, it is important to point out that the data presented and conclusions drawn must be regarded as preliminary. The effectiveness of these programs has not been established.

As shown in Table 2, an "X" in a particular row of the matrix indicates the presence of a feature in the print description of the program. The absence of an "X" indicates that the information was not available. In some cases, these sites may have implemented particular features, but because they were not described in the print documents, they are not designated in the matrix. Follow-up studies about program implementation provide further indicators to differentiate between cases where a program did not implement a feature versus those that implemented the feature but did not describe it in their print materials. After the matrix of features was completed, we identified those features that were frequently utilized in K-6 collaborative school-linked services. Results of the cross-site analyses are presented below in terms of the seven categories in the taxonomy.
I. General Characteristics that Foster Effective Collaborative School-Linked Services

All of the six programs had clearly defined goals that guided the collaboratives' actions. Each of the programs had carefully identified the clientele they served. In all cases, children and their families were the target populations; in a few programs, members of the larger community could also receive services. Identifying clientele early in the life of the collaborative is crucial when families are involved. Parents may bring other children to the collaborative site who are not in the school community, but who are in need of medical or social services. The parents themselves may be in need of assistance. Decisions need to be in place that provide explicit guidance on who is eligible to receive resources from the collaborative.

The methods of choice for service delivery, in all six collaboratives, are case management and the use of interdisciplinary teams that link students to services. The philosophy of all the collaboratives is to emphasize prevention and not just react to crisis. All collaborative sites focus on multiple rather than single problems, such as substance abuse, teenage parenting, or economically disadvantaged families. Five of the six collaboratives provided students and families access to services and programs during after-school hours, on weekends, and during school vacations. In five of the six sites examined, the primary needs of students, families, and the community were distinguished, and their specific concerns were addressed.

In two thirds of the collaboratives, inclusion of all stakeholders was mentioned as a key to successful planning. All six collaboratives reported support from the school districts' central office and the top levels of the service agencies involved. Two thirds of the collaboratives commented on the value of negotiated written agreements that explicitly outlined the new roles, procedures, and responsibilities for collaborators.

Two thirds of the collaboratives stressed the importance of the sense of ownership that evolves when local program sites develop the collaborative program, as opposed to a "top down" mandate that may limit the design of the program. The establishment of a new "culture" among collaborators, wherein the central problems and concerns of the organization are recast, is an important stage in the collaborative's development. It is analogous to the establishment of a new school culture, a process that is deemed essential in turning around low-achieving schools. Although only half of the collaborative site descriptions explicitly stated that there was an intention to create a new culture, five of the six sites described establishing new norms, rules, and a shared vision. (See "II. Coordinating Multiple Agencies" in Table 2). The development of a "shared vision" is facilitated by a lengthy planning period that provides many opportunities for collaborators to establish new contacts and loyalties. One half of the program sites described ample planning time as facilitating their successful implementation.

One procedure that is essential to successful implementation is the sharing of client and family confidential material among the cooperating agencies and with the school itself. Five of the six programs described the importance of resolving client confidentiality issues. If left unaddressed, issues of confidentiality can impede successful implementation. Other barriers to successful implementation include not including all key stakeholders in planning; the school bureaucracy or another single agency dominating the collaborative and subordinating other collaborators; inadequate space and resources for program operation; and little opportunity for collaborators to interact.
II. Coordinating Multiple Agencies

One of the key functions that collaboratives must master is the coordination of multiple agencies with the school bureaucracy. A number of key features have been identified in the research and theoretical literature as essential in setting up a functional collaborative program, including an intake system that is based on the concerns of all the agencies involved; common eligibility criteria; confidentiality waivers; case management procedures; good technical assistance to help familiarize collaborators with new roles; formal interagency agreements; guidelines for shared data collection and management; and shared management of all collaborative operations (policy setting, hiring, supervising, evaluating, generating funds). As demonstrated in Table 2, only a handful of these features have been widely applied. In our analyses, the most widely implemented practices for coordinating multiple agencies were use of confidentiality waivers; case management procedures; shared management of all collaborative operations; provision of technical assistance; and the value of establishing a collaborative culture. The problems of coordinating multiple agencies with the school bureaucracy are sufficiently documented in program descriptions. However, the application of procedures to meliorate these difficulties is not widespread.

III. Location of Services

The collaboration literature describes many variations for the location and delivery of services to targeted clients. The evaluation of California’s Healthy Start program (Wagner et al., 1994) uses four designations to identify collaborative services: school-site family resource centers; satellite family service centers; family service coordination; and youth service programs. These designations capture the variability of the six programs we analyzed. As indicated in Table 2, the multisite cases employ more than one type of location for service delivery. In contrast, the single-site cases use the school as a resource center where a variety of direct services are supported. Special client needs may require students being transported to hospitals, clinics, or other specialized locations.

There is very limited provision of emergency services and basic needs to students and families in crisis. This absence of emergency services may reflect the “prevention orientation” that most collaboratives seek to advance. However, given the adverse circumstances that besiege many of the neighborhoods and communities being served, meeting clients’ needs for food, shelter, transportation, and child care is increasingly crucial. In the past, schools rarely, if ever, filled the role of providing basic needs to students and their families. It remains to be discovered whether school-linked services can respond to these types of emergency demands. In our cross-site analyses, only one site responded fully to these types of emergencies. On the other hand, families did receive outreach services from all six of the programs. However, little evidence was available on whether families made necessary follow-up visits for medical and mental health services after their initial referral. If clients do not make the follow-up visits, the benefits of the services may be lost. Keeping records on whether clients attend follow-up appointments would provide useful data.

IV. Changing Roles of Schools and School Personnel

One of the most demanding accommodations made during the implementation of collaborative school-linked services is the integration of an interdisciplinary team of professionals into the school environment. The difficulties of interprofessional collaboration have been described (Corrigan & Udas, 1994). Teachers sometimes resist having other professionals, such as a case manager, involved in key decisions that affect the lives of their students. On the other hand, professional groups, such as physicians, social workers, attorneys, and child protective services workers, who are active participants
in the collaborative, are expected to deal with the bureaucratic regulations and governance structures that characterize most school settings. Reports of interprofessional conflicts among various groups of professionals are increasingly common.

During the implementation phase of collaborative school-linked services, leaders must clarify the evolving roles of teachers, school administrators, and members of the interdisciplinary team. In the six programs we examined, four report that teachers make frequent referrals to the collaborative staff. In two sites, teachers report having ample opportunity to work with the interdisciplinary teams on student cases. In these same two sites, members of the interdisciplinary teams find that teachers provide valuable information that aids them in identifying troubled children and families. Even though teachers were regarded in some sites as valuable contributors, they did not always receive feedback from the service providers. Only two of the six programs reviewed report that teachers receive information from collaborating service providers that could be of use in planning instruction or altering their classroom management.

In five of the six sites, the school administrators are not excessively burdened by the management demands of the collaboratives. Although the management of collaboratives is being researched, the expanding role of teachers and other collaborative staff is yet to be fully explored. For example, the roles of teachers and the collaborative staff in facilitating normative transitions between schools (preschool to elementary school or elementary to middle or junior high school) have not been addressed. Nor have the roles of teachers and collaborators been identified in accommodating the cultural, ethnic, and linguistic identities of students and families. Collaborative participants are beginning to define their different roles, but many concerns and issues that could benefit from attention have not been identified. The use of educational policy trust agreements may help negotiate these new roles, but to date there is no evidence among the six programs we examined that such agreements are in place.

As schools begin to offer services that extend beyond the school day and throughout the year, excessive time demands may be placed on teachers and collaborative staff to provide academic and socially beneficial activities during after-school hours. Teacher burnout is already an acknowledged difficulty in the teaching profession, and administrators who manage year-round schools report burnout as well. Staffing and supervising collaborative school-linked programs that serve clients in at-risk circumstances for 10 to 12 hours a day, 365 days a year, are demanding responsibilities. Concerns about time and effort appear in case studies and process evaluations of these collaborative programs.

Little has been written about the interaction of site-based management procedures and choice programs with collaborative school-linked services. Although site-based management structures, such as the use of school leadership councils, school advisory councils, and bilingual advisory councils, reflect the inclusion philosophy necessary for successful collaboration, the interaction of these two reform movements has not been documented. Both site-based management and choice programs encourage parent involvement and support a bottom-up reform strategy. How these reforms facilitate collaboration is not yet clear.

V. Role of Collaboratives Toward Families

Five of the six cases we reviewed regard the families of students as legitimate clients of the collaboratives. The program descriptions contain examples of family members’ personal needs being served, including help finding employment, avoiding eviction, receiving transportation, and providing child care. Three of the six programs report increased sensitivity to the families’ cultural backgrounds.
Collaborative services must be tailored to the clients' culture. One common example of cultural awareness reported in program descriptions is the provision of translators in collaboratives that serve large numbers of children from linguistic minorities.

Five of the six programs conduct family outreach. The provision of emergency services, while crucial to family well-being, has not been widely implemented among collaboratives. Only one of the programs we reviewed provide basic needs and emergency services. In general, the collaborative school-linked services movement has embraced the provision of services to whole families. This approach, along with serving clients' multiple needs and providing easy access to direct services, captures the essence of collaborative school-linked services. However, collaboratives serving students, families, and communities in very adverse circumstances may have to expand their mandate to provide basic needs and critical emergency services.

There is an underlying assumption among designers of collaboratives that the clients being served, including families and community members, will be empowered by the resources provided. However, one innovative approach that finds little support among the programs we examined was helping parents in the community become licensed as child care providers. If empowerment is truly a goal of collaboratives, it will be necessary to increase the capabilities of clients to become self-sufficient. Documenting the increased independence of clients will be helpful to determine the long-term outcomes of these programs.

VI. Financing of Collaboratives

Much has been written about new approaches to financing collaboratives. Based on our cross-site analyses, four of the six collaboratives received substantial funds from operational grants. Three of the six collaboratives have been successful tapping into existing dollars allocated to children's services. This is more typical of multisite than single-site, highly innovative programs. Decategorization and contract-for-service arrangements are not being used in the six programs we examined. Next to the use of operational grants, the most popular financing strategy was staff reassignment. Staff reassignment typically involves the outstationing of employees, such as social workers and medical personnel, in the school setting.

Although much has been written about innovative financing, collaboratives are only beginning to try these new strategies. Collaboratives require the use of funding approaches that provide stability for the implementation phase and sufficient resources to foster real change. Relying on ephemeral research grants and state year-to-year funds does not provide sufficient stability to promote the establishment of effective collaborative school-linked services.

VII. Guidelines for Evaluation

The practice of evaluating collaborative school-linked services has been rapidly evolving. Gomby and Larson (1992) published an article that called for formative and summative evaluation of all collaborative programs. They cautioned school personnel, policymakers, and program designers about the high cost of not evaluating collaborative programs—both in terms of dollars and foregone opportunities. Process evaluation can be used to shape and revise the program during its implementation. Outcome evaluation can be used to judge the program's effectiveness after it has been operating for several years.
Three principles of evaluation design that were applied in all, or most, of the program evaluations we reviewed included: (a) clear definition of goals; (b) use of an evaluation design that demonstrates causation; and (c) use of multiple outcomes. Three of the six programs reported using the following evaluation practices: use of outcomes that reflect the goals of all agencies involved; use of site-based evaluation designs determined at local rather than federal and state levels; and use of process evaluation in the early years of the program, followed by outcome or summative evaluation to determine effectiveness.

Although most programs record the number of services provided to clients, the role that collaboration plays in linking students to services must be documented. Developing a direct measure of collaboration is desirable, but to date we have found little evidence of such measures being used. Unobtrusive measures of collaborative efforts and client satisfaction would also be helpful in documenting program performance. Programs that rely heavily on standard outcomes, such as student achievement, attendance rates, and dropout rates, will not capture many of the changes that are occurring in collaboratives. In addition, program evaluators need to use designs that establish causality of program effects and gather several waves of data (longitudinal design) to eliminate sources of invalidity that can reduce the import of the evaluation findings.

RECOMMENDATIONS FOR ACTION

Based on findings from our analysis of six case studies and the research base (Wang, Haertel, & Walberg, 1994), we have identified 17 features of school-linked programs as critical areas for consideration in serving elementary children and families. These features and recommendations for action are presented below.

- The needs of students in at-risk circumstances are best addressed by collaborative programs that are prevention-oriented, serve multiple needs, and target the client's family for intervention. Collaborative programs are well suited to foster resilience among students and families in adverse circumstances.

- The creation of a collaborative culture is believed to ensure the commitment of school faculty and agency service providers. When collaborative staff agree to a shared and articulated mission, they foster consensus, communication, and collegiality.

- The use of case management reduces the fragmentation of service delivery. It preserves an orientation toward serving the needs of the whole child.

- An ample planning period during which the perspectives of all stakeholders can be taken into account is essential to the healthy development of the collaborative. During this planning time, written agreements describing new roles, responsibilities, and procedures can be developed to guide the collaborative's operation. The use of needs assessment can be a helpful planning tool.

- Resolving issues of client and family confidentiality facilitates information sharing by collaborative staff.

- The provision of adequate resources (dollars, time, space, professional expertise, enthusiasm) is essential to program operation.
The establishment of shared decision making and management procedures contributes to a sense of equal partnership among school and agency personnel. Concerns such as establishing common eligibility criteria and common outcomes for evaluative purposes must be addressed.

Well-crafted technical assistance should be provided to collaborative staff. Potential topics include increased communication and collegiality; goals clarification; cultural, ethnic, and linguistic sensitivity; client confidentiality; service providers sharing information with teachers that can enhance their instruction and classroom management; and new roles and responsibilities for participating in the collaborative.

The location of services is a central issue in the effectiveness of collaboratives. Co-location of services reduces fragmentation of service delivery and enhances the likelihood that clients will receive the array of services needed. Masten (1994) and Wang, Haertel, and Walberg (1994) present evidence of the co-occurring risks that besiege students and families in at-risk circumstances. Collaborative programs that provide co-location of services can respond efficiently to the needs of populations beset by multiple academic, medical, and mental health problems.

The evolving role of school personnel in collaborative school-linked services challenges existing school structures. Teachers' involvement in referrals and case management procedures needs to be defined. Feedback from service providers to teachers could be used to tailor instruction and classroom management techniques to meet the needs of troubled students. The roles of teachers and school personnel in collaboratives could be further expanded to better meet the demands of students and families in at-risk circumstances.

More time demands are placed on teachers, school administrators, and collaborative staff members as services located at school sites are expanded beyond the school day, on weekends, and during school recesses. Adequate resources must be available to meet the collaborative's expanded schedule.

Serving families, including the needs of individual parents, is believed to be essential to the success of collaborative school-linked services. A range of medical, mental health, legal, and social services are being provided to students and families. Rarely are basic needs, such as food, shelter, and transportation, as well as emergency services made available to clients.

Financing of collaboratives requires access to stable funding streams that are not susceptible to the vagaries of year-to-year state funds or limited research funds. Collaboratives need to access current monies set aside for children's services (Farrow & Joe, 1992).

Formative and summative evaluations of collaborative school-linked services must be conducted. Summative (or impact) evaluations, if possible, should be longitudinal and employ a research design that can demonstrate causation. Formative (or process) evaluations should be used to document the implementation of the programs for purposes of revising the programs' design and procedures.

A variety of outcome measures should be employed in evaluations of collaborative school-linked services. Outcome measures should represent the goals of not only the schools, but all the participating agencies. Family-based outcomes should be collected. Student achievement scores, attendance data, and dropout rates can be used for comparisons in multisite program evaluations.
but additional outcomes should be collected. Direct measures of collaboration, numbers and kinds of services provided, unobtrusive measures, and client satisfaction can provide additional information to the collaborative’s success.

• Collaborative school-linked services can meet the needs of students and families in at-risk circumstances especially well. Collaboratives address multiple problems of clients who are frequently in communities that are marginated educationally, economically, and socially. The collaboratives provide a supportive environment that can foster resilience by ensuring that some of the physical and social needs of students and their families are met. Because collaboratives frequently have a resource center or family center on the school premises, there are more opportunities for clients to receive social support; to identify role models; and to be exposed to new information, skills, and social activities. All of these opportunities can foster resilience (Wang & Gordon, 1994).

• A national research center should be established to determine the effectiveness of collaborative school-linked services. This research center should conduct definitive studies to determine the costs and benefits of collaborative school-linked services, as well as studies of effective collaborative practices and policies.
References


Table 1
Background Articles Reviewed in Developing a Taxonomy of Features of Collaborative School-Linked Services


Table 1 (cont’d)


### Table 2
Features of Collaborative School-Linked Services

#### I. General Characteristics that Foster Effective Collaborative School-Linked Services

| Identify primary purpose of collaborative: clearly defined goals (i.e., remediation; early intervention; prevention; provision of general support, such as information and training) | x | x | x | x | x |
| Identify clientele: universal coverage, children and families in at-risk circumstances, family centered vs. child/youth centered, only children and families in the school itself or the whole community in which the school is located | x | x | x | x | x |
| Emphasis on prevention, not just crisis management | x | x | x | x | x |
| Programs not single-focused (i.e., drug use prevention, pregnancy prevention) but rather serve multiple needs | x | x | x | x | x |
| Collaborating agencies have a long history of working together | x | |
| Collaborating agencies have a sense of shared resource dependence | | x | x |
| Belief that costs are reduced through collaborating | | x | x |
| Cross-agency sharing of goals; reconceptualizing of "central problem facing organizations" | x | x | x |
| Use of needs assessment to determine what particular services are required | x | x | |
| Use of case management and interdisciplinary teams to link students with services; case managers call other service providers for assistance | x | x | x | x | x |
| Collaborative has an ample planning period | x | x | x |
| Strong goal-oriented leaders hired to build alliances between participating agencies and schools | x | x |
### Table 2
Features of Collaborative School-Linked Services (cont'd)

#### I. General Characteristics that Foster Effective Collaborative School-Linked Services (cont'd)

<table>
<thead>
<tr>
<th>Use of explicit, formalized, negotiated written agreement defining roles and responsibilities</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solve issues of client and family confidentiality</td>
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<tr>
<td>Inclusion of all stakeholders in planning</td>
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<tr>
<td>Collaborative maintains its authority by not being absorbed into school bureaucracy</td>
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<tr>
<td>Family orientation vs. student/youth orientation</td>
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<tr>
<td>Sense of ownership when local program sites develop collaboratives</td>
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<tr>
<td>Development of a &quot;top-down&quot; mandate and a &quot;bottom-up&quot; approach</td>
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<tr>
<td>Programs are accessible to clients after school day/year ends</td>
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<tr>
<td>Student vs. community clients have to be targeted and primary needs for each group identified</td>
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<tr>
<td>Adequate space for program</td>
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<tr>
<td>Adequate resources to operate program (including staff time, facilities, use of computer systems)</td>
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<tr>
<td>Many opportunities for collaborating staff to interact</td>
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<tr>
<td>Continuity in collaborative and school leadership</td>
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<tr>
<td>Support from top levels of educational and agency hierarchies</td>
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</tbody>
</table>
### II. Coordinating Multiple Agencies

<table>
<thead>
<tr>
<th>Use of assessment or intake system that is based on multiple agencies</th>
<th>x</th>
<th>x</th>
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</thead>
<tbody>
<tr>
<td>Use of confidentiality waivers; sensitivity to property rights in terms of each profession's concern for clients</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Use of common client eligibility criteria</td>
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<td>x</td>
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<tr>
<td>Shared management of collaborative operations, policy setting, hiring, staff development, supervision, evaluation, and seeking funds (local vs. state initiatives have different concerns)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Use of Advisory Board to facilitate information and resource sharing</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Use of negotiating and adjudicating skills to reach decision among competing agencies</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Use of case management as opposed to categorizing clients according to separate problems</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Identification of common outcomes that reflect the goals of all agencies for purposes of formative and summative evaluation</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Guidelines on information collection and sharing; address security issues and data parameters in management information systems</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Formal, interagency agreements, including carefully worded definitions of new procedures, roles, responsibilities, activities, and time frames</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Establish a collaborative &quot;culture&quot; that includes a shared vision, goals, norms, and values</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Provision of well-crafted technical assistance that reflects the &quot;deep&quot; structures of the collaboration</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
### III. Location of Services

**School-site family resource center:**
Services are provided in a school from a range of public and private agencies, including medical, mental health, legal, social services, youth organizations, law enforcement, private foundations, colleges, universities, and religious institutions.

**Satellite family service center:**
Services are not located at an operating school, but rather at another site. Satellite centers can differ in the number of direct services they provide. Some provide referrals to community resources at other sites.

**Family service coordination:**
Use of referrals to an interdisciplinary team of service providers, who are not located at a single site.

**Youth service program:**
Focus on medical, psychological, and social needs of adolescent students. Sometimes based on target clientele, such as pregnant teens, teenage parents, and substance abusers. Services may be located at a school or off campus.

Collaborative provides easy access to child care, food, shelter, transportation, and other emergency services.

Collaborative provides services after school and throughout the calendar year.

Collaborative provides outreach to students and families.
Table 2
Features of Collaborative School-Linked Services (cont'd)

<table>
<thead>
<tr>
<th>IV. Changing Roles of Schools and School Personnel</th>
<th>Case #1, School District-Sponsored, Multi-Site Program</th>
<th>Case #2, Site-Sponsored, Multi-Site Program</th>
<th>Case #3, Site-Sponsored, Single Site Program</th>
<th>Case #4, Site-Sponsored, Single Site Program</th>
<th>Case #5, Site-Sponsored, Multi-Site Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers make referrals to collaborative staff</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Teachers meet frequently with collaborative staff</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Staff from agencies value school staff and see them as an informed resource to identify youth and families in at-risk circumstances</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Teachers receive feedback from other agencies and collaborators about how to alter their instruction and classroom management practices to better serve the needs of troubled students</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Use of site-based school management model (leadership team's decisions cannot paralyze principal or collaborative leader; must be consensus; no-fault problem solving)</td>
<td></td>
<td></td>
<td></td>
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<td>x</td>
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<tr>
<td>Collaborative avoids consuming excessive time of the senior school administrator</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Collaborative is not regarded as a negative by students and parents who have had previous school experiences and are at risk of dropping out</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Students/parents choose the school (choice program)</td>
<td>x</td>
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<tr>
<td>Collaborative facilitates transition of students and families from preschool to elementary programs and from elementary to middle or junior high school</td>
<td></td>
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<td>x</td>
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<tr>
<td>Teachers interface with service providers and parents and community representatives to ensure that the student's cultural and linguistic background is taken into account</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
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<tr>
<td>Use of educational policy trust agreements</td>
<td>x</td>
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<td></td>
<td>x</td>
</tr>
<tr>
<td>Collaborative provides services after school and throughout the calendar year</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
### Table 2
Features of Collaborative School-Linked Services (cont'd)

#### V. Role of Collaboratives Toward Families

<table>
<thead>
<tr>
<th>Feature</th>
<th>Case #1: District-Sponsored, Single Site Program</th>
<th>Case #2: District-Sponsored, Multi-Site Program</th>
<th>Case #3: State-Sponsored, Single Site Program</th>
<th>Case #4: State-Sponsored, Multi-Site Program</th>
<th>Case #5: Privately Sponsored, Single Site Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide access to child care, food, shelter, transportation, and other emergency services</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Provide parent and family outreach; provide outreach to ensure follow-up visits</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Help neighborhood parents become licensed as child care providers</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Ethnic, cultural, and linguistic appropriateness of services provided to clients</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Serve personal goals of families, not just narrowly focused programs on parental competence and child development</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>x</td>
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</tbody>
</table>

#### VI. Financing of Collaboratives

<table>
<thead>
<tr>
<th>Financing Option</th>
<th>Case #1: District-Sponsored, Single Site Program</th>
<th>Case #2: District-Sponsored, Multi-Site Program</th>
<th>Case #3: State-Sponsored, Single Site Program</th>
<th>Case #4: State-Sponsored, Multi-Site Program</th>
<th>Case #5: Privately Sponsored, Single Site Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access existing dollars being spent on children’s services (short-term financing using grants or year-to-year state funds is insecure and discourages planning and evaluation)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Use of contracts for services: redistributive mechanism to channel resources to agencies</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Decategorization, use of federal categorical programs as funding streams by removing narrow limitations (which permits a more responsive array of services)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Staff reassignment (i.e., outstationing of social workers who report to the Department of Social Services to serve families in a school)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Budget reallocations (i.e., use of foster care and residential treatment dollars for prevention programs to stop family disintegration)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Operational grant as &quot;glue money&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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</tr>
</tbody>
</table>
### VII. Guidelines for Evaluation

- Clear definition of goals
- Use of a number of outcome measures beyond school achievement that reflect goals of all agencies involved
- Keep records on number and types of services provided
- Use direct measures of collaboration
- Use family-based outcomes (i.e., improving access to basic education, achievement in functional literacy, obtaining GED, parent involvement, gains in income and employment)
- Site-based evaluation rather than evaluation design and outcomes determined at the federal and state levels
- Need to establish good record-keeping system
- Use of process evaluation in first few years of collaborative's existence, then summative (or impact) evaluation
- Participant satisfaction should be considered an important outcome
- Use, when possible, of evaluation designs that demonstrate causation
- Employment of longitudinal research design

<table>
<thead>
<tr>
<th></th>
<th>Case 1: Sponsored</th>
<th>Case 2: Single Site Program</th>
<th>Case 3: Multi-Site Program</th>
<th>Case 4: School District</th>
<th>Case 5: Single Site Program</th>
<th>Case 6: Multi-Site Program</th>
<th>Case 7: Federally Sponsored</th>
<th>Case 8: Single Site Program</th>
<th>Case 9: Multi-Site Program</th>
<th>Case 10: Federally Sponsored, Multi-Site Program</th>
</tr>
</thead>
</table>
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 ensure that CEIC's findings are known, but also to create a crucible in which the Center's work is shaped by feedback from the field to maximize its usefulness in promoting the educational success of inner-city children, youth, and families.

CEIC Senior Associates

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

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

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

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

William Boyd
Professor of Education
Pennsylvania State University

Gayle Dakof
Visiting Assistant Professor of Counseling Psychology
Temple University

H. Jerome Freiberg
Professor of Curriculum and Instruction
University of Houston

Michael Goetz
Associate Professor of Economics
Temple University

Geneva Haertel
Senior Research Associate, CRHDE
Temple University

Howard Liddle
Professor of Counseling Psychology
Temple University

Maynard C. Reynolds
Professor Emeritus of Educational Psychology
University of Minnesota

Leo Rigsby
Associate Professor of Sociology
Temple University

Judith Stull
Associate Professor of Sociology
La Salle University

William Stull
Professor and Chair, Department of Economics
Temple University

Ronald Taylor
Associate Professor of Psychology
Temple University

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

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

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

William Yancey
Professor of Sociology
Temple University

Andrea Zetlin
Associate Professor
California State University, Los Angeles

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