DOCUMENT RESUME

ED 269 478 TM 860 338

AUTHOR Yap, Kim Onn
TITLE Diversity in Program Improvement Approaches: Implications for Technical Assistance.
INSTITUTION Northwest Regional Educational Lab., Portland, Oreg.
PUB DATE Apr 86
NOTE 39p ; Paper presented at the Annual Meeting of the American Educational Research Association (70th, San Francisco, CA, April 16-20, 1986).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Change Agents; Change Strategies; Consultants; Consultation Programs; Educational Change; Educational Improvemen ; Elementary Secondary Education; Federal Programs; Models; Professional Services; *Program Implementation; *Program Improvement; *School Districts; *State Departments of Education; *Technical Assistance; Workshops
IDENTIFIERS *Education Consolidation Improvement Act Chapter 1; Elementary Secondary Education Act Title I; *Technical Assistance Centers

ABSTRACT

Program improvement activities can be classified into four categories based on the source of the impetus and the locus of the change agent: systematic, symbolic, opportunistic, and pragmatic. This paper (1) describes the various approaches to implementing Chapter 1 program improvement activities at the state and local district levels in 13 western states through the provision of technical assistance by an outside agency; (2) categorizes these approaches in terms of essential ingredients for fostering change in education; and (3) discusses implications of the findings for future work in program improvement. During 1982-85, the Region 4 Technical Assistance Center (TAC) provided over 300 workshops and consultations on program improvement topics alone. A majority of the program improvement activities are found in the opportunistic or pragmatic category. This implies that understanding of and expectations for program improvement in Chapter 1 should be moderated in the face of reality constraints, that many of the school improvement models currently in use may need to be adapted or tailored to accommodate assumptions inherent in the improvement package, and that TAC staff should take advantage of the diversity of approaches being initiated to afford flexibility in promoting incremental improvements in Chapter 1 projects. (PN)

Diversity in Program Improvement Approaches: Implications for Technical Assistance

Kim Onn Yap

Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue
Portland, Oregon 97204
(503) 248-6800

A paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 16-20, 1986

Diversity in Program Improvement Approaches:

Implications for Technical Assistance

I. INTRODUCTION

The Title 1/Chapter 1 Technical Assistance Centers (TACs) were established in 1976 by the U.S. Office of Education (now U.S. Department of Education) to provide evaluation technical assistance to state education agencies (SEAs) and local education agencies (LEAs). Since their inception, the TACs have been responsible for helping client agencies to improve their evaluation capabilities, to promote the use of evaluations, and to embark on program improvement activities (Millman, et al., 1979; Reisner, et al., 1982). The overall mission has remained unchanged over the past nine years although increasingly greater emphasis is now placed on program improvement.

The 1984-85 contract year began with a directive from the U.S. Department of Education that at least 25 percent of TAC resources be expended on program improvement activities. The new funding cycle, beginning in 1985-86, required the TACs to devote up to one-half of their resources to assisting SEAs and LEAs in program improvement. In addition, the Secretary's Initiative to improve Chapter 1 projects and to recognize unusually effective Chapter 1 projects provided another integral part of the overall TAC effort to help improve instructional services provided to disadvantaged youngsters.

In carrying out program improvement work, the Region 4 TAC, which serves 13 western states, the Pacific Trust Territories and the Bureau of

Indian Affairs, has relied heavily on available literature and research findings relating to effective schools. Many of the findings have been translated into ideas which can be put into practice in the day-to-day school setting.

A variety of approaches has been used to initiate program improvement activities at the SEA and LEA levels. The adoption of a particular approach is often determined by contextual factors unique to an SEA or LEA setting. The approach is often influenced and shaped by specific needs of clients, their perspectives on the relationships between the help giver (TAC) and the recipient (clients), and the essential ingredients of change in education.

The impetus for change may be exogenous (e.g., a Congressional mandate, a directive from the U.S. Department of Education, TAC recommendations) or endogenous (e.g., an intrinsic desire to do better). Likewise, the change agent can be external (e.g., TAC staff) or internal (e.g., SEA or LEA personnel). Strong commitment on the part of the help recipient is critical to the success of any change effort. It is also essential that the change activities produce some discernible outcomes to maintain the momentum and to ultimately lead to the incorporation or institutionalization of the change effort.

Program improvement activities can be classified into four categories on the basis of the source of the impetus (exogenous versus endogenous) and the locus of the change agent (external versus internal). A <u>systematic</u> improvement effort occurs when the impetus is endogenous and the change agent is internal. Conversely, a <u>symbolic</u> improvement effort takes place when the impetus is exogenous and the change agent is external. An <u>opportunistic</u> improvement activity is implemented with an

endogenous impetus and an external change agent. A pragmatic improvement activity is implemented with an exogenous impetus and an internal change agent. While the four types of program improvement activity are not equally desirable, they each have their strengths and weaknesses when initiated in real life school settings.

The objectives of this paper are to (a) describe the various approaches to implementing Chapter 1 program improvement activities at the state and local district levels in 13 western states through the provision of technical assistance by an outside agency; (b) categorize these approaches in terms of essential ingredients for fostering change in education; and (c) discuss implications of the findings for future work in program improvement.

II. METHOD

The study is based on data gathered through onsite contact logs and monthly reports submitted to the U.S. Department of Education for the 1982-85 contract years (NWREL, 1985). Data elements contained in these documents included:

- Number of onsite activities (e.g., workshops and consultations with TAC clients)
- Topics addressed in each onsite activity
- Number of clients served in each onsite activity
- Length of each onsite activity in hours

These data were summarized by month and then by each of the contract

years. For purposes of the present study, data for all three contract years were combined to obtain an aggregate picture for the entire contract period. The numerical data were augmented by field notes which provided anecdotes and vignettes of program improvement activities at both the SEA and LEA levels.

The program improvement activities were then categorized according to the conceptualization described earlier. While the categories are by no means exclusive of each other, each program improvement effort was categorized as systematic, opportunitistic, pragmatic, or symbolic.

III. FINDINGS

The data showed that during the 1982-85 contract years, the Region 4 TAC provided 1,976 workshops and onsite consultations to a total of 25,933 SEA and LEA personnel. These onsite activities dealt with over 50 different topics relating to Chapter 1 program operations and outcomes. Increasingly, the most requested topics included those pertaining to program improvement. Specifically, over 300 workshops and consultations were provided on program improvement topics.

Opportunism

Opportunistic program improvement activities were initiated by TAC clients, but the change agent role was played largely by TAC staff. This often occurred when the client agency found itself lacking sufficient resources and/or expertise to carry out the change function. Examples of

these projects included:

- Assessing the effects of a particular program component
- Assessing and increasing time-on-task
- Developing data systems to monitor student progress
- Looking at parent involvement activities to determine their impact on student outcomes
- Assessing the relative impact of service delivery on different types of students
- Reviewing software packages for program use as part of program improvement

Example: A Family Goal Program

The Chapter 1 program on the Big Island of Hawaii has a unique parent involvement component called the Family Goal Program. The component encourages active participation of parents in the learning process. Each Chapter 1 parent enters into an agreement with the district to set a family goal and to engage in activities designed to achieve that goal. Sample family goals include:

- Set aside a quiet place to study and to do home work
- Take our child to the library regularly
- Read to our child
- Talk to our child about books read
- Turn off the TV at a specified time each day so the family can read together

- Ask the Chapter 1 teacher how we can help our child
- Get more books for our home.

A family goal log is provided for parents to keep track of activities and progress. The log is forwarded to the Chapter 1 teachers for examination and recordkeeping on a regular basis.

Although the program component is widely perceived to be a major contributing factor to the success of the Chapter 1 program, no systematic study has been conducted to assess its effects on student performance. Thus, when the district submitted an application to the State Department of Education for recognition of the component as an exemplary practice, the state validation team recommended that the component be evaluated for evidence of efficacy.

The district staff, perceiving a need to demonstrate the effects of the component and to further strengthen the component, invited TAC staff to design a comprehensive improvement-oriented evaluation. The study is to provide strong evidence of efficacy (or the lack of it) and rich information for improvement.

In early 1985, TAC developed a longitudinal design (3-5 years), using entering students as cohorts. Chapter 1 schools in the district were randomly designated as experimental or control schools after they had been paired off on the basis of school locale, enrollment and grade span coverage. Seven schools were designated as experimental schools. Another seven served as controls.

The evaluation study will last five years (1985-86 through 1989-90), unless unequivocal evidence is gathered during the first three years of the study. The design calls for increasing numbers of student cohorts in

progressive stages. In the first year, the first cohorts will be in the study. The second year will include two categories of cohorts -- those receiving the treatment for the second year and those having their first exposure to the treatment. Progressively, each of the following years will have the benefit of additional cohorts.

The dependent variables will include reading achievement gains in Normal Curve Equivalents (NCEs), school grades, attendance, reading attitudes and parent perceptions. The independent variables will include nature of the family goals, number of goals, frequency of activity, grade level, school locale, school year and project setting.

TAC staff conducted two workshops in late 1985 as part of the evaluation process. In the first workshop, a tentative evaluation plan was presented to all district staff to familiarize them with the objectives of the study and to solicit input for any necessary modifications. The reception from the staff was highly favorable. The second workshop occurred after the evaluation plan was approved by the district superintendent. TAC staff explained the design and logistics to the Chapter 1 staff. The evaluation commenced with the 1985-86 school year.

The evaluation instruments include the family goal log, school records, the Metropolitan Achievement Test, a reading attitude inventory and a parent survey questionnaire. The inventory and questionnaire were adapted from existing survey instruments and field tested in the latter part of 1985 with small samples of students and parents. Both instruments were substantially revised and improved.

The five-year evaluation is expected to provide answers to the following questions:

1. Does the family goal program component have a positive impact on Chapter 1 outcomes in student reading achievement, attendance, reading attitudes and parent perceptions?
2. Do the number and nature of specific family goals have any effects on students outcomes?
3. What is the relationship between the frequency of family goal activities and student outcomes?
4. Do differential effects occur with respect to grade level, school locale and project setting?
5. In what specific ways can the family goal program component be improved?

TAC staff will continue to work closely with the district staff in implementing the evaluation study. We will use the evaluation information not only to assess the overall efficacy of the program component, but also to find ways of implementing improvement activities to further strengthen the program component.

Pragmatism

Pragmatic improvement activities were often initiated to address some aspects of program operations which had become mini-crises. They often called for trouble-shooting to put out "brush fires." These projects included:

- Providing testwiseness training to teachers

- o Upgrading student selection procedures
- o Upgrading needs assessment procedures
- o Integrating Chapter 1 and regular program through coordinated needs assessment and process evaluation
- o Identifying classroom behaviors affecting student achievement and developing curricular materials and activities to cultivate such behaviors
- o Using a program implementation checklist to assess status of program implementation and to identify highly effective program elements

Example: Student Selection

For years, the Kauai district in Hawaii has used test scores as the sole criterion for student selection. There was a widespread concern among the staff that test data did not provide an adequate basis for identifying eligible students. The process allowed too many students deserving help to "fall through the cracks."

In late 1984, at the request of the district, a TAC workshop was provided to explore various options for student selection, including the use of multiple measures and composite scores. Following the workshop, the district Chapter 1 resource teacher, working with the Chapter 1 staff, developed a process for student selection which involved the use of non-test indicators. These indicators included student behavioral characteristics, teacher ratings on specific reading problems, and other cognitive and affective factors such as school grades, participation in other special program, self-concept and work habits.

A checklist was created to obtain the necessary student information. Chapter 1 teachers worked collaboratively with the regular teachers to complete a checklist for each student scoring below the 30th percentile on a norm-referenced test. The various measures were weighted differentially and combined into a composite score for student selection.

In early 1985, the process was piloted with a sample of students. Changes were made in the contents of the checklist as well as the procedures for deriving the composite score. In late 1985, following the use of the new process for a school year, the process was computerized to eliminate the need for time-consuming calculations by teachers.

The Chapter 1 teachers generally felt that the new process was superior to the old one and were highly appreciative of the fact that the new process provides a built-in mechanism for coordinating with the regular teachers in providing instruction to Chapter 1 youngsters.

Systematism

Systematic improvement activities addressed longer-term goals and the change process could readily be incorporated in the existing system. While TAC staff might play a crucial role in such efforts, both the impetus and the change agent resided within the existing SEA or LEA system. Examples of such projects included:

- Using the SEA monitoring process as a means of program improvement
- Using the LEA monitoring process as a means of program improvement

- Developing long-range improvement plans and activities involving the establishment of an internal leadership team in a local setting

Example: Monitoring by State Education Agency

In carrying out their monitoring function in Chapter 1, many state education agencies concentrate on program compliance issues relating to state and federal rules and regulations. Little attention is paid to providing guidance and information for in-depth program improvement. State level personnel are seen as compliance enforcement agents rather than technical assistance providers.

To alter that image, the Hawaii Department of Education started a program in 1984 to promote program improvement activities at the local school level. Spearheaded by the Compensatory Education Section, the new procedures provided guidance and information to project staff and administrators for program planning and improvement. In return, each project school documented program improvement activities on a continual basis, and shared the information with other project schools.

The effort, partly funded through a grant from the U.S. Department of Education, included a staff development component in which the state monitoring personnel received training from TAC staff in data collection strategies and the dissemination of project improvement information.

A project review committee was formed to review and react to all processes, activities, and materials developed in the project. The committee represented a cross section of the department work force and expertise, including state, district, and school level staff and a TAC

staff. Based on the most recent research on effective schools, the committee identified and operationalized variables contributing to high student achievement. These variables included engaged time, student-teacher interaction, instructional strategies, and student motivation. With assistance from TAC staff, the committee developed, adopted, or adapted instruments to gather the relevant information. TAC staff then trained state and district staff in the use of the instruments, as well as in data analysis and interpretation.

The process included intensive classroom observations to generate information for program improvement. In addition, the program improvement team interviewed school administrators to gather information on their expectations, leadership, and support of particular program activities. Following the observations and interviews, the team provided immediate feedback to principals and Chapter 1 instructional staff.

A pilot test of the new procedures took place in the early part of 1984 in six elementary schools in the Maui School District. To assess the impact of the new process, a questionnaire was created and administered first in the fall of 1983, and then in the spring of 1984, to all Chapter 1 instructional staff in the six schools. In addition, the project staff used a program improvement log to document all improvement activities between November 1983 and April 1984.

The questionnaire surveys provided the following findings:

1. There were favorable differences between pre and post administrations of the questionnaire, with respect to the respondents' familiarity with the purpose and procedures of state monitoring. As would be expected, the respondents were

more familiar with the process at post administration than they were at pre administration.

2. At post administration, the respondents were more positive with respect to the amount of program improvement information provided by the monitoring process than they were at pre administration.

3. The discrepancies between what the respondents felt the monitoring process should do and what it actually did in terms of providing program improvement information were narrowed considerably between pre and post administrations.

The program improvement log recorded a total of 51 improvement activities between November 1983 and April 1984. Program improvement areas included parent involvement, professional improvement, student motivation, program evaluation, classroom management, and instructional strategies.

Outcomes of the study suggest that a state education agency can attain a high degree of success in revamping its monitoring function from compliance to program improvement. The study changed the perceptions of local project staff regarding program improvement and the state monitoring process. Project staff began to look to or actually use the state monitoring process as a significant source of program improvement information.

Example: Quality Monitoring by Local Education Agency

Quality monitoring as implemented in the Honolulu district in Hawaii is a participatory and collaborative process to bring about positive changes in Chapter 1 project schools. The process examines project implementation variables and evaluation data and translates them into action plans to ensure fidelity of program implementation and to improve student achievement. An important outcome of quality monitoring is the continuous exploration for better ways of providing instruction to Chapter 1 participants.

The process begins when district staff examine achievement gains for each project school in comparison to previous years, to district averages, and to grade level averages. Significant patterns, if they exist, are detected and implementation variables are analyzed. The district staff then prepare the project staff and administrators for the initial quality monitoring meeting.

As the district staff review project implementation and outcomes, they consider a host of variables such as classroom environment, instructional delivery systems, per pupil costs, evaluation procedures, evaluation results, test performance of students, instructional strategies, inservice needs of project staff, and parent involvement.

At the initial quality monitoring meeting, district and school level personnel develop a plan of action and identify persons responsible for carrying out the plan. Decisionmaking and responsibility are shared by all individuals involved in the project.

Since the quality monitoring process was first implemented in 1980, Chapter 1 projects selected to participate in the process have met with

much success. Achievement gains have invariably resulted from the total commitment of project staff to this process. Dole Intermediate School, the third largest intermediate school in the district, typifies the success story.

In examining the evaluation results for Dole Intermediate for the 1980-81 and 1981-82 school years, district staff noted that Chapter 1 students in grades eight and nine had not made the anticipated gains. The ninth graders, in particular, showed negative NCE gains for both school years. The decreasing gains prompted the selection of the school for quality monitoring in 1982-83.

The initial quality monitoring meeting occurred at the beginning of the new school year in October. During the meeting, attention focused on the poor achievement of Chapter 1 participants in grades eight and nine. Variables thought to have some impact on the low achievement level were identified. The plan of action was to reassign a Chapter 1 teacher from grade seven to grade eight. Project students were reassigned so that the larger classes were reorganized into smaller classes. The school administrator, the district resource teacher, the school registrar, and the project teacher coordinator were all responsible for the reorganization which took place shortly after the quality monitoring meeting.

Immediately following the initial quality monitoring meeting, the district resource teacher met with the project staff to review the plan of action and to work out further details. A detailed plan of action to effect changes was drawn up and put in place. As other concerns arose during the school year, new plans were developed and implemented. On a continual basis, the project staff shared information, insights, and evaluations with the district resource teacher and other colleagues.

At the end of the school year, the ninth graders showed an NCE gain of 5.1, as compared with a negative gain of -1.7 the previous year. The school wide average increased from 2.5 to 5.2. The evaluation results were reviewed by district staff at the beginning of the following school year as a new quality monitoring cycle began.

Symbolism

Symbolic improvement activities were prompted by an outside impetus and involved an external change agent. These were often discrete events the occurrence of which was largely dependent on outside intervention. Examples of these activities included:

- Participating in state identification, validation and dissemination process
- Participating in the Joint Dissemination and Review Panel process
- Participating in the National Identification Program for unusually effective Chapter 1 projects

Example: The National Identification Program

In November 1984, the U.S. Education Department initiated a program to identify Chapter 1 projects that have been unusually successful in meeting the special needs of disadvantaged students. Referred to as the National Identification Program, the effort was part of the Secretary's

Initiative to improve Chapter 1 through the sharing of effective practices specific to compensatory education settings.

The program requested nominations from state education agencies in the 50 states, the District of Columbia, Puerto Rico and the Bureau of Indian Affairs. Each Chapter 1 project was asked to submit demographic data as well as information on 13 program attributes and four achievement indicators. The 13 attributes comprised indicators of effective programs most often cited in the current school improvement research. Projects were asked to highlight those attributes that were implemented in a unique manner and contributed most significantly to program effectiveness.

The 13 program attributes were:

- Clear project goals and objectives
- Coordination with the regular school program and/or other special programs
- Parent and community involvement
- Professional development and training
- Strong leadership
- Appropriate instructional materials, methods and approaches
- High expectations for student learning and behavior
- Positive school and classroom climate
- Maximum use of academic learning time
- Closely monitored student progress
- Regular feedback and reinforcement
- Excellence recognized and rewarded
- Evaluation results used for program improvement

By early 1985, the state education agencies submitted 333 nominations to the U.S. Education Department. The nominated projects covered a wide diversity of locations, settings, philosophies and instructional approaches. The submissions included regular Chapter 1 projects, migrant projects, as well as projects for neglected or delinquent youth populations.

Each nomination was reviewed by a panel consisting of representatives from major educational associations, school improvement research and compensatory education. Panel members examined each nomination and prepared a report, including a summary of the ratings and comments.

The review panels identified 116 of the 333 projects submitted by states as unusually successful and most ready to be shared with other Chapter 1 projects. These projects covered a vast geographic spread of the country, including 23 projects from Region 4. On April 11, 1985, the U.S. Education Department officially designated the 116 projects as worthy of special recognition.

In conjunction with the National Identification Program, a two-volume Chapter 1 Sourcebook has been prepared for national dissemination. Volume I presents findings from effective schools research as they relate to the 13 program attributes with special reference to compensatory education. Volume II provides descriptive information on the identified projects and how they have implemented effective practices. In addition, all Title I and Chapter 1 projects currently approved by the Department of Education's Joint Dissemination Review Panel (JDRP) are also included in the document.

Regional conferences are currently being held for the identified projects to share information on their effective practices with other

Chapter 1 projects. Future TAC workshops on program improvement will also include the use of the Sourcebook as a resource for implementing improvement activities.

IV. ASSUMPTIONS

TAC assistance in program improvement, like most school improvement packages, rests on assumptions which often stay implicit in the packaging process. To be successful, TAC staff need to be mindful of these assumptions and to assess their validity in each improvement effort.

Assumption One: With a minimum amount of technical assistance, existing Chapter 1 staff are capable of learning from and applying research findings to program improvement efforts.

Few improvement efforts have called for a substantial increase in project funding. Most improvement activities are carried out by existing staff, promoting a more efficient use of existing resources (Edmonds, 1982). Indeed, if every improvement effort requires a change in personnel, very few efforts will be fiscally or politically feasible.

Most improvement approaches establish new cooperative diagnostic and problem-solving groups to make things happen. These groups are variously called quality circles, quality of (school) life committees, problem-solving task forces or leadership teams (Pratzner, 1984). They

provide the opportunity for people to identify barriers to the effectiveness of their organization and, through problem-solving, break down those barriers. The approach is based on the conviction that within the organization there exists a largely untapped pool of creative expertise and insight which the existing organizational structure has hidden or suppressed. This latent talent can be channeled and put to work to increase program effectivenes.

Assumption Two: Past research has generated a knowledge base to inform program improvement efforts.

In recent years, researchers have made a concerted effort to build and disseminate a knowledge base on effective schools. Edmonds (1982), for example, offers the following characteristics of an effective school (page 4):

1. The principal's leadership and attention to the quality of instruction;
2. a pervasive and broadly understood instructional focus;
3. an orderly, safe climate conducive to teaching and learning;
4. teacher behaviors that convey the expectation that all students are expected to obtain at least minimum mastery; and
5. the use of measures of pupil achievement as the basis for program evaluation.

Mackenzie (1983), in a perhaps more comprehensive review, identifies 31 elements, clustered around the dimensions of leadership, efficacy, and efficiency. The "core" elements include (page 8):

1. Positive climate and overall atmosphere;
2. goal focused activities toward clear, attainable and relevant objectives;
3. teacher-directed classroom management and decision-making;
4. inservice staff training for effective teaching;
5. high and positive achievement expectations with a constant press for excellence;
6. visible rewards for academic excellence and growth;
7. cooperative activity and group interaction in the classroom;
8. total staff involvement with school improvement;
9. autonomy and flexibility to implement adaptive practices;
10. appropriate levels of difficulty for learning tasks;
11. teacher empathy, rapport, and personal interaction with students;
12. effective use of instructional time, amount and intensity of engagement in school learning;
13. orderly and disciplined school and classroom environments;
14. continuous diagnosis, evaluation and feedback;
15. well-structured classroom activities;
16. instruction guided by content coverage; and
17 schoolwide emphasis on basic and higher order skills.

The knowledge base for effective schools draws from findings of several areas of research, including school effects, teacher effects, instructional leadership, curriculum alignment, organizational development and educational change. The broad knowledge base has served as a powerful impetus and a rich resource for a variety of school and program improvement projects.

Assumption Three: Loosely coupled intra-school systems (e.g., classrooms, programs, departments) can be changed into a cohesive, purposeful organization by implementing control systems developed through a participatory process.

Effective schools proponents advocate using schools as the unit of change. For example, in a recent survey of 25 states, Miles, Farrar, and Neufeld (1983) found that nearly all of the 39 effective school programs had a strong emphasis on the school as an organization. They emphasized improvement at the school level. Passalaqua (1981) similarly concluded that unless the school as a functioning social system is the focus of social change, program adoption and effective reform are not likely to occur. Using schools as the unit makes it possible to have multiple changes made simultaneously which research on quality of work life has shown to be an effective way of improving complex social systems (Pratzner, 1984).

However, research has also shown that schools are "loosely coupled" systems in which teachers are largely independent of the principal's immediate supervision (Weick, 1976). Indeed, Firestone & Herriott (1982) found that teachers have more influence than principals over day-to-day management decisions. As a result, attempts to increase school effectiveness through imposing discrete policies by fiat are not likely to be fruitful (Purkey & Smith, 1982). Ultimately, teachers have the power to make or break the improvement effort (Sirotnik, 1984).

Successful innovations are often those that have been developed, or at least significantly altered, by teachers who are expected to implement

the innovation (Berman & McLaughlin, 1974; Cooley, 1983). In a loosely coupled setting, a change effort is often (a) mutually adapted, (b) not implemented, or (c) coopted by the participants.

It is obvious that instructional improvement would seldom occur without the encouragement and support of the principal. Research on effective instruction, by itself, often does not have sufficient appeal to galvanize teachers into changing their instructional practices. The principal must provide the needed impetus to stimulate faculties into action by fostering a positive climate for academic achievement, by hammering out long-range goals, and by supporting teacher efforts to reach those goals (Mackenzie, 1983).

It is also obvious, however, that the effects of a school's "syndrome," "culture," or "ethos," (Purkey & Smith, 1983), need to move from the school level to the individual classroom. Ultimately, the classroom is where learning takes place. School effectiveness, if it means anything, comes down to behavior change in the classroom (Tomlinson, 1981).

In the Chapter 1 National Identification Program for 1984, the U.S. Education Department identified 13 attributes of effective schools and classrooms. These attributes included instructional and organizational variables. For the 116 projects receiving national recognition, the predominant attribute was an effective instructional process. Over 65 percent of the projects reported appropriate instructional materials and methods as the major reason for their success. Organizational variables such as school climate, goals and objectives, and leadership were cited by less than one-fourth of the projects as particularly salient factors.

Perhaps Pratzner (1984) strikes a desired balance when he says:

> "Institutional improvement must go hand-in-hand with individual improvement, and those who are closest to the work that needs to be performed (students and teachers) are also the most knowledgeable of how improvements can be made." (page 24).

Assumption Four: Evaluation has served as an effective tool for facilitating program improvement activities.

Under a broadened definition of use, there is ample evidence that evaluation information is used by the school people to enhance their understanding of and decisions on various educational issues (Kennedy, 1984). Evaluation use often occurs in subtle and incremental ways (Alkin, et at., 1979; Patton, et al., 1977). Evaluation information is sorted, sifted, interpreted, and translated into implications and inferences (Kennedy, 1984). Use typically contributes to incremental decisionmaking (Wise, 1978).

King and Pechman (1984) identify two principal uses of evaluations: signaling use and charged use. In signaling use, evaluation information serves as a signal from the local district to funding and legislative support agencies that all is well. It is done to meet accountability expectations and requirements. In such cases, the evaluation report is often a routine bureaucratic statement with little or no potential for effecting change. Charged use, on the other hand, has the potential to

cause a reaction in the system. It provides data upon which an individual or a group of individuals can base decisions and actions.

White & Worthen (1984) demonstrated that program evaluation can produce valuable outcomes in addition to complying with federal requirements. The authors' clients gained insights into how a state program designed to facilitate local innovation could be improved through comprehensive evaluation. Also, local district staff gained an increased appreciation for the role of evaluation in improving local programs under their control.

Alkin, et al., (1974) and Patton et al., (1977) believe that recommendations calling for massive changes in the system will be used less than reports that recommend minor modifications. Shapiro (1985) believes that decisionmakers tend to discount judgmental information because it is easily susceptible to strategic misrepresentation. They are most prone to use descriptive data rather than inferences about the worth or value of a program.

In the same vein, Eash (1985) sees evaluation research moving toward policy-oriented research designed to provide evidence on specific practical problems in a timely fashion. This calls for (a) close interaction between the evaluator and the client throughout the life of a project, (b) evolving rather than fixed evaluation designs, and (c) increased attention to the contextual politics involved as well as technical demands.

By providing frequent feedback to program staff, formative evaluation helps to modify or improve programs (Alkin, et al., 1974; Dickey, 1980). In general, formative evaluation offers much greater potential than summative evaluation for contributing to school or program improvement.

As Gottfredson (1984) implies, the pace of organizational change often makes summative evalution untimely. Less vigorous ways of knowing the effects of innovations are necessary and more useful.

Cooley (1983) sees a need to move from formal program evaluation to a client-centered systems approach to program improvement. He feels that the technological-experimental paradigm of educational change (Berman, 1980) tends to produce results that are either invalid or untimely. A cybernetic paradigm which entails continual "monitoring and tailoring" of program functions and outcomes offers considerably greater promise (Cooley, 1983).

Assumption Five: There is a symbiotic relationship between school and program improvement activities.

A cursory review of the effective schools literature shows that most researchers have used the terms "program," "curriculum," "innovation," "intervention," and "school" loosely. There does not seem to be a clear distinction between "school improvement" and "program improvement," for example. More recent studies have described the activities in question as "improvements in schooling," or "educational improvement."

Most practitioners would no doubt respond with the term "curriculum" if asked to define the term "program." Thus, a grounded definition of the latter term would have us believe that "school improvement" and "program improvement" are conceptually and practically indistinguishable.

To be sure, there is no empirical basis for a separation between school and program improvement efforts if "program" is defined as a set of curricular activities conducted to achieve some pre-specified

structional objectives. In that sense, the day-to-day operations of "schooling" consist of a complex intermingling of schools and programs. Programs would not exist without schools and schools would become empty structures without programs. A school is a composite or a gestalt of instructional programs. A program is nested in the larger environment of the school, a political-administrative structure.

Some programs, most notably federally funded programs such as Chapter 1, may encompass more than one school. In a larger sense, however, such programs represent federal or state efforts to improve schools in providing instruction to special population groups such as educationally disadvantaged children. Improving such programs will logically lead to improved operations and outcomes of schooling for all.

Quite often, a school improvement effort is focused on a particular program or curriculum (e.g., reading, language arts, writing) within a school. Thus, program improvement contributes directly to school improvement. School improvement is often operationalized as specific program improvement efforts. Although research on effective schools calls for a schoolwide emphasis, studies of effective schools seldom measure the instructional performance of an entire school. Assessment of instructional outcomes generally occurs at only one or two grade levels and in only one or two curriculum areas (Rowan, et al., 1983).

School improvement activities must focus on fine-grained within-school processes. Teachers, for example, need to understand the attributes of effective classroom instruction and learn how to manage different types of instructional systems. The "stuff" of schooling is the curricula, or programs, offered in a school. It is that "stuff" and factors which affect its effectiveness (e.g., teacher expectations, time-on-task) that we should attempt to improve.

There are, undoubtedly, some school-level factors (e.g., school climate, rules on discipline, pep rallies) the improvement of which cuts across all programs within a school building. They represent, however, a minority of areas to which improvement activities can be directed.

To say that there is no empirical distinction between school and program improvement does not deny the fact that the school as a functioning social system should be the focus of change, program adoption and effective reform. It merely reflects the reality that most improvement activities occur on a long-term incremental basis to fine tune the system: one school at a time, one program at a time (Lindblom, 1972; Colley, 1983).

V. TECHNICAL ASSISTANCE ROLE

Commenting on his experience in providing research support to a large city school system, Cooley (1983) offers two central prescriptons for evaluators. The first is to maintain a client orientation and the second is to shift emphasis from formal program evaluation to a systems approach to program improvement. On the latter point Cooley observes that:

> "educational research that takes place within school districts . . . would profit greatly if the emphasis were shifted from discrete studies of particular programs or policies, which generally fall under the rubric of program evaluation, to a continuous activity of data collection and analysis, which I refer to as monitoring and tailoring." (p. 7)

Adding a point that seems to challenge the usefulness of the Title I Evaluation and Reporting System (TIERS), Cooley argues that:

"Formal, summative program evaluations that attempt to estimate the impact of a particular program or policy on student outcomes tend to produce results that should not be used, because of their invalidity, or cannot be used, because valid impact studies, if they can be done at all, take too long to be timely. (p. 7)

Nonetheless, Congress has mandated that local districts not only evaluate their Chapter 1 programs, but also use the results of such evaluations to improve their programs. TAC staff and evaluators of Chapter 1 programs obviously need to reassess and reformulate their roles to meet this mandate.

In reformulating their role, TAC staff must look to a broader range of tasks and greater flexibility in performing these tasks. Chapter 1 evaluations must go beyond the determination of summative impact. TAC role might more accurately be described as "improvement monitoring" to be shaped by the following considerations:

Efficiency. Evaluation, especially summative evaluation, speaks primarily to the issue of effectiveness. Improvement monitoring addresses the issue of efficiency. While some improvement efforts would advocate increased financial support for schools, most focus on the more efficient use of existing resources (Edmonds, 1982). As Mackenzie (1983) suggests, the amount of agreement on the principal factors in school effectiveness is so impressive that the more relevant question now is what can be changed for the least cost and the most results.

Self-Renewal. School or program improvement is not a one-shot solution to organizational problems. It is an attempt to grow toward greater effectiveness through a series of intervention activities over a period of time (French & Bell, 1978). Improvement monitoring is a cyclical process. It is self-renewing as progress is made toward achieving improvement goals and objectives, as new research findings are made, as the school environment changes, and as new evaluation questions emerge.

Theory-Orientation. Improvement monitoring is more theory-oriented than evaluation as we know it at present. Through theory-guided improvement monitoring, TAC staff not only assist in solving problems, but also learn how and why the problems are solved. They, therefore, need to be more of a researcher and synthesizer or research findings than they are at present. Theory provides a template for judging the appropriateness of the interventions and the objectives of an improvement effort (Gottfredson, 1984). Improvement monitoring seeks to explain the causal links among educational phenomena. It is not enough simply to detect differences in reality. We need to explain what accounts for the difference (Kerlinger, 1977). Improvement monitoring focuses on not only the outcomes of schooling but also the teaching-learning process, especially the linkage of resource to resource use and to student performance. Improvement prescriptions assume causal links are understood. Monitoring not only checks on whether events have taken place as planned, but also attempts to detect whether such events are producing the expected consequences.

Data Base. In improvement monitoring, the evaluator helps improve programs by (a) serving as a technical resource in data gathering,

analysis, interpretation and display; (b) serving as a sounding board for new ideas; and (c) improving the knowledge base of program implementers.

To generate data of maximum utility, the evaluator must produce relatively neutral, descriptive data relevant to the decisionmaker. The evaluator needs to present the data results, rather than recommendations, to the decisionmaker, and permit the latter to draw his or her own conclusions (Shapiro, 1985). This is particularly true in such activities as needs assessment, standard setting, and cost analysis.

Standard Setting. In improvement monitoring, TAC staff may offer assistance in setting quality as well as comparative standards. We need standards for judging whether student performance is satisfactory or unsatisfactory, acceptable or unacceptable. We also need standards for judging whether one group performs better or worse than another, or whether a group's current performance is better or worse than before (Messick, 1985). TAC staff can assist in establishing a responsible standard setting process by attending to three key elements: (1) the choice of educational objectives, (2) the description of current group performance ranges and trends, and (3) the identification of educational contexts differentially related to performance (Messick, 1985).

Collaboration. TAC staff must adopt a more collaborative posture to involve school administrators and staff in improvement monitoring. There is ample evidence that evaluation work conducted without any staff involvement is less likely to be valid and useful (Dickey, 1980). Most experts believe that the separation between evaluators and curriculum practitioners will become less sharp in the future and the two roles may be merged in most field practices (Eash, 1985).

VI. CONCLUDING REMARKS

None of the four categories of improvement activity should be viewed in pejorative light. Each has its place in the overall change process. Symbolic improvement activities, for example, are symbolic only in the sense that no direct improvement takes place during the activity. As a dissemination tool, such activities have a significant role to play in raising awareness and in generating momentum and enthusiasm for setting the stage for greater efforts in the future.

The present study showed that a majority of the program improvement activities in Chapter 1 are found in the opportunistic or pragmatic category. Recent field experiences suggest that this trend is likely to continue in the near future. The finding lends credence to the belief that change efforts which are actually implemented at the SEA and LEA levels are more likely to be small and incremental rather than extensive and monumental (Wise, 1979; King & Pechman, 1984). This may be particularly true of Chapter 1 since such projects are typically a small part of the overall school operations.

This does not mean, of course, that systematic approaches to improvement should be discouraged or abandoned altogether. It does imply, however, that understanding of and expectations for program improvement in Chapter 1 should be moderated in the face of reality constraints. It further implies that many of the school improvement models currently in use may need to be adapted or tailored to accommodate assumptions inherent in the improvement package and that TAC staff should take advantage of the diversity of approaches being initiated to afford flexibility in promoting incremental improvements in Chapter 1 projects.

A shared knowledge base, consensus decisionmaking, and a participatory and collaborative process appear to be essential ingredients of a successful program improvement effort. More significantly, the pivotal importance of the teacher and the classroom is evident in all cases. Higher level processes such as state or district initiative, principal leadership, and expertise of outside consultants are important to the extent that they can play an effective role in facilitating changed behavior and improved student-teacher interaction in the classroom.

The role of evaluation will be shaped by the client's need for information both to establish accountability and to support improvement activities. Technology has increased our capacity to collect, process, and analyze vast amounts of data. This will provide greater choices with regard to the priority for different types of data. Making those choices may create tensions between different TAC client groups. TAC staff will need to be cognizant of the divergent needs and objectives of the different client groups. They need to be aware of both the normative and prescriptive models of decisionmaking (Kennedy, 1984). Evaluation information is used for developing understanding as well as for supporting specific decisions. Our ideas of how decisions are made prompt us to use different strategies for promoting appropriate evaluation use and for encouraging such use (King and Pechman, 1984).

Evaluators trained in research methods may hold a skeptical view toward improvement initiatives. They are used to testing the null hypotheses instead of the research hypotheses. Nonetheless, linking evaluation to program improvement efforts is a natural and necessary extension of the evaluator's work. To be effective and, indeed, to ensure its survival, the evaluation profession must exhibit "a bias toward action" (Peters and Waterman 1982).

REFERENCES

Alkin, M.C., Diallak, R.D., & White, P. (1979). Using evaluation: Does evaluation make a difference? Beverly Hills, CA: Sage Publications.

Alkin, M., Kosecoff, J., Fitz-Gibbon, C., & Seligman, R. (1974). Evaluation and decisionmaking: The Title VII experience, Monograph. Los Angeles: Center for the Study of Evaluation, University of California.

Berman, P. (1980). Toward an implementation paradigm of educational change. Santa Monica, CA: Rand Corporation.

Berman, P., & McLaughlin, M.W. (1974). Federal programs supporting educational change. Volume I: A model of educational change. Santa Monica, CA: Rand Corporation.

Cooley, W.W. (1983). Improving the performance of an educational system. Educational Researcher, 12(6), 4-12

Dickey, B. (1980). Utilization of evaluations of small-scale innovative educational projects. Educational Evaluation and Policy Analysis, 2(6), 65-77.

Eash, M.J. (1985). Evaluation research and program evaluation: Retrospect and prospect. Educational Evaluation and Policy Analysis, 7(3), 237--238.

Eash, M.J. (1985). A reformation of the role of the evaluator. Educational evaluation and Policy Analysis, 7(3), 249-252.

Edmonds, R.R. (1982). Programs of school improvement: An overview. Educational Leadership, 40(3), 4-11.

Firestone, W.A., & Herriott, R.E. (1982). Prescriptions for effective elementary schools don't fit secondary schools. Educational Leadership, 40(3), 51-53.

French, W.L., & Bell, C.H., Jr. (1978). Organizational development: Behavioral science interventions for organizational improvement (2nd Ed.). Englewood Cliff, NJ: Prentice-Hall.

Gottfredson, G. D. (1984). A theory-ridden approach to program evaluation. American Psychologist, 39 (10), 1101-1112.

Kennedy, M.M. (1984). How evidence alters understanding and decisions. Educational Evaluation and Policy Analysis, 6(3), 207-226.

Kerlinger, F. (1977). The influence of research on educational practices. Educational Researcher, 6, 5-

King, J.A., & Pechman, E.M. (1984). Pinning a wave to the shore: Conceptualizing evaluation use in school systems. Educational Evaluation and Policy Analysis, 6(3), 241-251.

Lindblom, C. (1972) Strategies for decision making. Urbana, IL: University of Illinois.

Mackenzie, D.E. (1983). Research for school improvement: An appraisal of some recent trends. Educational Researcher, 12(4), 5-17.

Messick, S. (1985). Progress toward standards as standards for progress: A potential role for NAEP. Educational Measurement Issues and Practice, 4(4), 16-19.

Miles, M.B., Farrar, E., & Neufeld, B. (1983). Review of effective school programs: Vol. 2. The extent of adoption of effective school programs. Paper prepared for the National Commission on Excellence in Education. Cambridge, MA: The Huron Institute.

Millman, J., Paisley, W., Rogers, W.T., Sanders, J.R., & Womer, R.B. (1979). Performance Review of USDE's ESEA Title I Evaluation Technical Assistance Program. Washington, D.C.: Hope Associates.

NWREL. (1985). Chapter 1 Evaluation Technical Assistance Center Region 4 Final Report. Portland, OR: Northwest Regional Educational Laboratory..

Passalaqua, J. (1981). The school social organization: Suggestions for change. The Generator (A Publication of Division G., American Educational Research Association), 2(3), whole issue).

Patton, M.Q., Grimes, P.S., Guthrie, K.M., Brennan, N.J., Grench, B.D., & Blyth, D.A. (1977). In search of impact: An analysis of utilization of federal health evaluation research. In C.H. Weiss (Ed.), Using social research in public policymaking. Lexington, MA: Heath.

Peters, T.L. & Waterman, R.H. (1982). In search of excellence: Lessons from America's best-run companies. New York: Harper & Row.

Pratzner, F.C. (1984). Quality of school life: Foundation for improvement. Educational Researcher, 13 (3), 20-25.

Purkey, S.C., & Smith, M.S. (1982). Too soon to cheer? Synthesis of research on effective schools. Educational Leadership, 40(3), 64-69.

Purkey, S.C., & Smith, M.S. (1983). Effective schools--A review. Elementary School Journal, 83(4), 427-452.

Reisner, E.R., Alkin, M.C., Boruch, R.F., Linn, R.L., & Millman, J. (1982). Assessment of the Title I Evaluation and Reporting System. Washington, D.C.: U.S. Department of Education.

Rowan, B., Bossert, S.T., & Dwyer, D.C. (1983). Research on effective schools: A Cautionary Note. Educational Researcher, 12(4), 24-31.

Shapiro, J.Z. (1985). Where are we and where we need to go. Educational Evaluation and Policy Analysis, 7(3), 245-248.

Sirotnik, K. A. (1984). An outcome-free conception of schooling: Implications for school-based inquiry and information systems. Educational Evaluation and Policy Analysis, 6(3), 227-239.

Tomlinson, T.M. (1981). Effective schools: Mirror or mirage? Today's Education, April/May, 48-50.

Weick, K.E. (1976). Educational organizations as loosely coupled systems. Administrative Science Quarterly, 21, 1-19.

White, K.R., & Worthen, B.R. (1984). Improving state and local education programs: Two outcomes of a statewide evaluation. Educational Evaluation and Policy Analysis, 6(3), 253-265.

Wise, R.I. (1978). What we know about the decisionmaker and decision settings. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.