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ABSTRACT This executive summary of a report on the Ways to Improve Schools and Education (WISE) Project study of local school-business collaboration focuses upon the private sector voluntary efforts to help schools become more effective through staff development/inservice education. Topics covered in the report include: (1) rationale for the project; (2) statement of the problems and goals for WISE; (3) site selection (limited to three school districts in the southwest); (4) development of liaison teams; (5) findings in literature in regard to school-business collaboration; (6) findings from WISE sites; (7) reports from the working conferences; (8) guidelines identified by issues and problems; and (9) conclusions and recommendations from sites and liaison teams. (JD)

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**Education and Private Sector Collaboration
to Help Meet
School Staff Development/Inservice Education Needs**

Executive Summary of the 1983 Annual Report

WAYS TO IMPROVE SCHOOLS AND EDUCATION PROJECT

December 1983

Staff:

**A. L. King
Sylvia Lewis**

**DIVISION OF FAMILY, SCHOOL, AND COMMUNITY STUDIES
David L. Williams, Jr., Director**

**SOUTHWEST EDUCATIONAL DEVELOPMENT LABORATORY
Preston C. Kronkosky, Executive Director
Austin, Texas**

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This report is based upon research supported by the National Institute of Education (NIE) under Contract No. 400-83-0007, P-4. It represents a summary of the Annual Report submitted to NIE for the Ways to Improve Schools and Education Project on December 30, 1983. The statements, findings, and conclusions contained herein are those of authors and do not necessarily reflect the views of the funding agency.

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I. INTRODUCTION

A. RATIONALE

Public schools in the United States are being asked to make major reforms in order to improve the quality of education. But the costs of many of these reforms are too expensive for the funds currently available to schools. In an era of declining enrollments, diminishing public confidence and fewer federal funds, schools are experiencing increasing costs. Many communities have refused to raise additional tax or bond money for school improvement.

Many school districts are nevertheless using community resources to upgrade the quality of the education they provide. These districts have formed partnerships with local business, industry, labor, higher education, and other organizations in order to use local resources more effectively.

This is an executive summary of a report on the Ways to Improve Schools and Education (WISE) Project's exploratory study of local school-business collaboration to develop human resources and enrich the quality of education in the community. The focus of the study is on private sector voluntary efforts to help schools become more effective through staff development/in-service education.

In-service education for teachers and other school staff has always been important to school improvement (McLaughlin & Marsh, 1978). Such staff development is even more important now when schools need to make the most effective use of available resources, especially human resources.

Improvements in education generally focus on the concepts of "quality education" and/or "effective schools." The following definition and discussion are offered as a basis for discussing these concepts:

Quality education is the outcome of effective schools and includes a range of experiences that (1) focus on learner academic achievement, (2) employ a variety of teaching methods, (3) promote learning on the part of all students, (4) take into account individual differences, (5) produce learner competencies in terms of measurable knowledge and skill outcomes, and (6) develop positive student behavior in and out of the classroom.

The effective schools concept is complex and produces considerable disagreement among educators who discuss it. There does seem to be consensus, however, on some assumptions regarding effective schools (Westbrook, 1982, pp. 7-10):

(1) Effectiveness is on the same qualitative continuum which includes ineffectiveness.

(2) The factors which make a school effective are common to all schools. Effectiveness depends upon the nature of the factors and how they are implemented. These factors are:

Attitudes	Instruction	Staff
Community Involvement	Leadership Roles	Students
Facilities	Parent Involvement	Other factors
Goals	Skills	

(3) Effective and less effective schools both have "central actors."

These include:

School staff

Parents

Facilities

Students

Community

(4) Effective schools research has been primarily descriptive and does not determine cause and effect.

Some of the effective schools research focuses on equal educational opportunity for disadvantaged children. Several of these studies indicate that integrated schools with supportive teaching-learning conditions tend to have several positive results with regard to racial attitudes and self-concept and that academic achievement rises for the minority children, and relatively advantaged majority children continue to learn at the same or higher rate (Weinberg, 1977a, 1977b; Edmonds, 1979; Epps, 1979). As Kirk and Goon noted (1975), the conditions--identified in studies reviewed by themselves, Katz (1964), St. John (1970) and others--are not unique to success for minority students in a desegregated setting, but that "they are vitally important to academic success for anyone in any educational setting."

In general, the same characteristics which correlate with effective schools also correlate with integrated schools. It seems that these characteristics--high expectations, success begetting success, positive behavior management and environment, cooperative staffs, and a strong leader who has a definite goal/plan and communicates well with staff and consumers (e.g., students, parents, community)--also correlate to corporate effectiveness. These characteristics are similar to the "Lessons from America's Best-Run Companies" which are discussed in Peters and Waterman's widely read and often quoted In Search of Excellence (1982). And, as in much of the effective schools literature, the authors do not discuss how a company can develop the attitudes, skills, knowledge, and conditions needed for excellence/effectiveness.

There has been during the past decade and a half, however, considerable progress in human and organizational development which indicates that much is known about the conditions which correlate with effectiveness and how to develop the attitudes, skills, and knowledge necessary for these conditions. Much of this expertise is embodied within the related concepts of andragogy and human resource development (HRD).

As practiced in the public and private sectors, andragogy, the art and science of teaching adults (Knowles, 1980, pp. 40-42), is based increasingly on assumptions of respect for individuals and their capacity for professional growth. Other andragogical assumptions which have strong implications for inservice education and other adult educational practices, are that as individuals mature (Knowles, 1980, pp. 43-45):

1. their self-concept moves from one of being a dependent personality to one of being self-directed;
2. their reservoir of experience becomes an increasingly rich resource for further learning;
3. they attach more meaning to those learnings they gain from experience than to those they acquire passively;
4. their time perspective changes from one of postponed application, and their orientation towards learning shifts from one of subject-centeredness to one of performance-centeredness.

Many American businesses have adopted these assumptions for developing human resources. In an era of increasing competition from abroad and of an economy shifting from an industrial base to one of service and information processing, the most important resources are no longer natural resources or even capital, but human resources (Dahl and Morgan, 1983, p. 3).

There is a widely-held and spreading belief that many corporations are providing high quality and cost-effective HRD inservice education for their employees. Some educators believe that the corporate sector has exceeded the education sector in the recognition of how learning is instrumental to economic and organization productivity. Herman Niebuhr, Jr., Vice President of Temple University, has said that business successes in this area display "evidence of educational innovation, both substantive and methodological, far beyond the models and innovations of higher education," and have made corporate educational enterprises competitive with public education (1982). There is evidence to support Scobel's (1980) assessment of the progress in HRD in the last two decades:

HRD has probably learned more about learning and the potential for high-level development than evidenced in either the applied educational or academic research arenas. HRD has come of age. It trains well. It educates well. It develops well.

Human resource development is one of the ways in which the private sector can assist school staffs in becoming more effective. And if staff development is to improve the productivity of the system, it is likely that the several parts of the system will need inservice. Administrators and all others of the district and school staffs have important parts to play in establishing and maintaining a climate for teaching and learning. It would seem that human resources are as critical to educational effectiveness as they are to business productivity.

Not all school inservice training is of poor quality. Many schools and districts have excellent staff development programs that can serve as models for emulation. Even the best of programs, however, can still be improved. It is well known that schools, districts, and other educational agencies can learn much from each other. Sharing, between public education and the private sector can be not only mutually beneficial, but can also benefit the general community.

This is certainly not to say that all corporate training is appropriate for schools. Rather, the suggestion is that one of the ways in which business and industry have profited from public education is by borrowing those staff development practices and research which could be adapted as part of corporate staff training. And, in turn, corporate inservice practices and research have elements which can be used to benefit schools. This seems particularly appropriate during a period in which business and industry have relatively more resources for staff development than do schools (Wise, 1981).

Most business contributions to schools have been in the nature of executives doing voluntary consulting work, funding other consultants and short-term programs for students, and most often, providing funds, advice, and course-related job experience for career and/or vocational education courses. A literature search for school-business relationships identifies more sources on career and vocational education and the transition of youth from school to

work place than other topics. The literature includes little information on adapting business training practices for use with school staffs except with regard to career and vocational training.

B. STATEMENT OF THE PROBLEM

The problem addressed by the Ways to Improve Schools and Education Project is the need for models and guidelines for effective education and private sector collaboration in staff development/in-service education.

C. GOAL OF THE WAYS TO IMPROVE SCHOOLS AND EDUCATION PROJECT

The FY83 goal of Project WISE can be stated as follows:

To establish a base of information from which to develop an efficient process for cost-effective collaboration of businesses, state education agencies (SEAs), local education agencies (LEAs), and higher education agencies (HEAs) in in-service education for school staffs.

D. LIMITATIONS

Project WISE is a pilot project to explore an innovative concept for a collaborative teaming of several public and private entities and to develop a set of prototype models and guidelines which will be tested in FY84. The Project's limitations are generally inherent in the pilot nature and small scale of its efforts.

Reports of progress with respect to organizations and implementation of site collaboration are limited to mostly verbal reports from site contacts. The several differences in backgrounds and stages of development of school-business collaboration at the three sites precludes comparability among them. Generalizing about findings and developments with the three sites must be limited and done with care.

II. PROCEDURES

A. SITE SELECTION

Three districts were selected, one from each of three states, New Mexico, Oklahoma, and Texas, of the six-state Southwest Educational Development Laboratory (SEDL) region. To limit travel costs, priority was given to districts which were closer to SEDL and/or readily accessible. Other criteria were as follows:

- 1) Local education agency (LEA or school district)
 - Have a need(s) which might be met by effective training of school staff.
 - Make this staff available for training.
 - Provide a staff member, with responsibility in school staff development, to serve on the project liaison team for that site.
- 2) Higher education agency (HEA)
 - Be in close proximity to the site LEA.
 - Provide a staff member, with knowledge and experience in staff development/in-service education for LEAs and business, for a project liaison team.

- 3) State education agency (SEA)
 - Provide a staff member, with responsibilities for staff development, for the liaison team.
 - Assist with dissemination of information about project outcomes to LEAs in that state.
- 4) Business
 - Provide a staff member, experienced in staff training, for the liaison team.
 - Voluntarily provide staff training to meet the needs identified by the LEA.

Three districts were selected: (1) Austin, Texas; (2) Albuquerque, New Mexico; and (3) Oklahoma City, Oklahoma.

Contact with each of the three sites began with the superintendent of their public schools. Along with their agreement to participate in the project, superintendents selected their Liaison Team Members. Selection of the other team members was made in collaboration with the school representative. The Albuquerque Public School Liaison Team member preferred to work with its local Chamber of Commerce in Project WISE, because there was already a working relationship between the two agencies in a vocational education Career Guidance Institute. Similarly, the Oklahoma City Public Schools preferred to collaborate with its local Chamber of Commerce. These two agencies had established an Adopt-A-School Program in Oklahoma City in 1979, but it had lost momentum as some key personnel had retired or changed jobs.

In Austin, Project WISE staff and representatives of the Austin Independent School District and the Austin Chamber of Commerce (Austin CC) decided that the Project would include the Austin CC, even if it were decided later that only one business would be involved in the training of school staff. This approach would make it easier to identify and select a business and to involve other businesses later.

The three site cities involved in Project WISE range in size of population from 332,239 for Albuquerque to 417,000 in Oklahoma City, with Austin in between at 386,000. Albuquerque has, however, the largest student population, with a total of approximately 75,330. Austin has the next highest with approximately 56,314. Oklahoma City has approximately 41,649 students.

The three school districts are similar with regard to percentage of Anglo/white student populations. Each has a slight majority of Anglos, with Austin at 52.3%, Oklahoma City at 53.3%, and Albuquerque at 53.5%. The Austin district is tri-ethnic, with minority enrollments of 19.4% Black and 28.3% Hispanic. Albuquerque schools, with an Hispanic enrollment of 38.4%, and Oklahoma City schools with a Black enrollment of 35.5%, are essentially bi-ethnic. All three school districts have individual schools which are not "balanced" in the sense of having enrollment percentages similar to the district ratio. Valley High School in Albuquerque, for example, the initial school in the Career Guidance Institute program, has a 70.8% Hispanic enrollment in its total of 1,705 students. Anglo enrollment at Valley High School is only 25%, with more than 4% comprised of Native American, Black, and Asian.

All three cities have had for at least a decade some "high tech" industry. All three have experienced surges of growth in this industry. All three have metropolitan populations considerably higher than that of the cities.

The Albuquerque Career Guidance Institute began in one high school in 1980, after a year of planning. It was planned and initiated by representatives of the Albuquerque school system and chamber of commerce and the Edna McConnell Clark Foundation of New York City. It is funded by the Clark Foundation. The Oklahoma City Adopt-a-School Program began in 1979, flourished, and then declined in activity. Austin's formal school-business collaboration activities have begun only this year. Successful school-community efforts played a role in a successful \$210 million school bond election during the spring of 1983. These efforts also helped establish a context for education-private sector collaboration

B. LIAISON TEAMS

Liaison Teams were to be composed of at least five members, with at least one representative of each of the following agencies in or near the site school district. Criteria for selection of the individuals are also indicated.

- Local Education Agency
 - Be designated by the superintendent to participate in Project WISE.
 - Have responsibility for LEA staff development/in-service education.
- Business or Chamber of Commerce (C of C)
 - Be authorized to serve as a Project WISE Liaison Team member.
 - Have expertise in staff development/in-service education and/or,
 - Have contacts with training resources in the private sector.
- State Education Agency
 - Be authorized by the State Education Agency to serve as a Project WISE Liaison Team member.
 - Have staff development/in-service education responsibilities.
- Higher Education Agency
 - Have clearance to serve as a Liaison Team member.
 - Have expertise in staff development/in-service education in business and/or education.
- Southwest Educational Development Laboratory
 - Project WISE Senior Researcher.

PROJECT WISE LIAISON TEAM MEMBERS

Albuquerque, New Mexico

Mr. Milton Baca, Principal
Valley High School

Mr. Bill Anderson
Career Guidance Institute

Ms. Rosanna Gonzalez
Career Guidance Institute

Ms. Laine Renfro
Home Economics
State Department of Education

Dr. John Rinaldi
Dean of General College
University of New Mexico

Mr. Joe Robinson
Valley High School and Career
Guidance Institute

Oklahoma City, Oklahoma

Ms. Alice Anderson
Director of Personnel
Services Division
Oklahoma City School District

Mr. Mike Barlow
Staff Development Director
Oklahoma City School District

Ms. Vicki Ficklin, Coordinator
School Volunteer Services
Oklahoma City School District

Judy Leach, Administrator
Teacher Education Section
State Department of Education

Ms. Linda Roberts
Oklahoma City Chamber of Commerce

Dr. Roger Stacy
State Supervisor, Industrial Arts
Division
State Dept. of Vocational Education

Austin, Texas

Mr. Dan R. Bullock
Director of the Governor's
Office of Community Leadership
State of Texas

Dr. Dale Carmichael
Director of Inservice Education
Texas Education Agency

Dr. Reuben R. McDaniel, Jr.
Professor, Graduate School of
Management
The University of Texas-Austin

Mr. Dan Robertson
Assistant Director of Planning and
Interface
Austin Independent School District

Ms. Crispin Ruiz
Community Affairs Director
Austin Chamber of Commerce

Ms. Marilla Wood
Vice President, Community Affairs
Office
Texas Commerce Bank

Southwest Educational Development Laboratory

Dr. Al King, Senior Researcher
Ways to Improve Schools and Educa-
tion (WISE) Project
Southwest Educational Development
Laboratory

III. OUTCOMES

A. FINDINGS IN LITERATURE

Businesses and schools have cooperated in the past and continue to do so. The desirability and benefits of school and corporate collaboration are being recognized more and more. The message of two sessions of the 1982 annual meeting of the American Association of School Administrators was a call for more and closer collaboration of schools and businesses (Education Daily, March 5, 1982). Much of the cooperation thus far has come about because of school desegregation.

A good desegregation program includes community involvement and support (King, 1982). In Dallas; Jefferson County (Louisville, Kentucky); St. Louis; and other cities, businesses provided leadership training and/or sponsored desegregation-related projects. In Boston, a federal court mandated desegregation plan which paired/clustered schools with businesses, higher education, and other agencies in the community.

Another major rationale for corporate involvement in school improvement activities focuses on direct preparation of high school and college students for work. Corporations contribute heavily to business/trade schools as well as to vocational and career education programs in high schools and community colleges (Council for Advancement and Support of Education, 1978; Fraser, 1981; Elsmann, 1981).

Most of the corporation-supported staff development for school staff members is directly connected to vocation and career education, and most trainees are secondary or community college vocational education teachers (e.g., Koble, et al., 1975; Dieffenderfer, et al., 1977). The literature of this collaboration for staff development does, however, have broader implications. For example, it was reported that inservice for vocational education teachers did improve the quality of vocational instruction in their classes (McElroy and Thomas, 1981). Several of the reports of these programs provide insight into teaching improvement strategies (e.g., Burt, 1971; Clark, 1978).

The National Institute of Education supported one of the most successful school improvement programs not directly related to vocational or career education (Bassin, 1982). The initial strategy began in 1969, when a voluntary partnership was established between the New York City High School Division and the Economic Development Council Inc, a non-profit organization formed to bring the resources of the business community to assist the public sector. The program was based on system improvement through organizational development and management by objective techniques. Although not a total success, the program was effective enough to spread from the original two schools in 1969 to thirty in 1976, almost a third of the total N.Y.C. high schools, and contributed to local education and to the literature of school-community collaboration.

The pathway to effective collaboration of any sort is seldom smooth, and there are many issues to be resolved before mutually beneficial school-business partnerships are possible. The Yazoo City and Mississippi Chemical Corporation experience is one example. The corporation was concerned that the school system's reputation for poor quality caused two employment problems: (1) graduates from the schools were not qualified for many of the jobs which were open, and (2) many prospective employees refused to move their families

into a district with such a reputation. The company's overtures of financial assistance in upgrading the school were spurned until assurance was given that the school board and administration would have control over all educational aspects of the improvement efforts (Deaton, 1982).

Much of the recent literature proposes anticipated outcomes as a rationale for school-business collaboration. This is true of the several independent task force and commission studies with action agenda for national educational reforms, as well as public and private sector agencies proposing state and/or local initiatives.

These scopes of benefits are generally relative to the scopes of audience for whom the reports, manuals, and/or guidelines are intended. For example, A Nation at Risk..., a report by the National Commission on Excellence in Education (1983) has a nationwide set of concerns and anticipated outcomes. Action for Excellence (June 1983), a report by the Education Commission of the States Task Force on Education for Economic Growth, also has a rationale and agenda which are national in scope:

The Task Force's agenda specifically calls for new relationships between schools and other groups. While emphasis is upon education and business, the Task Force also asks for more involvement of others. The foreword to Action for Excellence summarizes these relationships:

This report calls for new alliances among educators, school systems and many other groups in America to create a new ethic of excellence in public education. We believe especially that businesses, in their role as employers, should be much more deeply involved in the process of setting goals for education in America and in helping our schools to reach those goals. And we believe that legislators, labor leaders, parents, and institutions of higher learning, among others, should be far more involved with the public schools than they are at present.

The literature of local school-business collaboration programs, such as The Community Investing in Tomorrow..., about the District of Columbia Adopt-a-School Program (Prometheans, Inc., n.d.), stresses the development of local resources for the benefit of the entire community. And a study of school-business partnerships in 55 communities across the nation stressed "enlightened self interest" of local business leaders and educators. Here the corporate leaders are "convinced of the need to maximize return on dollars invested in public education," and educators, "hard hit by reductions in federal support, and demographic changes in the taxpaying and student" populations "need help to better manage shrinking resources and to organize new coalitions for public education" (Schilit & Lacey, 1982, p. 1).

Nationwide associations and industries have also provided manuals for local company officials and school administrators. For example, the National School Public Relations Association has produced a locally oriented Basic School PR Guide: Involving ALL Your Publics (Ascough, 1980) and a Principal's Survival Packet, Volume 2 (NSPRA, 1983). The American Council of Life Insurance has addressed its Company-School Collaboration: A Manual for Developing Successful Projects (1983) to "the company official responsible for planning, implementing, and coordinating company-school collaborative programs." Based on its experience in the St. Louis Public Schools, the American Council of

Life Insurance Manual assures the company official that: "Company-school cooperation will benefit your company, your community, and your school" (p. ii).

Because the American Council of Life Insurance Manual lists generally encompass the outcomes included in other literature, they are presented here as an example of that portion of the literature (The American Council of Life Insurance, 1983, pp. 1-2):

To the Company and Its Employees

- Corporate taxes are used more effectively to support better schools.
- Business products, services, and policies are better understood.
- Job training needs decline.
- The image of the company and business is enhanced.
- Educators and students make more informed public policy decisions affecting business.
- Equal employment opportunities increase.
- Employee morale improves as they and their company become involved.
- Current employees' volunteer efforts become better organized and more visible.

To the Community

- Community stability is strengthened.
- Support for the school system increases.
- Schools are better able to respond to business and community needs.
- Local taxes are efficiently used.
- Cooperation among community leaders is developed.

To the Schools and Their Students

- Educators become aware of the business point of view on many issues.
- Teacher morale improves.
- Business and management techniques make school operations more efficient.
- Students and teachers are better informed consumers.
- Students and teachers are challenged by new ideas.
- Students will understand how basic skills are used in business.
- Students learn about careers in business.
- Job opportunities for graduates may develop.

It is perhaps typical that education/private sector collaboration in small and/or rural schools receives less attention than that of larger and/or urban schools. This is unfortunate in that the small schools' needs are considerable and may be more acute than those of large districts (Beck & Smith, 1982). However, the rationale for small and/or rural school-business cooperation has not been completely neglected. Grimshaw (1982) pointed out the mutually beneficial outcomes of school-business-community cooperation for "ensuring educational excellence" (p. 1) in rural areas of Michigan. Also with regard to Michigan, Elsmann (1981) said that since rural school areas tend to have the greatest financial needs, the benefits from collaboration can also be great. Elsmann added that: "Making the most of limited resources is what collaborative [efforts] are all about" (p. 62).

B. FINDINGS OF PROJECT WISE SITES

Outcome data are generally positive. The Albuquerque site, which had the earliest start of the three project sites, has more data with regard to school-business collaboration. The Albuquerque data were gathered from inter-

views (mostly by telephone) of school staff and private sector representatives who have been involved in staff development activities in the Career Guidance Institute. All teachers at Valley High School have participated in some professional staff development activities, and many have engaged in a wide variety of such activities. Public sector and school representatives agree that: (1) contact and cooperation between the two groups have increased dramatically, (2) the level of activity achieved to date is proceeding well, and (3) the program will benefit students of the teachers who are involved (American Institute for Research, 1982).

In addition to Valley High School, the school-business collaboration project in Albuquerque has already been expanded to two junior high schools and three more high schools. There are also plans to involve more central office administrators in the project's staff development activities. Project WISE Liaison Team members for the Albuquerque site also report positive results from the inclusion of a state education agency representative to its team. The state education agency representative has assisted in providing more school-business collaboration information to the New Mexico State Department of Education and to other school districts in the state. Many other school districts also have requested additional information about school and private sector collaboration.

Efforts by Project WISE Liaison Team members in Oklahoma City have rejuvenated the city's Adopt-a-School Program. Because of the Program's increased emphasis on staff training, school management of Adopt-a-School has been shifted to the Office of Staff Development within the Personnel Division. For more effective coordination of volunteer training and staff development, the school Volunteer Services Coordinator has also been moved into the Office of Staff Development.

Most of the direct contacts between the Oklahoma Adopt-a-School and local businesses have been made by two Project WISE Liaison Team members--the school's Director of Staff Development and the Chamber of Commerce's Director of Training. It was partly through their efforts that a business-sponsored incentive-to-read project, that was being piloted in one elementary school, has been expanded to every school in the district. Each school in the district also has at least one additional new business adopter.

Prior to Project WISE, the only school-business collaboration of significant scale in Austin, Texas had been the "Forming the Future" project. This project was directed by an Austin Independent School District central administrator and chaired by a prominent Austin businessman. The major goal of "Forming the Future" was to obtain public support for the public schools in a \$210 million school bond election (Forming the Future, October 1982).

This successful Forming the Future campaign helped establish a climate conducive to additional school-private sector cooperation to help improve AISD schools. Soon after the campaign, the director of "Austin in Action," a Chamber of Commerce program to bring more of the city's businesses into its network of volunteer organizations, approached the President of the Austin School District Board of Trustees about the possibility of establishing an Adopt-a-School program. Concurrently, Project WISE staff met with the Austin Superintendent to discuss the possibility of establishing a Project site in Austin. The School Board members and central administration both responded positively.

Subsequently, a measure of coordination of Adopt-a-School and Project WISE was arranged. The Director of "Austin in Action" and the Chamber of Commerce Director of the Austin Adopt-a-School program are both Project WISE Austin Liaison Team members. The Senior Researcher of Project WISE is serving on the Austin Adopt-a-School Advisory Committee, which also includes the Chamber of Commerce Director of Adopt-a-School and is chaired by the Director of "Austin in Action."

After the Austin Liaison Team was formed, it was decided that Project WISE could best benefit the Austin School District by assisting with a collaborative project to facilitate the establishment of a magnet junior high school as part of the District's desegregation consent decree. The WISE Liaison Team is planning a collaborative staff development/in-service education effort for a junior high school, already operational, as a pilot project.

IV. WORKING CONFERENCE

It takes more than just "good people working hard" to be successful in collaborative efforts to develop human resources. A good model, and guidelines for applying that model, are necessary for effective school-business collaboration.

The goal of the Project WISE Conference was to pool information from the literature with conferees' experience and expertise to develop models and guidelines for school-business collaboration for staff development to meet school needs. In a presentation early in the Conference, Dr. Reuben McDaniel provided a foundation on which the conference built the models and guidelines. McDaniel's presentation posited the context and components essential to effective education-private sector collaboration. After refining the Context Model and these components, Dr. McDaniel and other conferees (1) constructed versions of a Strategic Model, (2) identified and prioritized major issues in implementing education-private sector collaboration, and (3) developed guidelines for resolving these issues.

A. MODELS

1. Outline of Context Model with Four Components

- 1) **SHARED OR OVERLAPPING GOALS:** Human Resource Development
An impelling force for all parties
"Why should [each participant] collaborate at all?"
"What will drive them into a joint effort?"
- 2) **EXCESS OR EXPENDABLE RESOURCES:** Knowledge/Expertise in Training
 - . Something that at least one party has and is willing to share or give up.
 - . Something to trade or barter.
 - . Resource must be useful to the other party/parties.
 - . Can be information, expertise, material, equipment, or money.
- 3) **MECHANISM FOR THE EXCHANGE OF RESOURCES:** Staff Development/Inservice Education
 - . Permits collaboration (exchange of resources) to take place.

- . May be formal or informal.
- May not look like real mechanism
- . Must be observable by all parties.

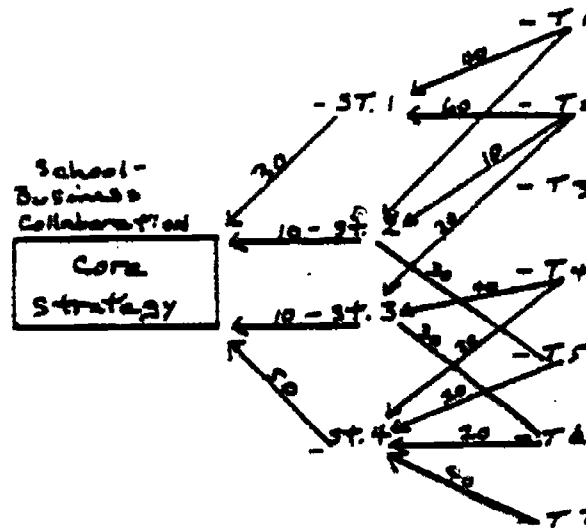
4) FEEDBACK ON RESULTS: Measuring Differences in Schools Over Time.

(Collaboration is energy consuming and collaborators need to know whether it is working and worthwhile)

- . Information about effectiveness of the mechanism. "Is it benefitting students?"
- . Information about efficiency of the mechanism. "Is it doing it better than some other way?"
- . Sense of equity. "Is this equitable to all concerned?"
- . Reward/Cost-Benefit System. "What are the benefits for public and private sectors?"

B. STRATEGIC MODEL

During a conference discussion of strategies to implement school-business collaboration for inservice education, Dr. McDaniel provided a strategic model to show the interrelationships of strategies and tactics. Dr. McDaniel's sketch of this model (Figure 1) and his remarks concerning it are included below.



Strat. 1 = institutionalization

Tac. 1 = develop formal organization
 Tac. 2 = develop permanent funding

Strat. 2 = identify needs & resources

Tac. 3 = Conduct needs analysis

Strategic Model

Figure 1

Developed by
 Dr. Reuben McDaniel
 at Project WISE Conference
 October 11-12, 1983

McDaniel:

There's a core strategy we've been discussing called school and business collaboration, then there are some individual strategies. And there is a set of tactics that you plan to do to achieve those things. The difficulty is that the strategies contribute unevenly to the development of the core strategy. Look at Strategy 1 and say 30% of the success of the core strategy is a function of Strategy 1, and 10% is a function of Strategy 2, and 50% is a function of Strategy 4. If you can't do Strategy 4 you better quit because it's such an important thing. But maybe you can find another way to accomplish Strategy 4.

There is another way of looking at it. Look at Tactic 1 and develop a formula. Let's say Strategy 1 is institutionalization. Then Tactic 1 is to develop a formal organization. And 40% of institutionalization is a function of your ability to do that. Can you actually make that happen? Can you get somebody in charge? And that also contributes 10% to Strategy 2, which is to identify needs and resources because formal organization permits you to know what folks want because they have a way of telling you. So the tactic to develop a formal organization contributes mostly to institutionalization but also makes a small contribution to developing needs and resources.

Now let's look at Tactic 2. Suppose that's to develop permanent funding. That probably is the biggest contributor to institutionalization; it's hard to institutionalize something you don't have money for. So let's say that 60% of institutionalization comes from funding. But funding contributes to lots of things. It contributes 10% to institutional needs and resources. It contributes 30% to whatever Strategy 3 is. And then let's look at 2; we've got to identify needs and resources. But what's the biggest thing that contributes to needs and resources? Well, it's Tactic 3, which is to conduct a needs analysis. But you find out needs from other places as well. You also find out needs from having to try to get permanent funding. When you got out to get permanent funding, people tell you what they want you to do with it; they talk about the formal organization. I'll use an example about developing advisory councils; that would contribute to institutionalization. It would contribute to needs analysis. But it would also contribute to community understanding, which might be Strategy 3.

This model gives you a conception of what a multiple effect activities have. And it really gets at what the synergy of the system is. That's technically what you're trying to do. You're trying to identify the synergistic relationships between activities, strategies, and goals.

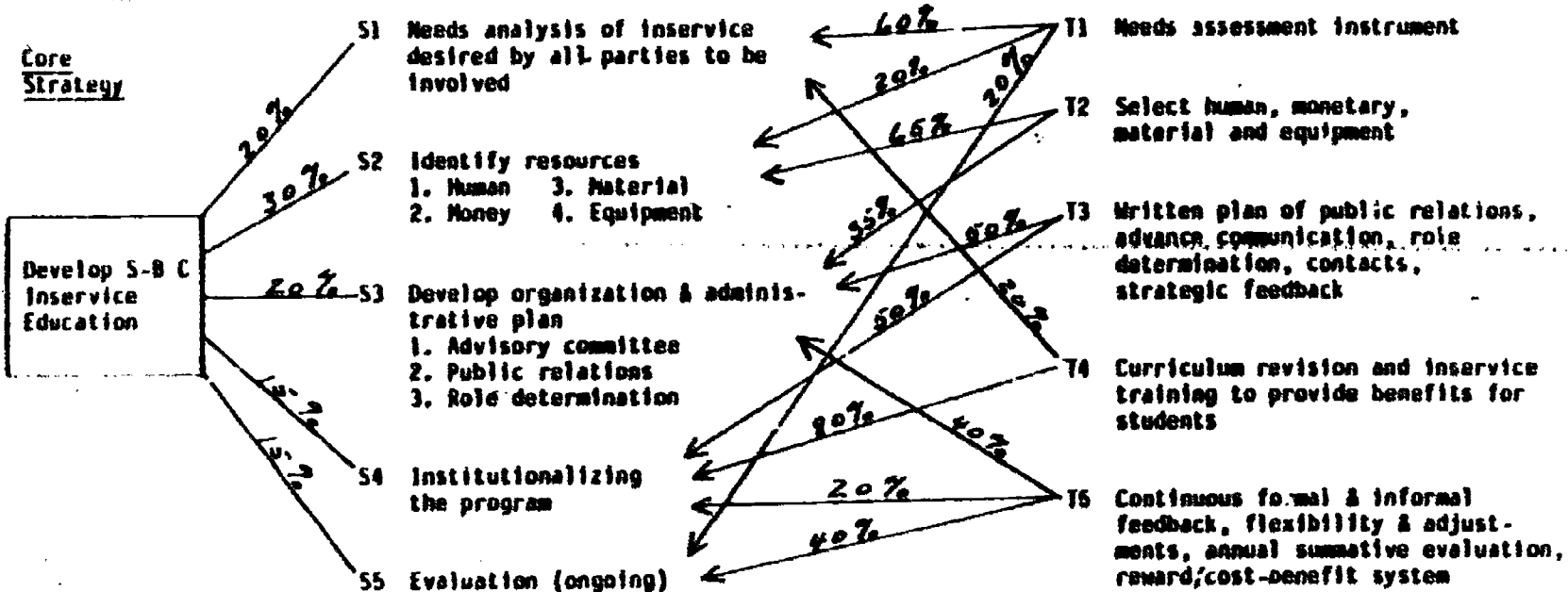
Subsequently, while working in site groups, the Oklahoma City Liaison Team developed Dr. McDaniel's strategic model for application in their Adopt-a-School Program. A modified version of the Oklahoma City model is shown here, as Figure 2.

**STRATEGIC MODEL
SCHOOL-BUSINESS COLLABORATION
FOR
INSERVICE EDUCATION**

Strategies

Tactics

(Training may be needed to carry out)



Adapted from a model developed by Reuben McDaniel and the Project WISE Oklahoma City Liaison Team at the Project WISE Conference, Austin, Texas, October 11 & 12, 1983

Strategic Model II

Figure 2

B. GUIDELINES

There are important issues to address in education-private sector collaboration. Inherent in these issues are problems to be resolved or avoided. An important part of the Project WISE Working Conference was to develop guidelines and strategies for effective school-business collaboration. The first step was to identify these issues and related problems. The second step was to prioritize these issues and develop guidelines for resolving them.

1. Issues/Problems

Issues and/or problems were identified by the conferees in general session.

Issues/Problems Identified

- 1) How do we measure effects/give feedback?
- 2) How to identify resources?
- 3) How to facilitate "exchange mechanism"?
- 4) How to get people to buy into a system?
- 5) How to maintain relationships once started?
- 6) How to establish trust?
- 7) How to sell mutuality?
- 8) How to expand and maintain continuity?
- 9) How to deal with time and extra load?
- 10) How to prevent burnout/boredom (including students)?
- 11) How to determine strengths?
- 12) How to eliminate misconceptions?
- 13) How to get funding:
 - . Local
 - . School
 - . Grant/External/Private/Government
- 14) How to obtain resources other than funding?
- 15) How to institutionalize the process or program?
- 16) How to develop resources once they are committed?
- 17) Evaluation?
- 18) Problems of "turf"?
- 19) How to develop/provide leadership (from all sectors)?
- 20) Who will be linker/facilitator?
- 21) How to involve and get support of students?
- 22) How to involve parents/community?
- 23) Who should control?
 - . At what level?
 - . Why?
 - . How?
- 24) How to assess needs/identify resources and match them?

2. Resolutions/Solutions: Guidelines

To produce guidelines for resolving the issues and preventing or solving related problems. The conferees formed into these role groups:

- School
- Chamber of Commerce/Business
- State and Higher Education Agencies

These separate role groups then identified the most important issues and developed ways to resolve them.

Panel Reports of Role Group Results:
School Group

Issues

- The five most important issues are (in process and rank order):
- 1) How to institutionalize the school-business collaboration program.
 - 2) How to identify needs and resources, money, manpower, equipment or other.
 - 3) How to get people to buy into the system.
 - 4) How to establish and maintain trust.
 - 5) How to measure the effects of school-business collaboration and provide feedback to the collaborators.

Guidelines

1. How to institutionalize the process or program: You need to: (a) clearly define the programs and processes, (b) establish commitment at the leadership levels, and (c) appoint effective facilitators.
2. How to identify and improve resources: conduct effective needs assessment of all parties involved.
3. How to get people to buy into the system: (a) recognize and identify common goals and strengths, (b) identify complimentary exchanges of knowledge, skills, and abilities, and (c) maintain an avenue of continuing, open assessment of needs.
4. How to establish trust and maintain relationships: (a) inservice, inservice, inservice, workshops, (b) information exchange, and (c) what they use in Albuquerque, a school improvement teaming effort that's a joint effort between the school and the private sector on a continuing basis.
5. How to measure effects and provide feedback: (a) utilize various evaluation instruments and (b) use targeted, open communication continually, up, down, and across.

Panel Reports of Role Group Results:
Chamber of Commerce/Business Group

Issues

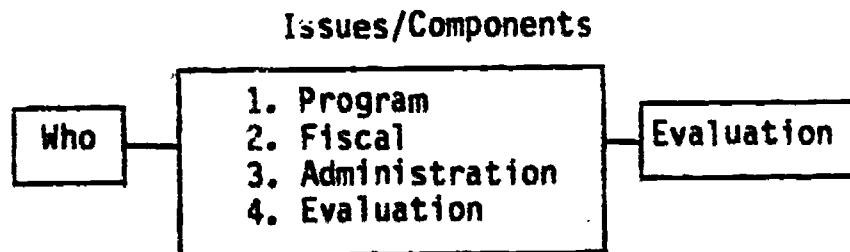
- The four most important issues in collaboration are:
- 1) Program
 - 2) Fiscal
 - 3) Administration
 - 4) Evaluation measurements.

Guidelines

1. Program--Success of the program is guaranteed by key players, including parents, business, educators, community at large, students.
2. Fiscal--The major area of fiscal procurement of funding which is done by (a) corporate gifts and donations, (b) foundations through grant applications, (c) normal budget process of educational system, and (d) governmental responsibility.

3. Administration--The administrative process is used for direction, guidance, and control by using the following criteria: (a) capability of staff to identify resources from all sectors, maintaining positive relationships through public relations, mass media in order to guarantee expansion and maintaining continuity. (b) Turf problems must be handled only at an administrative level through continuous, open interaction and by the development of leadership in all sectors. (c) A facilitator position (liaison) is critical for the control of the implementation process. (d) The most important role of the administrative process is the art of institutionalization.

4. Evaluation



A tool to use for the measurement and evaluation process is simply to start out with questions of who the players are and what the program consists of. There are the four areas in the development of the evaluation and measurement: program, fiscal, administrative, and evaluation.

Start out with the key players, who's involved in this, is it the schools, the business, the community, the school board? Then look at the fiscal area. Move the fiscal down to the "who" and then find the key players in there. Do the same evaluation process on each of the four areas. Then you come out with what you expect at the end of the program.

Panel Reports of Role Group Results:
Higher Education Agencies and State Education Agencies

Issues

The eight most important issues are:

- 1) Evaluation
- 2) Resources - identify, develop, obtain & manage
- 3) Needs assessment - identify for goals and objectives
- 4) Continuity
- 5) Communication-linkages = relationships, trust, mutuality, public relations, misconceptions, exchange mechanism, facilitator
- 6) Leadership - control and motivation
- 7) Ownership & rewards - counteract boredom, burnout and overload
- 8) Intercurricular implementation (institutionalization)

Guidelines

1. Evaluation

- 1) Did it achieve stated goals?
- 2) Perception (gut feeling perceptions are important).
- 3) Develop new ways of evaluation
 - a) Data collection methods revised and/or identified.
 - b) To what extent have we achieved goals - where do we need to go--and how long will it take to get there?
 - c) Systematic process of feedback during whole process - not just at end.
 - d) Look for and at measurable factors.

- e) Impact evaluation - what impact did project have on
 - (1) kids? (3) community?
 - (2) school? (4) Other (including unexpected)?
- f) Draw inferences from (and compare with?) other projects/states/
data/information.
- g) Change and adjust, based upon what is shown by evaluation.

2. Resources

- A. Identify
- B. Develop management plan
- C. Obtain
- D. Maintain
- E. Ideas:
 - 1) field trips
 - 2) continually inform
 - 3) name recognition - who is involved
 - 4) recognition functions - banquets, newsletters, brochures

3. Communication - Linkages

- A. Get principals involved as much as possible:
 - 1) Overall advisory board - school, industry, community, legislative
 - 2) Sub advisory board - specific area specialists
 - 3) Peers informing peers - most effective
 - 4) Parents, students, community on committees
- B. Public relations - keeping everyone informed at all levels as much and as often as possible
- C. Divide business/industry into clusters and link them with schools, etc. in the clusters

4. Ownership - Rewards

- A. Strokes for both - school and business
- B. Publicize who gets what, why and how

5. Intercurricular Implementation

- A. Needs assessed first
- B. Goals and objectives set
- C. Advisory committee input/information/exchange of information
- D. All curriculum interfaced with all elements of information

The models and guidelines produced by the Project WISE Working Conference will be the bases for a revised set of models and guidelines during FY84. This set will be reviewed, revised, site-tested, and then revised and developed further to produce prototype models and guidelines. Information about these models and guidelines will then be disseminated to audiences who can use it.

V. CONCLUSIONS AND RECOMMENDATIONS

A. SITES AND LIAISON TEAMS CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

- Education and private sector collaboration is a viable concept and worthy of implementation.

- The liaison team approach appears to be an effective means of facilitating school-business collaboration.
- Use primarily local funds and local people buy into it, own it, and share it."
- Grant funds from a non-local source, such as a private foundation, can be helpful in starting and/or maintaining a program.
- "Outside" funds can be used without compromising the positive benefits of school-business cooperation, when its control and management are local and collaborative.

2. Recommendations

Some of the Liaison Teams' recommendations emerged from their experiences at their respective sites and others emerged during interaction in the WISE Conference.

Recommendations emerging from conditions at the local sites

- If vocational and/or career education programs are successful, consideration should be given to building on that success in expanding school-business collaboration.
- If there are cohesive labor unions in or near the collaborating school district, consideration should be given to including them as a collaborator in school-business collaboration.
- If the school or business has a committee or office for volunteer services, consideration should be given to including it in S-B C activities.

Recommendations emerging from Conferees' interaction at the Project WISE Conference

Liaison Team members also made recommendations for their own team, other Liaison Teams, and Project WISE staff at the Working Conference. There was consensus on "how important some of the things we are talking about are. They really are on the cutting edge of some major components of change in our school districts."

- Make opportunities to share with other districts and with other schools in their districts, information about education-private sector collaboration.
 - Disseminate information about school-business collaboration to other states, school districts, and potentially collaborative businesses in the SEDL region and the nation.
 - Continue to nourish the Liaison Team concept at each site.
- "These are things that are going to have to take place if we're going to exist as a public school type of setting over the next few years."

B. CONFERENCE CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

During the conference, these conclusions became clear as a result of interaction and information-sharing between the conferees.

- School-business collaboration can benefit all partners and the larger community.
- Public schools should seek and utilize all resources which are available.
- The private sector has knowledge and skills which can be transferred to schools through inservice education.

- A collaborative arrangement, such as a liaison team, should be considered as an effective approach.
- The collaborative team should include representatives from the school or district, business or chamber of commerce, and state education agency, as well, perhaps as from other public agencies or private organizations.
- Models, such as the Project WISE Conference "Context Model" and "Strategic Model," are necessary for effective and cost efficient collaboration.
- Guidelines, based on the experiences of other education-private sector activities, can be of critical importance to teams who are planning and implementing school-business collaboration.
- Interaction between school-business teams at different sites is useful for learning about guidelines and for gaining new ideas and insights in the implementation of education-private sector cooperative activities.
- Interaction between members of different site teams, as in a working conference, is apparently helpful in implementing school-business collaboration.
- Other than in WISE, there is little if any exchange of information between collaborative projects.

2. Recommendations

The Project WISE Conference made five recommendations for effective education-private sector collaboration. Each is stated below with a sub-set of recommendations which conferees suggested for Project WISE.

- Sites which are planning/implementing school-business collaboration activities should hold a conference wherein members of various site teams can interact to produce insights and ideas which will be useful in helping the sites achieve their goals. If possible, one or more sites which have had successful school-business collaboration experiences should be included in the conference.

Recommendations for Project WISE

- a) Hold a follow-up conference in spring of 1984.
- b) Hold follow-up conferences in each of the three states (New Mexico, Oklahoma, and Texas).
- c) Bring conferees back together at least once a year to exchange ideas and share new program activity.
- d) Hold conferences such as the Project WISE Working Conference in all six states of the SEDL region, but include more sites/school districts.
- e) Hold another conference; invite three other states of the SEDL region, plus the three already here.

- A center for information and technical assistance should be established to assist sites in the implementation of education-private sector activities.

Recommendations for Project WISE

- a) Establish Project WISE as the nexus for private sector-education projects within the region.
- b) Use the Project as a clearinghouse for materials and information developed at as many sites as possible.
- c) Continue research and development of models, guidelines, and strategies for school-business collaboration.

- d) Help individual sites anywhere with information, guidelines, strategies, and models.
- e) Conduct a follow-up survey to evaluate effects of the ideas taken from this meeting and share the information with these three sites and others.
- f) Offer technical assistance to sites in the region to achieve successful school-business collaboration results.

- The liaison team approach should be further developed.

Recommendations for Project WISE

- a) Implement each strategy developed at this conference and share the results with these three sites and others.
- b) Project WISE should be implemented on a large scale within each state and include a much greater percentage of the schools.
- c) Continue to enrich the liaison team concept at each of the three sites.
- d) Assist in obtaining financial support for staffing school/community implementation teams in school districts throughout the region.
- e) Help sites be even more innovative in seeking and managing resources and longer term commitments.
- f) Formalize a network system that involves this group and others in an on-going basis to further develop school-business collaboration.

- Special efforts should be made to establish a climate for more education-private sector collaboration.

Recommendations for Project WISE

- a) Provide public relations exposure for sites represented in Austin conference.
- b) Provide public relations information to headquarters of corporations who have plants or offices in the cities which are potential school-business collaboration sites.
- c) Encourage businesses, civic organizations, etc. to ask themselves: "What can we do to help education?"
- d) Encourage schools to become more "open" in their approach to education, i.e., "get the teachers and other staff into relevant learning that can be provided by the private sector."
- e) Look at more innovative ways to assess projects and communicate successes (and failures) to constituents.

- Assistance should be provided to assist schools and other S-B C participants to obtain funding for projects.

Recommendations for Project WISE

- a) Keep all projects informed of possible funding, grants, foundations, etc., to initiate and/or implement collaborative projects.
- b) Help obtain financial support for: (1) staffing school/community implementation teams throughout the region, and (2) enhancement of current efforts.
- c) Help sites in grant-writing to funding sources.

The Project plans to produce during 1984 a volume of "Project Wise Working Conference Proceedings."

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