

DOCUMENT RESUME

ED 245 416

EA 016 977

AUTHOR Slaughter, Helen B.; And Others
TITLE A Strategy for Chapter 1 Planning and Evaluation in School-Based vs. District-Based Projects: Spinoffs from the School Effectiveness Research.
PUB DATE 26 Apr 84
NOTE 15p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 23-27, 1984).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Decision Making; Developmental Programs; *Educational Planning; Elementary Education; Improvement; *Principals; *School District Autonomy; *School Effectiveness
IDENTIFIERS *Education Consolidation Improvement Act Chapter 1; *Tucson Public Schools AZ

ABSTRACT

Although many large districts have centrally organized their Chapter 1 (Education Consolidation and Improvement Act) compensatory programs at the district and project levels, elementary school improvement efforts are strongly tied to local school autonomy and principal leadership. This paper analyzes the Tucson (Arizona) Unified School District's conversion of a centrally organized Chapter 1 project to the school level. A section describing the process notes that the planning cycle began with the annual Chapter 1 needs assessment process, assigned in 1982 to school principals at their own sites. During the next year, principals participated in a Chapter 1 development program offering them greater expertise in requirements previous to the needs assessment planning cycle. Decentralization outcomes, problems, and possibilities are outlined in an eight-part discussion of changing guidelines, cost effectiveness, Chapter 1 and district services coordination, implementation factors, technical assistance, school proposals, program monitoring, and gains evaluation. Findings show that principals are enthusiastic about Chapter 1's new freedoms. (KS)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED245416

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

X This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

*Helen B.
Slaughter*

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

**A STRATEGY FOR CHAPTER I PLANNING AND EVALUATION
IN SCHOOL-BASED VS. DISTRICT-BASED PROJECTS:
SPINOFFS FROM THE SCHOOL EFFECTIVENESS RESEARCH**

**Helen B. Slaughter
Chapter I Research Evaluator**

**Barbara Benton
Director of Federal/State Programs**

**Stephen Powers
Chapter I Research Evaluator**

**Tucson Unified School District
P.O. Box 40400
Tucson, Arizona 85717**

**Paper presented at the Annual Meeting of the American Educational
Research Association, New Orleans, LA., April 26, 1984**

EA 016 377



ABSTRACT

Research on school effectiveness has indicated that strong principal leadership and autonomy is essential to school improvement efforts. This perspective suggests that all educational programs in a school, including compensatory education programs, should be more under the control of the principal and building staff than than of central district staff. This paper describes strategies used in one district to broaden the decision-making base of Chapter I program planning and evaluation. Issues are addressed relating to potential pitfalls and/or benefits of increasing local, school autonomy to school improvement efforts.

A Strategy for Chapter I Planning and Evaluation in School-Based vs. District-Based Projects: Spinoffs from the School Effectiveness Research

The effective schools research (summarized most recently in the Educational Researcher, 12 (4), April 1983) and in a Study of Schooling (Goodlad 1983) has indicated that strong principal leadership and local school building autonomy is essential to the effectiveness of elementary school programs and to school improvement efforts.

Research on implementation (Fullan & Pomfret, 1977) and the effect of instruction on learning (Cronbach and Snow, 1977) has emphasized the need for considering the ubiquitous variance of local conditions and the need for mutual planning and accommodation by all key participants in implementation. This has resulted in a call for school-based educational program planning and also for school-specific evaluation (Cronbach et al., 1980; Kennedy, 1979; Snow, 1977). Cooley (1982; 1983) has suggested that evaluation researchers in school districts adopt a client oriented, "monitoring and tailoring" approach for assisting schools to improve their effectiveness.

Federally funded programs such as Chapter I of the Education Consolidation and Improvement Act, (formerly Title I), are an uneven combination of federal guidelines, state directives and local design and initiative. Many large school districts, such as the one discussed in this case study, have organized their compensatory programs centrally with the unit of planning and management at the district and project levels rather than at the school level. This has been done for reasons of accountability vis-a-vis guidelines, for administrative efficiency and sometimes to promote the dissemination of high quality, innovative and highly focused projects. However, school personnel have not always been receptive to central staff mandates and the recommendations of Chapter I specialists. Compensatory projects, even if highly effective in themselves, have often been less effective than they might have been if they were better integrated into a whole school improvement plan. In making a transition from centrally-based to school-based Chapter I projects there was a need for a strategy that would increase the participation and decision making power of school principals while preserving accountability, high quality and sufficiently targeted programs to improve the achievement of low-income minority students. This paper will describe the process used in one school district to decentralize the Chapter I program in order to maximize the total school improvement effort, as well as to improve the effectiveness of Chapter I services. The following objectives provided a basis for developing a structure for school-based Chapter I projects:

1. To develop a strategic planning mode that would counter-balance district and local school-site goals, objectives and evaluation requirements.
2. To provide an orderly process that would utilize some of the research on effective organizational management in making the transition to school-based projects.

3. To broaden the participation of school principals in strategic planning and decision-making regarding the Chapter I project in a way that would increase the principal's leadership and the building-level support of the Chapter I project.
4. To integrate and best utilize the resources available through Chapter I funds with district resources at the school level for improving school effectiveness.

Context

The Tucson Unified School District enrolls approximately 53,000 students in 78 elementary schools, 15 junior high schools and 11 senior high schools. In 1980 the district appointed four regional assistant superintendents in a major step towards decentralization. During the next year, each school was asked to develop an Instructional Action Plan. In 1982 a number of schools, including at least one in each region, were targeted by the district for improving achievement. In this a strong emphasis was placed upon the principal's role as the instructional leader. The district has also been undergoing a court-ordered desegregation plan since August 1978.

Most of the district target schools, e.g. 10 out of 12 schools targeted to improve achievement, and many of the schools affected by desegregation, including magnet schools, have been or are currently receiving Chapter I funding. Due to changes in the numbers and percentages of students from poverty-level families and also because of shifting district priorities in grade levels serviced, the number of schools included in Chapter I funding has decreased from 15 elementary schools, six junior high schools and two senior high schools in 1981-82 to 14 elementary schools and two junior high schools in 1983-84. Funding for Chapter I two years ago was \$2.6 million and is currently up to \$3.5 million a year.

The Process

The process described below and which will be more fully described in the paper with supporting documentation was begun in the school district during the 1982-83 school year to convert a centrally organized Chapter I project to the school level at 13 elementary schools. In doing this, a strategic planning mode similar to that described for higher education by Keller (1983) was used in involving principals in an on-going training and planning process.

In strategic planning, planning is not done by a separate group of planners but is done by the people who will be implementing the plan and who will be living with the results or consequences of the plan (Keller, 1983). It is an attempt to reduce the distance between principals responsible for day to day decisions regarding teachers and students, and administrators responsible for high level decision-making. This more fluid communication and more horizontal decision-making between upper levels of management and the middle level managers who deal more directly with clients, e.g. in education,

students and parents, has also been a feature of the more productive corporations (Reich, 1983; Peters & Waterman, Jr., 1982).

Research has indicated that effective principals also involve teachers in program planning and decision-making and encourage the participation of key staff members early in the process (Leithwood & Montgomery, 1982, p. 326). While there has been little research regarding the process of growth in effectiveness of the principal (Leithwood & Montgomery, 1982, p. 336), one thing that seems important is the principal's autonomy and freedom to make decisions regarding his or her school program (Goodlad et al., 1979-83). It is important that teachers perceive their principals to have decision-making powers on issues affecting their school. Another factor that seems important in successful organization improvement efforts is a belief on the part of principals and key staff members "that their involvement will result in task specific work with some short term payoff..." (Fullan, Miles & Taylor, 1980, p. 139).

Therefore, decentralizing the Chapter I program included involving key people in all facets of the planning process, tolerance of controversy, learning to collaborate with others, commitment to forward reaching goals, balanced by flexibility and continuous adjustments to shifting local conditions. The school district's mandate for improving school effectiveness along with a commitment to improving principal leadership gave impetus to the Chapter I effort. The process included the following:

1. Providing principals with the latest guidelines and program alternatives to expand the options in using Chapter I funds.
2. Providing inservice in cost-effectiveness evaluation using examples from current Chapter I project components; discussing various models for costing out projects and evaluating effects.
3. Placing responsibility at the building-level for conducting a needs assessment that would require coordinating Chapter I with the school-wide regular program and would include school staff, and parents.
4. Placing responsibility with the principal for addressing program implementation problems, e.g. the issue of pull-out and in-classroom projects for Chapter I in the current program.
5. Providing technical assistance and evaluation data to schools on an individual basis.
6. Developing flexible school level Chapter I proposals in collaboration with principals, Chapter I administrators and evaluators. Providing technical assistance to relieve the burden of paper work at buildings so that the focus would be upon problem solving and program development, not

paperwork.

7. Making provisions for monitoring, revising and documenting the Chapter I school based project.
8. Charging schools with the responsibility for developing follow-up or sustained gains studies of its Chapter I program (in addition to district longitudinal studies).

Specific techniques used to accomplish the above as well as issues arising from each of the elements and the implications of each for program management and implementation will be discussed below in the section on "Outcomes, Problems and Possibilities."

However, before detailing specific planning strategies the importance of an overall structure or planning cycle should be mentioned. The annual (and federally required) Chapter I Needs Assessment process provided the point of departure for beginning the process of developing school-based rather than program-wide projects. In past years, previous to 1982, Title I initiated a comprehensive needs assessment process annually, but the needs assessment process was organized centrally through central district and Chapter I staff (Slaughter, Prentice and Kennon, 1979). School needs were taken into consideration but both the locus of data analysis and decision-making were controlled centrally. In spring 1982, the Chapter I program began a process of assigning responsibility to principals to carry on a needs assessment of their own parents and staff at the school site. Cluster meetings were held with principals at buildings with similar needs and data regarding achievement and student language background at each school, as well as for the total Chapter I schools program, were presented to principals. Each principal was asked to consult staff and parents at their schools regarding the needs of Chapter I and then, after completing the needs assessment requirements, select and prioritize among projects currently offered through Title I-Chapter I.

In this initial year, some principals involved only a token number of staff members and parents in the process, although others elicited greater participation. The cluster meetings, however, provided a framework for increased dialogue between principals and central Chapter I staff about the needs of specific schools.

During the next year, 1982-83, principals participated in a Chapter I staff development program that provided them with more in depth information regarding alternative program strategies for Chapter I and more expertise regarding program requirements previous to the annual needs assessment-planning cycle. This included a workshop on cost effectiveness in educational evaluation by an outside consultant (William Seidman) and another workshop on program alternatives made possible under the new Chapter I regulations by the Arizona State Department of Education, Chapter I consultant, Kathy Verville.

Thus, there was approximately a one year period during which principals

were being trained to assume more control of their Chapter I projects. In the spring 1983 Needs-Assessment and Planning Cycle, one objective was to develop separate school-by-school program applications rather than a single district proposal. Needs Assessment materials were developed that were specifically designed to meet principal's information needs. The forms to be filled out by principals after completing the needs assessment at their school did not list only existing Chapter I project but also allowed principals to initiate a new project, alter the grade levels that would be served by a project and/or modify an existing project. In order to reduce paperwork, project descriptions for each Chapter I component, including new components originating from schools, were written up by central Chapter I staff. After budget allocation decisions were made each school received a copy of an individualized school Chapter I application along with project modification forms. The principal was given the prerogative to modify or revise his or her school's project description that spring before the project was sent to the State Education Agency (SEA) for approval, which only a few principals did. Then in the fall, principal's were given another chance to modify or amend their school's Chapter I project. The idea of this type of cycle was adapted from a similar procedure used in the San Diego City Schools.

Outcomes, Problems and Possibilities

The process of decentralizing the large Chapter I program in the school district, while recognizing and complying with federal and state constraints on the use of funds, and also balancing district mandates with local school needs and concerns, is necessarily a continuous one, the details of which are still evolving in the third year as we begin yet another annual needs assessment/program planning cycle. Specific features, tradeoffs and benefits involved in our collaboration with principals discussed below, reflect changing conditions in the district, in specific schools and in federal funding and guidelines.

1. Changing guidelines and project alternatives. Part of our inservice each year has been to provide principals with information regarding the law, regulations and guidelines relating to the use of ECIA Chapter I funds. This has been done in an attempt to encourage principals to generate alternative service delivery strategies that will still fit within current regulations. The constant change in specifics regarding guideline interpretation however makes this a rather complex process.

New projects are first proposed by the principal to the Chapter I office. Two new types of projects were generated last year through principals' initiatives. One principal proposed an extended-day primary Chapter I project for low achievers who scored too high for the school-day pullout project but were eligible for Chapter I. When this project was successfully initiated in the fall at one school, three other principals, (in a kind of principal 'network' effect), implemented similar projects designed to meet student needs and logistics of staffing at their schools, later in the fall (using

carry over funds). Several principals were interested in implementing full day Chapter I kindergarten projects. These were able to be funded at two schools. A third school designed a small-size kindergarten by using Chapter I funds to split one session into two small sessions. This spring (1984) one principal is working with central staff to design a developmental first grade language arts block for students who are not ready for the more conventional first grade reading program. Principals have also gained flexibility in implementation because the principal may select the grade levels at which to implement specific projects.

New project designs still require negotiation and approval by the State Education Agency through the central Chapter I office. The process of generating new projects works best through cooperative brainstorming and collaboration between the principal and a key Chapter I staff members, (e.g. director, evaluator, and project instructional developer/program documenter, staff development personnel, etc.). In other words, more personalized communication (regarding building level needs) and planning with the principal, rather than total building autonomy, takes place in an effective decentralized organizational structure.

2. Cost Analysis and Cost Effectiveness. A one day inservice workshop in March 1983 provided principals, central district and Chapter I staff some background theory and strategies in decision-making based upon cost analysis and cost effectiveness in educational planning and evaluation. The workshop, given by consultant William Seidman, was based upon concepts developed by Levin (1981) using an ingredients approach to costing out a program and compares various methods of estimating the cost effectiveness of programs. The model uses a decision-making framework that includes looking at the social costs of programs and number of nonbudgeted items such as space and principal time. The complex issues involved in relating costs to educational effectiveness are discussed in the above reference, and in a paper by Slaughter (1983). Briefly, cost-effectiveness studies in evaluation share the same weaknesses as other evaluation studies, e.g. lack of valid control groups, narrow measures of effects and a dearth of longitudinal data. This approach, by articulating the need to look at program costs and outcomes, together, and also by encouraging the use of evaluation data in decision-making, is however, an important one in forward looking planning. For principals, the process of listing program ingredients appeared useful in thinking through alternative uses of Chapter I funding, and various ways of analyzing data. A very real limitation to the use of cost effectiveness ratios for choosing among the existing Chapter I projects in the school district was that rather than having competing projects serving the same grade levels and needs, the various projects in Chapter I were designed to meet different kinds of needs of student groups at various age levels.

As principals began to look more closely at Chapter I costs, the issue of cost per child and expensive versus inexpensive teacher salary emerged. We attempted to offset the oversimplification of the cost per child figure with cost per instructional hour-- a distinction that seemed especially important when comparing a program for which Chapter I paid all the costs, i.e. our prekindergarten project, to the cost of a pullout project. The teacher salary

issue became less important when principals became aware that teacher's salaries would be averaged and that, in any case, the district contract with the teacher's association precluded dismissing more experienced teachers from the program.

Fragmentation or piecemeal selection of projects was a concern of Chapter I central curriculum staff. To offset this concern, and also the concern that the expensive but exemplary preschool project, the Parent and Child Education (PACE) project would be lost, substantial amounts of funding were set aside for staff development, parent involvement and PACE as well as for services and administration costs. School budgets were allocated on the basis of project unit costs rather than per dollar costs down to the last nickel and dime.

3. Coordination of Chapter I and Other District Services. One of the problems of federally funded schools is coordinating services from various federal, state and local programs. Giving greater control to principals in selecting and planning their own projects helped to some extent to alleviate this problem. The greatest problem that emerged for principals in spring 1983 Chapter I planning was in coordinating their Chapter I budget -project requests with anticipated but uncertain district supplementary financial-resources support for district selected target schools. The Chapter I needs assessment--program application process needed to be completed long before the district budgeting process was completed. In most cases principals worked out a well coordinated program but the planning process was made more difficult by this (probably) unavoidable lack of synchronization.

4. Implementation. One of the decided advantages of building level Chapter I projects is that the principal can take more responsibility and be more effective in working out program implementation problems. Then, too, classroom teachers were much more involved in the Chapter I Needs Assessment and planning process at the building level than previously, and made more commitment to contributing to a successful program. Chapter I staff, now included in building level as well as program level needs assessment, have also felt that they played a larger role in the total school effort to improve achievement.

The remaining items are all related to restructuring the relationship between research and evaluation services and local schools, so that more highly specialized, technologically efficient, data bases and decision frameworks will be more accessible to, and hopefully, the results of which can be used to a greater extent, by practitioners directly responsible for implementation. We also feel that evaluation-research provides a perspective, or an experimenting attitude, towards educational practice that may be especially appropriate for principals and teachers in "improving" schools. Indeed, Little (1982) has suggested that an experimenting attitude and a willingness to be innovative is one feature of the staffs in effective schools. Furthermore, we feel that this approach has resulted in a more flexible-system of management at the central district and state levels in responding to needs for program changes voiced by principals.

5. Technical Assistance and Evaluation. Principals often say that excessive paperwork, that is not directly related to the educational program, diminishes their role as instructional leaders of the schools. School-based projects, under the principal's leadership, are more feasible when principal's have access to the expertise of central staff in terms of report writing and data analysis skills. Evaluation reports of pre-posttesting of Chapter I students and needs assessment data pertaining to estimated achievement levels of students at all grade levels has been provided to principals. (We use estimated number of students in our needs assessment data because of principals suggestions that we take into account needs of Spanish monolingual or dominant students who are not tested in the state mandated tests in our needs assessment.) Principals also became more interested in learning about innovative educational programs in other district or suggested by the research and disseminated by central research and evaluation staff. Detailed qualitative assessment, and student selection memos of testing procedures still go directly to Chapter I staff at the schools, with copies to the principal. Therefore, evaluators must balance the needs of individual school sites for information with the needs for data management, documentation and evaluation at the Chapter I Program level.

In our interviews of principals, and at inservice meetings reporting evaluation results, it has become clear that principals would find evaluations that included comparisons of the achievement Chapter I participants and all others, i.e. the non-Chapter I students at their school more useful to them than the more narrowly focused reports regarding only the Chapter I students. Principals of district schools targeted for achievement are especially concerned that achievement improves for the total building. Some collaboration of district and Chapter I evaluation services would be useful for improving the building-level utilization of evaluation.

6. School Chapter I Proposals (Applications). As previously mentioned, individual school Chapter I applications including needs assessment documentation, budget information, and descriptions of each project to be implemented that year at the school, were prepared last spring. A master or general Chapter I application, as well as copies of each school's plan was kept centrally. Project descriptions were developed by central staff with some principal input except for the after school extended day project written independently by one principal. Two principals filed modification pages for one project in their school's proposal but these were slight. At a principal's meeting in September, the use of the program application as a management document was emphasized, after which a number of principals requested another copy of their proposals. The fall amendment process found more principals becoming actively involved in writing project components for their school.

7. Monitoring. Program monitoring by evaluators and other central staff is facilitated by school site applications and update pages. The monitoring plan includes interviews with principals, when possible, as well as of all project components at the school. Documentation and "paper" monitoring of student selection still needs to be coordinated and documented centrally. The design of appropriate student selection criteria for new

projects in collaboration with principals is especially important to insure that students with the greatest needs are not overlooked in favor of those believed to have the greatest potential for gains. In fact, the external auditing procedure, conducted through the state (SEA) has become more centralized and requires more extensive documentation than previously.

Monitoring has various focuses depending upon time of year and program needs. The first is documentation of implementation and on-site problem solving with principals and Chapter I staff regarding individual school on student needs. The next is special focus monitoring, e.g. this year we had an unusual number of new Chapter I staff and made monitoring "new" staff program implementation one of our foci. Finally, there is monitoring of compliance items, especially those questioned by outside auditors, etc. In addition we are in the process of conducting an ethnographic study of student response to regular district classroom instruction as contrasted to student response to instruction in several of our Chapter I projects. The need for confidentiality and anonymity varies according to the particular type of monitoring, with the greatest need for confidentiality in the ethnographic study, but we have maintained a separation between program monitoring and staff evaluation in all our monitoring.

8. Sustained gains evaluation. A sustained gains evaluation is one that looks at student achievement longitudinally after the year in which the students received Title I-Chapter I services. Under the ESEA Title I regulations, districts were required to develop one or more of a number of longitudinal or use a follow-up measure, or third data point, for a sample of their Title I students, in order to determine whether or not students who achieved gains while in Title I projects sustained them at a later date. This has continued to be a requirement in Arizona under ECIA Chapter I.

We originally thought that sustained gains evaluation results for specific projects for the whole Chapter I program followed by breakdown for specific school project would be of great interest to principals. Then, too, sustained gains studies seem especially important to our emphasis upon early childhood preventative projects. At a recent principal inservice, where program wide sustained evaluation results were presented to principals we were greeted with mild panic despite the fact that our results had been very positive. Principals have only recently in the last three years become responsible for utilizing district test data with staff and target school principals feel "under the gun" to raise achievement test scores. The thought that they would also have to look at a third data point in addition to pre-posttest or yearly cross-sectional results seemed just too much. It may be that in time, after the notion of a sustained gains study becomes more familiar and with technical support from evaluators, some principals will become more interested in designing and carrying out a sustained gains study at the school level.

Developing Chapter I Planning and Evaluation Systems that are More Conducive to Improving School Effectiveness

Two years ago the Tucson Unified School District began a process of restructuring its Chapter I Program to allow more building level flexibility and autonomy for the principal in program development and implementation. As stated by Pratzner (1984, p. 22) research from the effective schools literatures and quality of work life literatures both suggests "that democratization is a key to improvement in the quality of life within institutions." Research on school improvement programs has indicated that the principal's commitment to the program is critical to its success (Clark and McCarthy, 1983, p. 20). Too often the evaluation of the implementation of school renewal efforts has found "there were more cases of the principal's playing a negative or nonsupportive role than a supportive one. (Fullan, Miles, and Taylor, 1980, p. 144)."

We have found that by working with principals, rather than through principals, a higher level of commitment to program improvement and successful implementation has been attained than previously. Principals in Chapter I schools have increasingly used the services of Chapter I central staff to devise improved programs at their schools. Many district schools targeted for improvement receive Chapter I supplementary educational funds -- funds which can in themselves provide incentives to urban school faculties seeking to improve the achievement of students from economically disadvantaged homes. Principals have recently requested and arranged additional inservice time for collaborative Chapter I program planning. As stated by Pratzner, 1984, p. 22, "The underlying problem addressed by the quality of work life literature is the underutilization of human resources in the workplace." Our model is one attempt to tap more fully the strengths of a rich array of high-quality staff from teachers to principals to more specialized central staff, staff who are continually involved in on-the-job training, and who together can produce results in terms of improved instruction for students. Messick (1984) has recently reformulated the problems of special education in a way that relates also to compensatory education. He has stated, "The fundamental issues are little different from those in regular education, namely, the validity of assessment of functional needs and the quality of instruction received, whether in the regular classroom or in special education settings." (Messick, 1984, p. 4)

The principal is the key person to insure that both the learning environments of the regular classroom and that of special programs are of sufficient quality and are well planned and coordinated. Fullan, et al. (1980) stated that all organization development programs, (of which this Chapter I effort can be viewed as a subset), required at the very least, data, freedom, commitment, and time. Principals have responded to the new freedom in Chapter I by increased enthusiasm and support for the program.

Note: The views expressed here do not necessarily reflect those of the school district or of the Arizona Department of Education, Chapter I office.

REFERENCES

- Bickle, W. (Ed.), Effective schools: a special issue. Educational Researcher, 12 (1), April 1983.
- Clark, T.A. & McCarthy, D.P. School Improvement in New York City: the evolution of a project. Educational Researcher, April 1983, 12 (4), 17-24.
- Cooley, W. W. Improving the performance of an educational system. Educational Researcher, 12 (6), June-July 1983, 4-12.
- Cronbach, L. J. and R. E. Snow. Aptitudes and instructional methods. New York: Irvington Publishers Inc., 1977.
- Cronbach, et al. Toward reform of program evaluation. San Francisco: Jossey-Bass, 1980.
- Fullan, M., Miles, M.B. & Taylor, G. Organization development in schools: the state of the art. Review of Educational Research, Spring 1980, 50 (1), 121-184.
- Fullan, M. and Pomfret, A. Research on curriculum and instructional implementation. Review of Educational Research. Winter 1977, 47 (1), 335-397.
- Goodlad, J. et al. A study of schooling: technical report series. Los Angeles, California: Graduate School of Education, University of California. 1979-83.
- Goodlad, J. A place called school: prospects for the future. New York: McGraw-Hill Book Company, 1983.
- Keller, G. Academic strategy: the management revolution in american higher education. Baltimore, Maryland: The Johns Hopkins University Press, 1983.

- Kennedy, M. M. Generalizing from single case studies. Evaluation Quarterly, 3 (4) November 1979, 661-678.
- Leithwood, K. A. & Montgomery, D. J. The role of the elementary school principal in program improvement. Review of Educational Research, Fall 1982, 52 (3), 309-339.
- Little, J.W. Norms of collegiality and experimentation: workplace conditions of school success. American Educational Research Journal, Fall 1982, 19 (3), 325-340.
- Messick, Samuel. Placing children in special education: findings of the national academy of sciences panel. Educational Researcher, 13 (3), March 1984, 3-8.
- Peters, T.J. & Waterman Jr., R.H. In search of excellence: lessons from America's best-run companies. New York: Harper & Row, Publishers, 1982.
- Pratzner, Frank C. Quality of school life: foundations for improvement. Educational Researcher, 13, (3), March 1984, 20-25.
- Reich, R. B. The next American frontier. The Atlantic Monthly, 25 (3), March 1983, 43-58.
- Slaughter, H.B. Prentice, B.S. & Kennon, D. Title I needs assessment: parents are part of the team. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 8-12, 1979.
- Slaughter, H. Utilization of cost-effectiveness evaluation in school-based decision-making: advantages and limitations. Paper presented at the Rocky Mountain Educational Research Association Annual Meeting, Tucson, AZ, November 3, 1983.
- Snow, R. E. Individual differences & instructional theory. Educational Researcher, 6 (10), November 1977, 11-15.