

DEVELOPMENT AND FIELD TRIAL
OF A
SCHOOL STAFF SELF-ASSESSMENT PROCESS

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS (EDUCATION)
in the Faculty
of
Education



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SIMON FRASER UNIVERSITY

February 1980

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Development and Field Trial of a School

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ABSTRACT

A school staff concerned with the quality of education faces questions about change: whether to, what to, and how to change. The search for ways of increasing a school staff's ability to cope effectively with a changing environment and to identify changing needs is an area of study attracting growing interest. The development of school-based needs assessment strategies as one part of a planning project in a large, urban, Canadian school system was the context in which this study was conducted.

The purpose of this study was to develop and field test a self-evaluation process for use by school staffs to provide information on the quality of interaction in their schools. One objective of the study was to modify and explore the use of an instrument for rating dimensions of self renewal: Dialogue, Decision-making, Action, and Evaluation (D.D.A.E.). The School Practices Inventory instrument uses criteria statements, and a discussion scale. A second objective was to observe the process of data feedback and discussion of how school practices are currently operating, and how staff would like to see them operate. The study sought to generate information for later application in designing the final format of the self-evaluation component of the needs-assessment materials under development. The usefulness of the Inventory, the effectiveness of the discussion scale, and the strength of the feedback process were studied.

Three staffs used the Inventory, discussed data at feedback meetings, and formed plans for dealing with concerns. Field trial activities were organized into three case studies. Because of the multi-dimensional nature of the process, the study used a variety of methods. Ethnographic and statistical methods suited to the decision-oriented purposes of the research emphasized participant

observations, key-informant interviews, questionnaires, and statistical analysis on the instrument items and sub-scales.

Findings were: (1) that in schools with very different types of climates participating in the study, the use of the Inventory followed by discussion in feedback meetings affected D.D.A.E. processes and engendered school climate change; (2) that Inventory items were valid, highly related to staff interaction dimensions, and item-scale correlations were high; (3) that all six sub-scales were significantly correlated at the .05 level, with 75% of the correlations significant at the .01 level; (4) that the discussion scale did not strongly support the rating scale as additional, complex variables appeared to influence decisions about how and when to discuss staff concerns; and (5) that overall, staffs judged the self-assessment process to be practical and to provide useful information for staff planning.

Practical insights into essential change generated by the study included: the importance of looking at contextual factors when focusing on the single school; the appropriateness and effectiveness of ethnographic methods in decision-oriented studies; and the importance of follow-up materials for core planning groups in staffs to obtain staff participation in planning.

ACKNOWLEDGEMENTS

The writer wishes to extend thanks to those, who at various points throughout the research period, gave important advice and assistance: to Dr. Michael Manley-Casimir, Dr. David Kaufman, and Dr. Marvin Wideen; to members of the Educational Planning Team, Wilson Winnitoy and Lissi Legge who worked on the Needs Assessment Process; and to the principals and teachers of the schools who participated in this study.

I would also like to express my appreciation for the support and encouragement of family and friends, and for the contribution of Debby Milosz to the completion of this project.

R.F.L.

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BACKGROUND AND PROBLEM

Background

Concern for change in the schools, and for the processes effecting change is growing among both professional educators and members of the public. Much of the pressure on the school as a system embedded in the larger system of culture is related to two contrary points of view. Serious disagreement exists as to whether there is too much change or too little change in education. The consequences of the dichotomy have been felt in the area of methodical inquiry as well as in the day to day operation of the schools.

Getzels (1970) suggests that the examination of what is meant by change has been somewhat neglected as has the possibility that there may be different types of change. Depending upon the type of change at issue, both the perceived rigidity or faddism in education appear to be demonstrable. A considerable literature has developed in support of each perception.

In the midst of such conflicting demands, the school staff concerned with maintaining and improving the quality of education offered to pupils faces questions having to do with whether changes should be made, and if so, what to change, and how to bring it about. (Culver and Hoban, 1973). "Enforced change" has its source in the cultural context of the organization and "Expedient change" has its source in the institutional structure of the organization. Both accommodation and reaction as mechanisms of change are liable to certain dangers. (Getzels, 1970). These alternatives to thoughtful planning for change by an educational institution are costly both in terms of consequences for pupil achievement and for staff morale. (Pellegrin, 1968).

The type of change Getzels (1970) calls "Essential change" has its source

in voluntarism within the personal dimension of the organization. It is not merely an accommodation to cultural or external pressure nor is it only a reaction to institutional or internal pressure. Instead it has its origin in the creative inquiry and commitment of the individuals inhabiting the system.

Several important theoretical assumptions underlie this concept of changing as self-renewal in a school organization. The work of Getzels, Lipham and Campbell (1968) gives insight into not only the statics but the dynamics of organizations like schools. They stress the necessity of taking into account nonlinear relations among variables as well as the linear relations. In developing the idea that not all relations and interdependencies in the effective system are balanced, symmetrical, and linear, these writers point out that there are forces impinging from within the social system as well as those from without, and that voluntaristic behavior deriving from the personality and cognitive characteristics of the individuals in the system as well as the structure of the prescribed roles affects the dynamics of the organization.

Goodlad (1973) develops the idea that the single school becomes the appropriate target for intervention designed to develop self-renewal capabilities, because it is an organic whole, a system made up of parents and pupils, a professional team of teachers with a designated leader and the necessary buildings, equipment, and materials.

Bentzen and Tye (1973) suggest that achieving essential change is not a one time phenomenon. Teachers, students, parents, and administrators should be encouraged and supported in their efforts to engage cooperatively in the process of coping with the unique and changing problems and goals they identify. This type of on-going process requires that any consultative or intervention strategies should be designed to assist staffs attain and strengthen an organizational climate and associations with other organizations

in which there is the capability of renewal.

It is not only the formal rules or procedures but rather the quality of the human involvement, commitment, and understanding exercised by professionals, parents, students, and others that make a school effective in meeting the challenges of a pluralistic and changing society. Schmuck, Runkel, Arends and Arends (1977) believe the key to becoming a self-renewing organization lies in developing its staff's capability to carry out cooperative planning, decision-making, and assessment.

The major roles of consultative or change agent personnel will be to transmit necessary knowledge or skills to the staff members or to provide some type of expertise for the organization at its request. A school staff will take responsibility for the on-going activities. Planners will increasingly create the conditions in which people can learn the competencies needed to possess, master, discard, and invent new systems of action. (Ziegler, 1972).

Although a school staff may be committed to an on-going program of planned change, it may be impeded by a lack of understanding about how to work effectively with the organization. Lortie (1966) points out the characteristics of school organizations in which staff members were trained to exist in a 'Robinson Crusoe ecology', and the school organizations which are self-correcting, self-renewing systems of people who are receptive to evidence that change is required and able to respond with innovative, integrated programs and arrangements. Sarason (1971) has also contributed an extensive observation upon the context of the school that resists and works against change.

It is appropriate to highlight two rather lengthy and comprehensive studies that have been undertaken within the last decade. These have yielded a number of productive strategies which appear capable of increasing the school's ability to cope effectively with a changing environment. One of the

research programs has been conducted by the University of Oregon's Center for the Advanced Study of Educational Administration (now the Center for Educational Policy and Management). This program is known as Organizational Development. The second research program was carried out by the Institute for the Development of Educational Activities (I.D.E.A.). The project was known as the Five Year Study of Changing Schools.

Organizational Development

In 1967, the Center for Advanced Study of Educational Administration (C.A.S.E.A.) initiated a program of research and development entitled Strategies of Organizational Development. Over the ensuing ten years, the development and dissemination efforts have been aimed simultaneously at establishing networks of Organizational Development specialists within school districts and developing and producing aids for consultants in the form of designs, diagnostic and feedback instruments, learning games, skill exercises, group procedures, and audio-tape materials.

The Five Year Study of Changing Schools

Results of the I.D.E.A. study appear to have produced some major insights for both the role of the consultant and for the processes needed to operate self-renewing schools. The research program began in the mid-Sixties, a period of growing concern and dissatisfaction with the traditional school system. The director of the study, John Goodlad, thought that the failure of many intervention strategies such as the non-graded movement with which he was associated resulted because of a failure to take full advantage of the organismic wholeness of the single school.

I.D.E.A. decided to examine the total setting in which change takes place. The study was designed to involve eighteen schools from districts in southern California. The schools were invited to participate in designing and testing out new strategies for improving education, but were not committed to implementing any specific innovations.

The communications model called Dialogue, Decision Making, Action, and Evaluation (D.D.A.E.) and the League of Schools were two strategies that appeared particularly promising in their power to assist schools to become and remain self-renewing organizations.

Through the use of self-evaluation instruments that dealt with the functioning of the organization, staffs learned how to gather data they needed to direct their own self-renewal processes. Overman (1973) reports that the self-evaluation instruments and the feedback process set around them that were developed by the I.D.E.A. staff and the school staffs in the study provided a key part of a needs assessment strategy that gave the schools a powerful renewal capability.

The Problem Situation

In 1969, members of the Development and Research Department of the Calgary Board of Education became aware of the renewal studies outlined above, and decided that some of the emerging results could be of potential value in improving the planning and evaluation capabilities of schools in their district. A project was designed to explore, in a local setting, some of the strategies advocated by the I.D.E.A. and C.A.S.E.A. researchers.

The pilot project of an associated schools group (A.S.G.) operated from 1970 to 1974 in a family of eleven Calgary schools that had opted into the project. The A.S.G. was made up of a high school, its two feeder junior high

schools and their eight feeder elementary schools. The leaguing of a K-12 group of schools into an A.S.G. was aimed at establishing an organizational and social setting in which to work with staffs to develop and assess improved strategies for school-community communication, consultation, curriculum development, staff development, and program planning.

The A.S.G. project was managed and facilitated by the Development and Research Department from 1970 to 1973 and subsequently by the Planning, Process and Evaluation (P.P.E.) team. This P.P.E. team took over development and research functions after the 1973 administrative reorganization in the Calgary Board of Education. It worked out of a Curriculum Services Department in the Instructional Division and thus, some of the emphasis became more planning oriented.

The P.P.E. group continued to observe and participate in the formative evaluation of the A.S.G. project. These observations from the project included a growing awareness that techniques for school-based planning and needs assessment, processes for managing data feedback, and better methods of delivering consultative and staff development services were required if schools in an associated group were to participate competently in the planning process as self-renewing members.

These needs were translated into action objectives for the P.P.E. team between 1973 and 1976. As the team worked in an advisory capacity with schools in all five administrative areas of the district, a recurring theme in the team's objectives was improvement of the quality of advisory service to teachers. The budget available for consultative and resource personnel did not keep pace with increasing demands from school staffs for assistance with planning and evaluation concerns. It was a time of rapid growth and change in the school system and it was essential to look carefully at the most effective and efficient use of the available personnel. The Curriculum Services

Department Long Range Plan for 1973-74 which contains the aims for the various teams gives some background to the practical reasons for the focus selected for this research project. That document states:

In order that individual teachers and administrators, school staffs and K-12 families of schools will have at their disposal sufficient workable skills, procedures, and techniques to be able to deal effectively with the ever-increasing changes in education, the expectations and demands of the Department of Education, the Board of Education, of students, parents and the community, and so that the quality of education for all students in the system will be maintained or improved, the aim of the P.P.E. team is to provide services in educational planning, in the processes of education, and evaluation, in dimensions which are outside of the responsibility of subject area teams. (Calgary Board of Education, 1973).

The following goal areas and strategies also contained in the above-mentioned long-range plan link this research project to the area of educational practice of concern to this researcher, who was a member of the P.P.E. team, and subsequently an Educational Planner with the Division of Planning and Information of the Calgary Board.

Goal 1. To develop and provide alternative designs in school and curriculum organization, time-tabling, staff deployment and staff development,

The team will provide assistance in the design, implementation, and evaluation of in-school projects and innovations.

Goal 2. To develop and pilot strategies to assist individual school staffs with identification and prioritization of goals,

The team will develop programs for school-based planning and evaluation.

Goal 4. To develop and provide strategies and techniques for the evaluation of programs, processes and personnel,

The P.P.E. team will develop designs and procedures for total school evaluation, give assistance with the evaluation of system-wide and school-based programs, and develop strategies for the systematic collection of evaluation data in the school system. (Calgary Board of Education, 1973).

The self-evaluation process under development in this research project, thus, responds to needs which emerged from experience with the pilot project in school-based planning and self-renewal (A.S.G.) and subsequently efforts to develop school-based planning procedures.

Requests received by the P.P.E. team during 1974-1975 from schools which formed the pilot group for the Calgary Educational Planning System (C.E.P.S.) project that had been started in response to Goal 2 stated above, required the development and field testing of planning and renewal techniques that could be used in school-based planning. The P.P.E. team was working with staffs in seven elementary schools to devise needs assessment procedures that would look at several aspects of the school: student outcome objectives, the enabling objectives which outline what the staff will set up and provide in order that learning will be facilitated, and the staff and school climate objectives.

The work in 1974-1975 with one of the pilot schools, Bowcroft Elementary, included the development of a process for assessing staff climate. The staff and their newly appointed principal were concerned about the quality of planning and communication and about teacher morale. A process was needed whereby group perceptions could be noted and analyzed. The organizational climate difficulties were also related to problems the group was having with planning and budgeting for programs. The P.P.E. team advisors worked with the staff to apply some strategies from the I.D.E.A. study. The Criteria Instrument and the type of feedback process used by the group of schools in the California study were adapted for use in Bowcroft.

The staff at Bowcroft was enthusiastic in its response to the School Based Needs Assessment process activities. The information from the Criteria Instrument gave the staff members an inventory of school practices which they could assess and review and use in planning needed changes. Areas of disagreement were objectively displayed and feedback from the advisors could

be included in the discussion of action plans for the future. Many of the objectives that emerged in subsequent planning sessions with the school dealt with the needs revealed through the self-assessment in the areas of morale and communications. (Process, Planning, and Evaluation Team, 1975).

Evaluation of the Bowcroft pilot indicated the need for some refinements in both the original Criteria Instrument and the process of self-evaluation and feedback employed. In the light of favorable response from the staff on the use of techniques from the I.D.E.A. and C.A.S.E.A. studies, it was decided to modify and develop the self-evaluation process with a view to including it in a manual of school-based planning procedures for the C.E.P.S. project that was then under preparation. An additional aspect of the self-evaluation process required investigation, in that pilot use had been confined to elementary schools. The target group of schools needing such procedures included all levels of organizations, K-12 and thus some experience with using the process in secondary schools was needed.

The Purpose of the Study

The purpose of this research is to develop and field test a self-evaluation process as one component of a school-based needs assessment strategy.

Objectives

Specifically the objectives of the study are to:

- a) Modify and explore the use of an instrument that will give a school staff information about its functioning as a problem solving group and about the operation of various procedures and practices

in the school.

b) Design, implement and assess a feedback/discussion/self-evaluation process that provides a systematic method of locating areas in which there may be disagreement within a staff and gives people a means for identifying them.

c) Provide a strategy of minimal advisory intervention in the following dimensions of the process:

- i) development of the instrument, process and technique,
- ii) provision of scoring and feedback of information,
- iii) observation of the self-evaluation process and documentation of the procedures in order to suggest modifications.

d) Study the use of the process in three case schools and observe the relation of the results to certain variables in the school organizations.

Research Questions

Specific questions relate to the usefulness of the Criteria Instrument, the Satisfaction Index, and the operation of the self-evaluation process in three case schools. The criteria statements from the Criteria Instrument used in the I.D.E.A. study are included in the School Practices Inventory which forms the major instrument of the self-evaluation process. The Satisfaction Index on the Inventory instrument was designed to give the staff members an opportunity to indicate whether they felt the item on the Inventory should be considered in the follow-up feedback sessions and discussions. The relations between areas rated on the Inventory and topics that came up for discussion during the follow-up sessions with the staff were observed. The feedback

sessions were an integral part of the process. The objective of these sessions was to provide information that might be helpful to the staff and that might give them an awareness of the organizational procedures, the communication processes, and the quality of staff interaction in their school. Other questions assess the effectiveness of survey feedback and discussion as part of the needs assessment process within the theoretical framework of a self-renewing school.

Question One

How did the case schools compare at the beginning of the study?

Question Two

Has change occurred as a result of the use of the process?

Question Three

What is the over-all evaluation of the staff self-evaluation process?

Question Four

Should modifications be made to the School Practices Inventory Instrument?

Question Five

What is the relationship among subscales on the School Practices Inventory?

The Scope and Delimitations of the Study

Several factors that narrow the focus of the study should be noted.

1. The Exploratory Nature of the Project

The relation of this study to the on-going developmental project of a school system planning strategy has already been discussed in an earlier part

of this chapter. This study is limited to the development and field trial of one component of a more complex planning strategy. The process being researched and reported upon in this thesis is part of a school-based needs assessment package which, in turn, is viewed as part of a larger planning endeavour.

2. The Use of Three Schools as Case Studies for the Field Trial

Three school staffs used the self-evaluation process. They were in different locations in the lower mainland of British Columbia, were of different sizes, and of different grade levels, elementary and secondary. In the context of the planning strategy for which this self-evaluation process is being designed, a school staff would be using the self-evaluation as part of a longer planning activity, and would have requested the assistance of a consultant. The consultant or resource person in this study became the researcher, and thus, the request was made of the case schools to participate in the research. This factor violates some of the conditions advocated for use of the planning processes with schools.

3. The Selection of Variables for Examination in This Study

Only selected variables have been examined in this study. Many others variables that relate in some way to the total social interaction of the school organization might have been considered. Teacher values, community goals and priorities, school district expectations, the availability of resources, past experiences with planning, and a host of characteristics of the individual school context that make each situation unique could have been looked at. In an actual planning situation, such factors would possibly have

to be taken into account when developing plans with the school.

4. The Lack of Generalizability of the Findings

The study is designed to be a 'decision oriented'¹ research project with observations and analyses of the process contributing to the information available for use by the developers of a school-based needs assessment package, and by the staffs which will be involved in the planning. The results will be applied to specific ends, and should help practitioners make decisions about school organization or programs.

5. Selected Literature

The literature reviewed for this study deals with perspectives on the change process most related to the process being developed. It is not a comprehensive review of the whole field of educational change. The material selected focuses upon the three major types of change outlined by Getzels and particularly on the findings of studies related to the promotion of self-renewing capabilities in school organizations.

Outline of the Thesis

Chapter two presents some perspectives on the change process. The material selected focuses upon reactive versus planned or essential change. The findings of studies and theoretical work related to the promotion of self-renewing capabilities in school organizations are included. Chapter three features the research methods used in the study. Major sections of this chapter deal with the applicability of ethnographic methods of decision-

oriented research projects of this type, the role of the observer and researcher, a description of the population observed in the study, the development and description of the instrument, and the procedures for collecting, recording, shaping, and analyzing the data.

Chapter four presents the analysis and results of the study. A description of the contextual factors affecting the field trial sites opens the discussion. The five major research questions are discussed both in terms of objective and subjective data collected through such means as the observations, interviews, and other ethnographic methods.

Chapter five presents a summary of the information and implications and traces recent developments in the implementation of the findings in a large urban centre.

PERSPECTIVES ON CHANGE AND CHANGING

Three types of change outlined by Getzels (1970) provide a useful set of categories within which to examine the literature pertinent to the research reported in this thesis. The tripartite scheme for looking at change in a system focuses on sources, mechanisms and types of change designated: enforced change, expedient change, and essential change.

This chapter reviews selected items from the change literature bearing on these types of change and examines insights influencing the development of the school-based needs assessment process.

Getzels (1970) made three important observations about the literature on educational administration and educational change. First he observed a growing concern with organizational change from the late Fifties to the late Sixties. The second observation was the serious disagreement over whether there was too much or too little change. One body of literature asserted that the predominant character of the school was its rigidity, while by contrast, another described a pervasive faddism. The apparent credibility of each belief led to such serious consequences as the foreclosure of methodical inquiry and the inability to distinguish among various types of change. Either of the contrary positions appeared to be empirically demonstrable in the absence of classifications of change that clarified underlying assumptions. The third observation concerned a belief expressed frequently in the literature that more empirical data was needed to solve the problems of organizational change. Getzels proposed instead

what is needed in this domain then are paradigms of organizational behavior that deal not only with the structural or static aspects of organizations as current conceptions predominantly do, but focus also and more specifically on the mutable or dynamic

aspects of organizations--that is, conceptions dealing systematically with the nature of change, the possibility of different types of change...(p. 72).

Getzels traced the development of thinking on the organization and administration of schools through a number of phases from the use of simple to complex variables, through descriptive studies to experimental studies, and from theoretical models of the school as a technical system to theoretical models of the school as a social system.

The model of the school as a social system is described as interdisciplinary, including the following elements: a psychological element represented by the central concept of personal disposition, a sociological element represented by the central concept of role expectation, and an anthropological element represented by the central concept of cultural value, all embedded in a particular environment. Behavior in the school as a social system is seen as emerging from the interaction of these personal, institutional, cultural, and environmental forces. (Getzels, Lipham and Campbell, 1968). The same organization can be viewed as both static and dynamic. It is mutable; it undergoes change in both its internal and external relations. Getzels cited the nature of much current organizational and social systems theory as a reason for the difficulty educators have in dealing with the dynamics of changing organizations.

The concept of organization founded in equilibrium models (Parsons and Shils, 1951) concentrating upon the structural and static aspects of social systems theory produces several consequences. The first is the belief that all relations and interdependencies in the effective system are balanced, symmetrical and linear. Getzels proposes that not all crucial relationships in social systems are linear, balanced and symmetrical. A second consequence is that the predominant mode of analysis of organizational behavior tends to become structural rather than procedural focusing upon statics more than upon

dynamics. Getzels suggested the structure of an organization is more easily inferred from studying its dynamics than are the dynamics from studying its structure. He proceeded to develop some distinctions among types of change.

TYPES OF CHANGE

A change that would not have occurred in the internal system but for pressures from the external system is called enforced change. The source of the change is in the cultural dimension outside the organization. The mechanism of change in the organization is accommodation to retain congruence with the related external systems. It is to this type of change that reference is made when it is said that the impetus for change is from the outside. Other theorists refer to this type of change as ad hoc change or one-way transmission (Havelock, 1969).

If alterations in the cultural values exert pressures for alteration in the internal system of the school, counter pressures can develop. The institutional structure of roles resists transformation and only alterations that will conserve the existing organization are made. This kind of change that is introduced in order to maintain the system rather than change it on principle is called expedient change. The source of the change is in the institutional dimension of the organization, the mechanism of change is reaction in order to circumvent more fundamental transformations that might otherwise ensue. It is this type of change to which reference is frequently made by those who claim that school organization is rigid and inflexible.

Transformations that are neither merely an accommodation to external pressure nor tactics for resisting transformation but spring from the needs, initiative and imagination of the individuals within the school are called essential change. The source of the change is in voluntarism within the

personal dimension of the organization. The mechanism of change is creative inquiry and transformation based upon principle. This type of essential change is sometimes referred to as genuine renewal capability in the organization. (Gardner, 1967).

Enforced Change

Systematic concern with organizational change is of recent origin. The review of administrative behavior in education (Campbell and Gregg, 1957) did not deal with the topic as such. While scholars have given increasing attention to the topic, much of the literature of the past decade has concentrated upon efforts of schools to accommodate external pressures to change. Griffiths (1964), for example, exemplifies theoreticians of that time producing an extended formulation of organizational change. Drawing upon preceding theory he listed some general propositions about organizational change: the major impetus for change in organizations is from outside; the degree and duration of change is directly proportional to the intensity of the stimulus from the suprasystem; change in an organization is more probable if the successor to the chief administrator is from outside the organization than if he is from inside the organization; change occurs from the top down, not from the bottom up; the more hierarchic the structure, the less possibility of change; and the more functional the dynamic interplay of subsystems, the less the change in an organization. If these characteristics of organizational change are interpreted in terms of Getzel's (1970) category of enforced change with its source of pressure in the cultural dimension of the organization, external to the system, it is easy to see how the danger of over-hasty compliance to outside pressure and indiscriminate acceptance of innovations could be mistaken for originality and progress and lead to the accusation of faddism

in North American education.

Watson (1967) restated the theoretical proposition described by Griffiths and made it into an empirical generalization: "By and large, most changes have been introduced...by outside pressure rather than generated from within the system itself." (p. 109) Change is seen as being forced upon an organization that then accommodates to meet that pressure.

Sources of Cultural Pressure on Schools to Change

The opinion of many people concerned for the past two decades with a massive effort to change school organization can be summed up by Goodlad's (1973) statement: "...to remain the same is to become anachronistic sometimes leading to revolutionary solutions".(p.20) The concentrated pressure from the public and from educators to change schools has been ascribed, in part, to cold war competition with the Soviet Union. Evidence of the reaction to early Russian achievements in space technology was seen in the American school math and science curricula. But the concern for improving schools arose also from a growing public awareness of the need to deal with diverse and long standing social problems. Agitation by minorities, the poor, by youth, and by politically motivated groups of many persuasions frequently reflected back onto the seeming failure of the school system to cope with people's shifting needs and aspirations.

The belief persisted in America that the schools could be expected to solve some of the ills of society. Some of the pressure for change came from those who proposed revolutionary solutions to educational problems, believing the traditional school system to be rapidly approaching the anachronistic. The vocal critics of the Sixties examined and frequently deplored the state of schools on this continent, advocating radical change in both the outcome goals

for education and in the means used for achieving them. Such reformers as Thelen (1960), Goodman (1960), Holt (1964), Friedenbergr (1965), Goodlad (1966), Leonard (1968), Kozol (1968), Dennison (1969), Kohl (1969), Joyce (1969), urged changes be made in curriculum, in the organization of schools and in the methods of teaching. They saw a need to re-emphasize learning how to learn, to return excellence and ecstasy to learning and to broaden the range of opportunities offered to learners. Some suggested alternative forms of education, but all shared the view that what happens to the child in school is an end in itself, not just a means to some future end such as the acquisition of specific skills. (Averch, 1972). An immense popular literature attracted much public attention to the criticisms of schools and intensified the external pressure to change.

Supporting the changing climate of expectations for schools to try and improve was a significant increase in federal funding for education in the United States. Legislations such as the Equal Opportunities Act, the Educational Professional Development Act, the National Defense Education Act, and particularly the Elementary and Secondary Education Act (1965, Title 1), committed vast amounts of federal money to the improvement of education. Bailey and Mosher (1968) attribute to these acts an enormous source of external pressure on schools to innovate and change. State Departments of Education, school districts and administrators expected school staffs to adopt innovations and learn new techniques of teaching.

The impact of the innovative thrust of the Sixties in the United States was felt in Canada too. The source of part of the pressure to change is attributable to the dependence of Canadian educators upon the research, development and publishing capabilities in the United States. Changing trends in Canada, however, are also responsible for the demands on schools to innovate. It was a period of intensifying regional and cultural diversity,

increasing mobility and urbanization of the population, growing economic disparity among regions, and changing ideological structures. The impact upon the priorities of such an increasingly pluralistic society was pointed out by Burton (1972) and by Stansfield (1973), as well as in the reports of such influential provincial commissions as Hall-Dennis (1968), Worth (1972) and in such reports as the British Columbia Teachers' Federation study of teacher involvement in educational change (1968), the Human Resources Research Council (H.R.R.C.) study on educational planning futures in Alberta, (1972), and the Organization for Economic Co-operation and Development (O.E.C.D.) review of National Policies for Education: Canada, (1975). Change for the sake of change was not advocated by these public and professional groups. They pointed out changing cultural values and the need for becoming involved in planning modifications in the organization of schools to meet those changing needs. In the period following the major commissions of the late Sixties and early Seventies, many innovations were attempted as schools began to implement enforced changes demanded by the cultural environment in which they worked.

Results of the Efforts to Change Schools

The results of externally motivated efforts to change schools have been studied and contribute in large measure to the growing change literature that arose during the Sixties and Seventies. Various studies have noted that educators usually directed and assessed change efforts even though the initial impetus and planning may have occurred outside the educational organization. Insights into the process of organizational change emerged from the work done by educators in developing and evaluating change efforts of the type described as enforced change. These effects are grouped under the following headings for the purpose of examining some of the more pertinent insights into change

processes: the increase in research and development activities, increased efforts to link innovations to improving achievement of student outcome objectives, increased efforts to develop and implement educational alternatives, increased efforts to understand the change process.

Increase in Research and Development Activities

Although there were many significant innovations developed prior to the Sixties, notably the results of the curriculum revolution that began in the preceding decade, Bentzen and Tye (1973) assessed the period to be one in which the output of ideas and the pressure on schools to adopt them accelerated markedly. As money became available, new regional research and development centres (RD) were established across the United States. Chase (1971) prepared a background paper for the Commissioner of Education assessing the operation and results of the centres begun in 1966. He pointed out several characteristics of RD that contributed to the continuing improvement of education, and were more fully exemplified in the educational RD operations than in educational practice generally. One of the most important was the systematic attempt to work out cycles of needs assessment, specification of objectives, analysis of alternative strategies and treatments, leading to choices among alternatives, construction of partial or tentative systems of prototypes on the basis of testing in clinical and experimental situations, and continual evaluation and refinement. Another important feature of the work of the RD centres was the attention paid to all the major elements in learning environments resulting in broader understanding of the total context of the school organization. Chase stated:

We have learned to distrust the assumption that improvement in education will result from piecemeal reforms such as introducing new media of instruction,

revising instructional materials, regrouping learners, organizing teachers into teams, or adopting programmed instruction. The history of innovation shows that any substantial gain in effectiveness depends on many factors operating to the common effect...involves helping school personnel acquire needed skills and competence in new roles as well as developing improved instructional materials and management systems. (p. 10)

Potentially productive innovations from all aspects of education emerged. Through the publications and dissemination network of the RD centres, the innovations and products competed for teachers' attention. Project funds were available to support school efforts to implement change. Chase identified as a major weakness of the RD centres the poor provision for dissemination and implementation. In his assessment, "...the process of change is far more complex than the purchase and installation of products" (p. 60); research and development must focus on these processes as well as products. Some significant developments described as products by Chase are: individualization of instruction through such total systems as Individually Prescribed Instruction, (IPI), and Individually Guided Education, (IGE); improvement of teacher education through various strategies such as microteaching, personalized teacher education programs, and learning packages from North West Regional Laboratory called Improving Teacher Competencies; the development of strategies to improve early childhood learning methods; and the improvement of educational organization and administration through strategies such as Organizational Development from the RD centre at University of Oregon, and the Multi-Unit School materials from the University of Wisconsin RD centre.

One significant result of the external pressure to change education, thus, is the increase in the number, quality and availability of educational products, materials, and research findings. Clark and Guba (1967) point out an additional effect of the accelerating efforts in research and development: there has been an increase in the number of specialized change agents and

consultants identifying educational needs and problems and working on implementation of innovations with schools.

Linking Innovative Efforts to Improving Achievement of Student Outcomes.

Despite virtually unparalleled efforts by national or privately endowed funding and research agencies to diffuse and implement innovations, all too frequently the results were disappointing. Sarason (1971) expressed the disillusionment felt by many reformers when he lamented: "...the more things change the more they remain the same." (p.2) Achievement of educational outcome objectives appeared not to be improving. Opportunities to change and improve schools were not being maximized by staffs despite the pressures, supports and efforts emanating from external sources.

Another type of research emphasis grew out of the enforced change type of efforts. The funding agencies, governments and foundations wanted to assess the effectiveness of the programs they were supporting. The pressure on the educational system to link quality of student outcomes to some of the types of input factors grew as the investment in improvement accelerated. Several large scale reviews done in the early seventies attempted to synthesize research findings on the effectiveness of schooling. The Rand Report, Averch et al. (1972) and the National Assessment of Educational Progress (N.A.E.P.), Bryant et al. (1974) are two of the most comprehensive.

The Rand Report.

The report was prepared for the American President's Commission on School Finance and assessed what was then known about the determinants of educational effectiveness. Averch reported attempts to discover whether the resources,

processes, and organizations being used in primary and secondary schools had any appreciable impact on student achievement. He looked at five major approaches to this question: input-output; process; organizational; evaluation; and experiential. The input-output approaches to research were exemplified by the Coleman Report; the process studies contained work done mainly by sociologists and psychologists researching methods of resource application; the organizational approaches consisted largely of case studies documenting the effect of organizational change in the school of such factors as historical, contextual, social, and administrative demands; the evaluation studies focused on assessing the effects of broad-based intervention strategies like the federal Elementary and Secondary Education Act and other large funds upon student outcome achievement; and the experiential approaches included the reform literature, action research by teachers and advocates of change describing how the school system works and fails.

The Rand reviewers concluded research had not revealed an approach to education that offered substantial promise of significant improvement in student outcomes across the board. They stated the importance of non-school factors in determining outcomes, emphasizing the impact of other parts of the school organization upon student outcome achievement, and the interactive nature of the school as an organizational system. They further suggested that increasing expenditures on traditional practices alone would have little effect on improving outcomes. Substantial improvement in student outcome achievement depended upon paying increasing attention to the enabling means, the provision of organizations, structures and methods that vary considerably from those in current use.

Bryant, Glaser, Hansen and Kirsch (1974), in a report prepared for the National Assessment of Educational Progress commissioned by the Education Commission of the United States, reviewed the research literature, studies and reports to identify associations between educational outcomes and background variables. Concern for improving education, concern for obtaining equality of educational opportunity for minority groups, and a need to show the effectiveness of federal funding generated the special interest in student outcomes. N.A.E.P. concluded that one can expect to account for between twenty and fifty percent of the variation in academic outcomes (as measured by test scores) by variations in sex, race, home and family background, school characteristics, and attitudinal factors of individual students. Student background, and school characteristics are interlocked, and together account for a large portion of variance in student outcomes. School effects, N.A.E.P. noted, might have appeared more important if specific school inputs for the particular student could have been associated with the individual student scores used. They further noted, a great deal of study was needed to investigate the differential impact of teachers and other school inputs on student performance. There was reason to believe that such variables might have appeared more effective in accounting for change in achievement over time than in accounting for variation in the levels of achievement at a point in time. Information on the impact of school inputs on improving student achievement in specific cases was lacking at the time of release of the N.A.E.P. report.

Subsequent studies have explored other dimensions of school and teacher quality and their effects upon student achievement. As examples of these more recent endeavours, the three studies outlined below provide some evidence of the significance of organizational structures and staff variables for effectiveness.

Bidwell and Kasarda (1977) reported a study examining the determinants of

organizational effectiveness using data from 104 school districts in Colorado. Five environmental conditions, three components of district structure, and one of staff composition are linked in a causal model to the median reading and mathematics scores of high school students. The environmental conditions are size, fiscal resources, percent non-white in the population of the district's community, and the education and income levels of the parental risk population. The measures of district structure are pupil-teacher ratio, administrative intensity and the ratio of supporting professional staff to teachers. The staff composition variable is qualification level of the professional staff expressed as the percent of teachers with masters degrees. Organizational effectiveness is defined as goal attainment related to the academic achievement of students.

Results of the study indicated that pupil-teacher ratio and administrative intensity depress median levels of achievement; whereas, staff qualifications foster student achievement. Of the environmental conditions, only percent non-white has consistently significant direct effects on median achievement levels. Other environmental conditions such as resources have important indirect effects on achievement via their direct effects on school district structure and staff qualifications.

Hanushek (1977) studied the production of education, teacher quality and efficiency. Using data from the Equality of Educational Opportunity study (Coleman et al., 1966) and additional data from California districts he examined some dimensions of school effects within a basic model of the educational process that stated educational output, a multidimensional factor, is a function of the cumulative background influences of the individual's family, the cumulative influences of his peers, the innate abilities, and the cumulative school inputs.

Hanushek's study focused on school influences and looked in particular

at the attitudes of teachers and administrators, at the verbal facility and general ability of teachers, and at the quality of teacher's educational background and experience. From these analyses he concluded that teachers do generally make a difference in the quality of achievement, that schools now operate inefficiently, buying the wrong attributes of teachers, and that language input or verbal ability as a proxy for general intelligence is an important input factor.

Recent studies of outliers coming out of a process evaluation done by the Maryland State Department of Education Centre for Research and Development (1978) identified high residual and low residual schools using basic skills test scores gathered as part of the Maryland Accountability Program. Those schools with generally high or low student achievement were examined more closely in an attempt to identify substantial differences between the high and low residual schools, clusters of factors that were influencing the achievement of students after removing the student background and socio-economic types of factors usually associated.

Questionnaires were administered to teachers, principals, students and teacher aides and observation of the schools in process were made to note school situational factors. Comparisons and analysis of the school observations and questionnaire data showed that certain factors appeared with regularity in the high achieving schools, and other groups of factors appeared consistently in low achieving schools. The positive factors association with high achieving schools were: principals exercised strong leadership, participated in the classrooms and had high expectations for student and teacher performance; school staff had greater experience, more variety of educational background, and read more educational journals; parent-teacher relationships were reported as satisfactory; teachers received high ratings from their principals, were satisfied with opportunities to try new things, expected

greater student performance, and reported positive attitudes about education; teacher aides were used for non-teaching supervision, and worked across all grades with primarily small, low-ability student groups; schools tended to have open space facilities, but traditional curricula, longer days, more team teaching, and smaller classes.

There has been some criticism of the design of educational research pre-occupied with assessing outcomes and identifying the factors statistically associated with these outcomes. Underlying processes, to the extent that they are considered at all, become matters for speculation based on the patterns of statistical associations and "...there can be alternative explanations at the level of causal mechanisms." (Bronfenbrenner, 1976). He proposes an experimental ecology of education, a broadened scientific perspective, a replacement theoretical model requiring life situations, focus on sets of forces or systems, and contrasting systems. The research on the ecology of education would require experiments involving the innovative restructuring of prevailing ecological systems in ways that depart from existing institutional ideologies and structures by redefining goals, roles, and activities, and providing inter-connections between systems previously isolated from each other.

The Increase in Efforts to Implement Alternatives.

Another result of external expectations of schools to change has been the large numbers of theories advanced about the change process, and an equally large number of explanations in the literature for the school's seeming inability to significantly improve student achievement or to change its procedures and orientation. One major group of reformers using experiential approaches to research such as those mentioned in the Rand report have proposed radical ways of achieving change.

Case studies of schools attempting a change program are reported by Goodlad and Klein (1970), Smith and Keith (1971), and by Herndon (1971) among others. They and more vociferous observers of the change efforts such as Postman and Weingartner (1969), Silberman (1971), and Kozol (1972) stated that the traditional patterns, and the institutional nature of the school persisted even when particular innovations were adopted by the staff. In addition to their criticisms of the school's organization as such, the reformers claimed that major surveys and assessments of educational outcomes failed to study certain kinds of unanticipated and, in their opinion, undesirable effects of schooling.

Illich (1970) proposed that public education would profit from deschooling of society. The hidden curriculum of school trains students to confuse process and substance, teaching with learning, grade advancement with education, a diploma with competence, and fluency with the ability to say something new. The major objection many of the reformists had with school as currently organized concerned the institutionalization of values leading inevitably to what Illich called "...physical pollution, social polarization, and psychological impotence: three dimensions in a process of global degradation and modernized misery". The process of schooling as it presently exists transforms nonmaterial needs into demands for commodities and students learn to become consumers reliant upon institutional treatment for health, education, personal mobility, welfare, and psychological well-being. An increasing number of parents and educators subscribed to the ideas of the educational reformers and sought new ways of arranging for children's education.

The substantial trend toward alternative education in North America provides evidence of the extent to which people have been striving to effect some essential changes in education. The traditional organizational structure and context of the school, interacting with the content of instruction and the

methodology, affect both quality and quantity of learning. The reformers' belief was that improvement in the quality of learning and the capability of pursuing certain types of goals for education could be obtained only through a radically changed form of school, or indeed, through elimination of the school as we now know it.

Even such strongly motivated change efforts as those in the Alternative movement have run into difficulties. Deal 1975(a) pointed out:

Alternative schools have been initiated mostly by educational idealists who assumed that a new path to learning could easily be found by removing barriers from the old. They did not conceive that the removal of these barriers would produce overpowering consequences. Neither did they have the understanding, the skills, or the organizational sense to cope with the problems without returning to the system they had wanted to revise in the first place. (p. 16)

Sarason (1971) too foresaw this problem. He thought that study was needed on how complex social organizations work and stated that the culture of the school may assure the failure of any attempt to change education. The growing awareness of the complexity of the change process is evident in the growth of the body of literature on educational change. During the late Sixties and early Seventies, an increasing number of articles and books explored theories and reported on studies that sought better ways to plan, implement and foster educational change. This search has a number of thrusts that have produced fruitful ideas for those concerned with improving education.

Increased Efforts to Understand the Change Process.

These efforts will be examined in several categories: change models, change strategies, and insights into the process of change emerging from studies of enforced change with its major source and impetus external to the

school organization.

Change Models.

Many change models emphasize diffusion of innovation and assume the source of change is external to the school. Such models draw heavily upon experience in other disciplines and traditions such as agriculture or industry. Rogers (1962) reviewed over 500 studies and identified six major traditions of studies in the area of diffusion of innovation, among which, Education, although one of the largest, was of lesser significance in its contribution to the diffusion of ideas.

Miles (1964) gave two models of change, one starting with development of interest in an innovation and ending with a post-trial decision to adopt, adapt, or reject it; the other starting with criticism of existing programs and ending with action or decision about the innovation.

Gallaher (1965) discussed the differences between changes internally derived through invention and discovery, and changes that accompany contact among groups in a culture such as diffusion and acculturation. Out of the research focused on these latter concepts came the distinction between "non-directed" and "directed" culture change. He pointed out that it was the latter that was of most interest to education. The "advocate" consciously selected elements in a "target system" that was to be changed and stimulated the "acceptance" of innovations. Within this view of change, and using the terminology of directed change, Gallaher proposed a model that involved processes of: innovation, the process whereby a new element of culture or combination of elements is made available to a group; dissemination, the process whereby an innovation comes to be shared; and integration, the process whereby an innovation becomes mutually adjusted to other elements in the

system. Within this model, the discussion of advocacy became crucial. Gallaher described "utopic advocacy", concerned with manipulation to gain the acceptance of an innovation. The concept assumed that one could achieve best results by doing things to, or planning for, people rather than with them. He also outlined "pragmatic advocacy", concerned with creating a climate conducive to acceptance. The latter type of advocacy was recommended for achieving genuine change.

Although Bennis (1966) spoke of planned change, he went much further into an analysis of change process, differentiating the power dimensions of "mutual goal setting" and "non-mutual" goal setting, each of which could be either "deliberate" or non-deliberate" on the part of either "one side of the relationship" or "both sides of the relationship". This paradigm offered eight species of change designated by Bennis as planned change, interactional change, technocratic change, natural change, indoctrinational change, socialization change, coercive change, or emulative change. The type of change he called "interactional" lacked self-consciousness, and lacked change agent-client relationship and was non-deliberate.

Havelock (1969) provided a comprehensive overview of the field of innovation. An extensive literature review of about 4,000 items covered the then-current state of knowledge about the processes of dissemination and utilization of innovation. He proposed three major types of models for this type of change: research, development, and dissemination; social interaction; and problem solving strategies.

Bhola (1975) proposed a configurational theory of innovation diffusion. Diffusion in this model is a function of four variables: configurational relationships between the innovator and the adopter systems; linkages within and between the innovator and adopter; environment of a change event; and resources available to the innovator system to promote the planned change and

to the adopter system to incorporate that change.

Overemphasis on externally initiated and motivated change has given rise to an extensive literature on change agency, and on creating climates conducive to acceptance in target systems, to use the terminology of diffusion of innovation. The assumption that the change agent is the possessor of superior knowledge, that client or target system resistance must be lowered, and that change processes are quite linear and sequential pervades much of this literature. The findings emerging from the research into change processes based on such assumptions encouraged some theoreticians and researchers to explore alternative assumptions.

March (1973) discussed the familiar "myths" or speculations by which we deal with other people and which bias our models in social action. He pointed out the need to realize to what an extent our assumptions of (1) the pre-existence of purpose, (2) the necessity of consistency, and (3) the primacy of rationality permeate most theoretical and empirical observations. All planned change efforts imply a commitment to a certain view of reality, and the acceptance of certain modes of realizing those ends. Those assumptions constitute the conscious or unconscious basis for selecting specific courses of action and thus they precede all tactical decisions. He urged the adoption of the alternative model of "intelligent foolishness" and other non-experiential forms of learning to overcome present constraints and biases.

In a most useful synthesizing work, Paulston (1976) outlined competing theories of social and educational change. Two basic social change paradigms (the equilibrium and the conflict) were set out, and six reform theories with operational assumptions accompanying each elaborated upon. These were: evolutionary and neo-evolutionary; structural-functional; systems; Marxian and neo-Marxian; cultural revitalization; and anarchistic and utopian. The first three theories of change grow out of the equilibrium paradigm; the latter

three grow out of the conflict paradigm. Strategies proposed within any of these theories are influenced by the attending biases. For example, the pre-conditions for educational change linked to a utopian theory have to do with the creation of supportive settings, the growth of critical consciousness, and social pluralism. Major outcomes thought consistent with this theory centre upon self-renewal and participation, local control of resources and community, and the elimination of exploitation and alienation. Paulston distinguished among concepts of change. "Reform" was used in the sense of normative, national and broad structural change. "Innovation" was used for relatively low level, technical or programatic change. The awareness of how biases constrain one's ability to explore the full range of potentially effective strategies for reform was pointed out, and examples of the application of the theories and models provided. To the extent that change agents cannot identify the types of assumptions both March and Paulston refer to, they are unable to be fully effective in their roles.

Change Strategies

Emrick and Peterson (1978) presented a synthesis of findings across five recent studies of educational dissemination and change. The implications of the studies for policy making related to federal and state dissemination programs were outlined in the work. Conclusions drawn from the studies included the idea that some form of personal intermediary or linkage is essential to the dissemination process, and that a relatively comprehensive support system is needed to provide crucial materials and in-person utilization assistance. This recent overview is characteristic of most work that takes as its major assumption the idea that change is initiated without. The strategies emphasize the centrality of the change agent. Indeed, the role has a continuing

and evolving place in strategies more characteristic of essential change, but its major application appears to be in strategies of enforced change.

Change Agents. Such researchers as Guba (1967) and Havelock et al. (1970) analyzed a vast literature reporting experiences of change agents working with the diffusion of innovation and presented guides for the change agent. Empirically developed, these materials enabled the change agent to predict a given institution's success in adopting innovations. Havelock (1971) provided a comprehensive study of change agency. His typology of knowledge-linking roles included: conveyor (transfers knowledge from producer to user), consultant, trainer, leader, innovator, defender, knowledge builders, practitioners, and users. Seven phases of moving the client from the present to the desired future state of affairs were detailed for the change agent: building a relationship, diagnosing the problem, retrieving relevant knowledge, selecting the innovation, developing supportive attitudes and behaviors, maintaining impetus for change, and stabilizing the innovation. All these widely accepted change strategies accepted the idea that there was some identified body of knowledge to be transmitted from an outside source to the schools in such a form that the schools would use it, or some skills existed that had to be taught to the staff.

Other scholars stressed assessment strategies useful in looking at organizational structure, personality and leadership styles, the nature and type of communications used in schools, the level of usage of innovations, (Manning, 1974), developmental readiness of the client institution, (Hall, 1975), and depth of intervention (Harrison, 1970). Harrison made a case for the shift of consultant orientation to the direction of accepting a client's felt needs and presenting suggestions at a level in which the client could serve as a competent and willing collaborator. Change agent-practitioner type of collabora-

tive planning has been advocated by Cooke and Zaltman (1972) and by Kohl (1973). These arguments endorse promoting change by improving planning capabilities in schools in conjunction with either centralized coordination or inter-school coordination of change.

Sikorski et al. (1976) reported on the process and effects of change efforts and dissemination strategies. As part of this extensive overview, she outlined the influences of change agents. She traces a shift in opinion in the literature on the role of change agent and discusses the potential use of internal change agents to move the focus of incentive from outside to inside the organization considering a change. Sikorski points out the importance of participative decision making structures in relation to the location of incentive within the changing organization.

Administrative Leadership of Change. The development of a strategy of change as one of the prime responsibilities of the institutional leader, whether principal or district administrator such as a supervisor or superintendent, was identified by Selznick (1957) and in later studies by Chesler, Lippitt and Schmuck (1963), and by Novotney and Tye (1971). A major finding in these studies was the relation of the principal's attitudes to innovativeness in the staff.

Findings reported by Ignatovich (1973) from study of three planning-evaluation project implementations emphasized a recurring theme: the management of organizational conflict was crucial to the implementation of new strategies in planning and evaluation. The source of part of the conflict was to be found in unclear role and task definitions. (Tye, 1972). In a communicative school climate, the principal and others are able to deal with differences in points of view while maintaining a common purpose. Tye proposed that the principals should monitor instructional decisions made by the staff, serve

as facilitator for their decision making, and act as a transactional agent between and among levels of decision making. In his opinion, some of the roles of a change agent usually ascribed to an external consultant could be assumed by leadership within the school. The attitude most often required for the new leadership role is that of "relational leader" (Lobb, 1974). It entails working with other staff members to establish the conditions under which cooperative decision making can occur.

Mann (1975) reported results from on-going Rand Corporation Studies of change agent programs concentrating on staff development efforts. A characteristic of the schools judged most successful in implementing changes was an integral, highly committed management group that stayed with the project from its initiation on. Administrator transfers were minimal and principals were supportive. These insights may indicate the importance of having committed and supportive administration in the school organization in order to develop the communication and decision making skills needed to support change efforts.

Some researchers have offered suggestions for the training of middle managers, superintendents and principals as internal change agents. Although such personnel are sometimes actually or in role distance outside the school staff, they may be closer to the school organization than change agents from a university or research and development agency implementing an innovation. Barrileaux (1975), Radnor and Coughlan (1972), and Zaltman and Duncan (1977) all described programs for developing the skills of leadership and change agent in administrative personnel at the school or district level.

Change Directed at Changing Administrators. The importance of the leadership of the school administrator is underlined by the above-mentioned research. The problem of acquiring and maintaining such internal change agents is great.

March (1978) addressed two sets of questions in an essay analyzing

American public school administration: what are the characteristics of education administration as it exists, who are the administrators, what are their jobs, what are their careers like, and what are the social and bureaucratic structures within which they operate; and what might be done to make changes in selection, training or control so that the prospects for change in the institution could be maximized? March identified themes for considering educational administration that might illuminate issues connected with the selection, training and control of administrators. Some of the factors he described make the suggestion that change agent role could be located within the educational organization and perhaps in the principal somewhat doubtful under present circumstances.

For example, March outlined features of educational administration that make "...changing education by changing educational administration ... like changing the course of the Mississippi by spitting into the Allegheny." (p. 219) Schooling is organized: curriculum, structure, system, geographically, and does not vary much in its essentials from time to time or place to place. In addition, little of the identifiable variation is attributable to the effects of organization and administration as currently analyzed. He judged, however, that almost imperceptible improvements are better than no improvements. He cited as constraints on radical reform such features as the following: educational organizations are social institutions, organizations of people, are labour intensive and have a technology of learning, but are really organized anarchies in which technology is unclear, goals ambiguous, and participation fluid; administrative function is hierarchical with personal prestige and prerequisites associated with position, is small in size and simple in structure, is only loosely linked to activities in the classroom focusing instead upon management of accounts about people, pupils and personnel in an authoritarian, standardized and centralized style; administrative jobs feature organizational

insularity, long work hours, and subjective misallocation of time; educational administrators are demographically conventional with other leadership groups in that they tend to be middle aged, native born, male, married, white, protestant, of non-urban background, from local school systems, have teaching background, and are upwardly mobile in a profession they regard as satisfying; educational careers are orderly in sequence, short, and do not appear connected from district to district by a network of appointments, but rather to move within a district's hierarchy. March pointed to the pervasiveness of this description, not to its universality as the significant feature about educational administration that makes it necessary to attend to the qualities listed if changes are ever to be implemented.

The social and bureaucratic structures within which these administrators work also make change difficult. March stated that the context within which educational administrators work is ambiguous, diffuse, parochial, and normative. The ambiguous setting for decision making is shaped by objectives that are hard to specify, a lack of knowledge about the technology of schooling and difficulty in interpreting and using past experiences...as administrators generally do. This ambiguity combines with behavioral rigidity influenced by norms about goals, technology and experience. The inconsistencies between the ambiguity and rigidity create a feeling of powerlessness. The system is diffuse in that it is difficult to relate or detect the impact of administrative action upon schooling. The administrative system is parochial in that most administrators are local, working near the place where they grew up and were educated. Administrators for the most part are educators, sharing society's version of educational reality, and participating in its elaboration. Their background and position make them adhere to the norms, and have little conflict with the basic articles of faith, as March described the nature of education.

The proposed solution to the difficulty in changing education posed by the above-mentioned characteristics of educational administration is, as March stated:

...heroic, but simple: a selection procedure that recruits better, more ambitious, and more cosmopolitan administrators, promotes the good ones and eliminates the others; a training program that teaches them how to learn from their experience, define goals clearly, and move toward achieving them straightforwardly, developing and using such skills as are necessary for the job; and an organizational structure that enforces accountability and gives administrative control over activities in the schools. (p. 232)

March advocated elementary competence in organizational life, the acquisition of basic competence and commitment: increasing the density of good administrators through the system rather than by focusing on a small elite; learning skills in "intelligent foolishness", constructive aesthetics, and nonexperiential forms of learning: encouragement of good administration by good ideas and the development of social and professional norms; a world view that recognizes the limitations of intentional life as a basis for embracing that life's contradictions and absurdities.

March broadens the understanding of organizational change with his overview of the problems and characteristics of contemporary educational administration. He assesses the field and points out changes in aspects of administration, and in the selection, training, and control of administrators that have potential for making education better. A major change in the training or organization of educational administrators described by March has to do with change in beliefs. A major shift in the world view of administrators is in his view desirable and necessary if they are to be capable of leading change efforts in their schools. Though "education changes when beliefs change" (March, 1978), beliefs are influenced by other social processes - a comprehensive range of social virtues and skills are needed. March believes the

present system of professionalism and university training of administrators "has increased the belief concensus...and made the diffusion of new ideas in education and administration more rapid and general."

Emerging from the research and theoretical work based on the assumption that the source of change is in the cultural dimension outside the school, and directed at the type of change Getzels (1970) called enforced change, are results chiefly in the areas of increasing numbers of well researched innovations - both products and processes for improving educational practice; increased awareness of methods of assessing educational outcomes and increased monitoring of efforts to improve education; increased interest in and efforts to implement alternative educational programs; and increased efforts to understand the change process. Particularly in the areas of more useful theories and models, more comprehensive strategies, and a changing view of the change agent's role and location relative to the organization, have more realistic and comprehensive views of change emerged.

Expedient Change

Those who claim that school organization is rigid and inflexible are likely referring to the type of change Getzels (1970) called "expedient". The mechanism of this type of change is reaction to maintain the status quo with as little essential alteration as possible in the face of a changing environment of either institutional or cultural dimensions. Any change would be token, or an effort to circumvent and inhibit real change.

Factors That Inhibit Change

Some researchers observing the difficulties in implementing change pro-

jects have sought to discover factors that could explain how change processes are inhibited. Such factors are often to be found in the very nature and characteristics of the educational institution itself. Bentzen and Tye (1973) identified seven factors that inhibit change: inadequate finance, vested interests, bureaucracy and adherence to norms, value dilemmas, leadership vacuum, confusion about decision making prerogatives, and the lack of implementation strategies. They diagnosed the educational institution as being severely hampered by both personal and organizational patterns that encase it and make it impervious to many attempts either to change it, or for it to change itself. Of the factors identified by Bentzen and Tye, several merit closer examination. The constraints identified as "bureaucracy and adherence to norms", "decision making prerogatives", and "implementation strategies" relate closely to the process of self-evaluation and feedback that is the topic of this research paper.

Bureaucracy and Adherence to Norms

Bureaucratic structures insure the accomplishment of institutional purposes and have the virtue of maintaining order and control. Schools have become highly bureaucratized units within bureaucratized districts where standards of attainment, much of the curricula and pedagogy are standardized. Policies, rules, and regulations order the operation of the school system and direct activities within the school organization of each building. Miles (1964) observed several examples of this effect in schools that were set apart with system encouragement and a mandate to operate differently. They tended, after a time, to conform to the norms of the larger system of which they were a part.

Bidwell's (1965) review of the school as a formal organization attempted

to abstract from the literature on the organizational nature of schools certain generic attributes, and to show how they might be related systematically. Although he admitted that there were great differences among the various types of schools, Bidwell stated that the most generic organizational attributes of schools should be equally evident in schools of any type. His analysis was limited to schools with child and adolescent student bodies, parent-clients who did not pay fees, and which were day schools. Three basic assumptions about the nature of public school systems were made: that school systems are client-serving organizations, that there is a fundamental dichotomy between student and staff roles, and that schools are to some extent bureaucratic.

Schools are considered bureaucratic in that they display, in at least a rudimentary way the following characteristics: a functional division of labour, the definition of staff roles as offices requiring merit and competence and legally based tenure, the hierarchic ordering of offices providing an authority structure base on the legally defined and circumscribed power of the officers, and operation according to rules of procedures which set limits to the discretionary power of officers by specifying aims and modes of action.

The school system, to function, demands a degree of rationalization made necessary by two kinds of factors: it is responsible for a uniform product of a certain quality, and so sets minimum, but not maximum levels of student standards, and it deals with students over long periods of time in complex and massive sequences of services and socialization tasks. Both kinds of factors reinforce the professional basis of school system activities. Bidwell noted that both the looseness of system structures and the nature of the teaching task seem to press for a professional mode of school-system operation, while the uniformity of product desired, and the long time span over which groups of students are trained, press for rationalization of activities and thus, for a

bureaucratic basis of organization. He pointed out that:

...the school is to a substantial degree a self-contained organizational unit, with a defined population from which students are drawn (the school district in a one-school system or the attendance area for each school within a multi-school system). The principal and teachers usually retain at least some control, often substantial, over curricula and teaching methods. (p. 976)

School administrators thus balance three criteria in determining lines of action: professional norms and standards, public wishes, and fiscal efficiency. The latter two are related to the fact that the school is an arm of the local and state or provincial governments and is responsible to these bodies and to a public constituency for the effective and efficient use of the funds provided for their operation. These external pressures are applied to the individual school in that it deals with an indirect clientele, the students, whose parents are the constituents along with other members of the tax-paying public.

Bidwell concluded that school systems faced two major functional problems:

...the coordination of the instructional activities of classroom teachers and individual school units in such a way as to maximize the sequential articulation of these activities and insure reasonable uniformity of outcomes. The other is the maintenance of sufficient latitude vis-a-vis the public constituency and its agent, the board of education, for the exercise of professional judgments regarding, first, what kinds of specific educational outcomes best serve the students and the constituency and, second, what procedures are best adapted to these ends. (p. 1012)

Internal coordination means maintaining some rational procedures in the face of tendencies toward debureaucratization such as those caused by client variability. To avoid the seemingly irreconcilable alternatives of either total professional discretion or total reliance on legal authority and rules, Bidwell pointed out the potential of:

...the professional staff's operating as a "company of equals," including the school system's administrator-professionals; of their collective determination of standard rules, legitimized by common consent; and of the transference of administrative authority from the basis of official superordination to that of senior colleague status. (p. 1013)

The professionalization of teaching staffs presses for administrative adaptations in the direction of collegial interaction between administrators and teachers.

Communication processes among the professionals in the school acquire a special importance in this type of organization. The communications has to be continual rather than intermittent, and occur largely through face-to-face interaction of teachers and administrators which minimizes hierarchic distance. To the extent that such control and coordinative processes are missing, the tendency is for professional discretion and student variability factors to erode sequential coordination of student experience, and the ability of the school to cope in an organized way with the external pressures of the parent and community constituency.

The norms of the system of which professional staff are a part are situationally specific standards for behavior. Dreeben (1968) called them principles, premises or expectations "...indicating how individuals in specifiable circumstances ought to act" (p. 26). Acceptance refers to a self-imposed obligation but also implies that there are sanctions encouraging or discouraging compliance by use of rewards or punishments.

Both the formal bureaucratic regulations and the norms such as those cited in a study by Watson (1967), time schedules, modes of dress, forms of address to colleagues, superiors or subordinates, personal protestations of institutional loyalty and adherence to ideals of independence, achievement, and other norms with particular relevance to economic and political participation in industrial societies, tended to inhibit change.

Dreeben pointed out how the school tends to reinforce these norms:

within industrial societies, where norms applicable to public life differ markedly from those governing conduct among kin, schools provide a sequence of experiences in which individuals, during the early stages of personality development, acquire new principles of conduct, principles instituting additions to those already accepted during early childhood. (p. 48)

Most of today's teachers and administrators were themselves educated, and are still being educated on the basis of these norms. Michael (1968) points out that the social perspectives reinforced by the schools and the staff in them may be insensitive to the requirements for a changing society. The schools attended by teachers when they were children, and the schools in which they now teach are set up to teach and maintain norms that may very well impede changing.

Related to the adherence to norms that maintains the status quo are the findings of research by Bridges and Reynolds (1968) supporting the idea that elementary teachers with open belief systems were more receptive to the trial of innovations than elementary teachers with closed belief systems. Neither experience nor age, nor length of tenure were found to be significantly related to teacher receptivity to change. This finding contradicted the beliefs about recruitment, selection and assignment of staff to schools trying innovative projects held by some educators. Carson et al. (1967) had found that more experienced teachers were less concerned about being involved in making decisions than were their less experienced colleagues. The finding led the authors to comment on what was thought to be an inverse relationship between experience and receptivity to change. As Bridges and Reynolds pointed out, however, the relationship between experience and readiness to try new ideas is a more complex matter involving the nature of the organization or the context in which the experience has been gained. This contention is supported

by evidence gathered by Smith and Geoffrey (1968) pointing out the ways in which the school organization operates to socialize and shape its members' outlooks and behaviour.

The research done by Harvey (1968) and Flizak (1968) supported the concept that the most severe constraints to innovation were to be found in the school's organizational structure and processes. Harvey found 74% of teachers and administrators sampled possessed highly rigid and concrete belief systems that impeded their adaptability to new ideas. Flizak also concluded that what happens in a school may, to a large extent, be determined by the structure of the organization, influencing the teachers' modes of thinking, feeling, and behaving. It appeared to some theorists that nothing less than drastic alteration of the structures of the educational organization would suffice if significant change was to occur. (Goodlad and Klein, 1970) and (House, 1974).

Decision Making Prerogatives

Other constraints having to do with the lack in education of clear definition of goals, and the decision making process that could produce that clarity, increase the chance for failure in many change efforts. Gardner's (1967) statement highlights the dilemma: "...we all know in our bones that over the long haul what we do in education has the greatest relevance to building the kind of society we want" (p. 67). The problem lies in the fact that the kind of society we want is not agreed upon either by the clients or by the professionals in schools. Burton (1972) and Stansfield (1973) have commented upon the pluralistic society that generated conflicting goals for education and sometimes unreconcilable demands on schools. Lacking clear goal direction and priorities, educators often tinker with low-risk changes of the sort

House (1974) called changes to content rather than changes to structures or process. Such decisions might rock the societal boat, and it is not clear with whom such responsibility for decision making lies.

Related to the lack of clear goal definition is, therefore, a state of confusion about decision making prerogatives. Who shall determine goals, objectives, and priorities? Responsibility and accountability of various levels within the educational establishment and how the levels interact is not always clearly understood either by clients or by professionals in the schools. Studies by Etzioni (1961), by Otto and Veldman (1967), and by Belasco et al. (1971) pointed out that in multi-purpose organizations like schools, certain types of decision making conflicts arise. Goals make incompatible demands for action; there is conflict about the amount of means, time, and energy available for each goal. Serving a plurality of goals strains personnel and causes confusion about priorities. Control structures and conflicting expectations about authority for deciding what has priority often hinder the quality of decisions made at the action level.

Particularly when personnel are coping with new demands or changing procedures do the above-mentioned constraints cause problems and conflict among staff members. Experience in an organization may help teachers anticipate problems and understand the complexities of the system they work in, as Bridges and Reynolds (1968) pointed out, but Sarason (1971) argues that most teachers who work within certain structures have not examined their work patterns within that structure. They may never have thought about alternative ways of working together, or of organizing the work setting. The decision making that they have likely done related directly to the instructional not the work milieu. Participation in making school-wide decisions about the organizational or instructional objectives may generate conflict among professionals, among peers, and between administrators and staff members. In the

face of interpersonal conflict that threatens to violate strongly held professional norms, the teacher often refers to past experience. This leads directly back to existing or former organizational patterns. The experienced teacher may not be able to call upon a broader range of possible solutions gained from a larger repertoire of experience than that possessed by the new teacher when it comes to organizational and structural change. The experienced, older teacher may have encountered only one type of school organization although he or she may have worked in different places. The familiar authority and decision making pattern may seem comfortable and predictable even if it has particular defects that the staff complains about. The familiar patterns may be regarded as a protection against conflict generated by changing the organizational environments in which staff members work and interact.

Lack of Implementation Strategies

A number of types of constraints may be grouped under the general heading of implementation strategies required for successfully changing schools. Bennis (1966) analyzed the growing collection of change technologies and models for the change process and concluded:

what we know least about is implementation - a process which includes the creation of understanding and commitment toward a particular change and devices whereby it can become integral to the client systems' operation. (p. 77)

In his work on change, Bennis focused on the sociology of organizational change, suggesting guidelines for the use of laboratory type training within the organization's system to give its members human relationship skills and to influence organizational values. Bennis proposed a model for diagnosing the

state of an organization that is considering making a change. He recognized the importance of sociological factors in the implementation process, but discussed change largely in terms of the adoption of innovations. A change agent would be needed to introduce the innovative idea to the client system. Implementation skills were defined in terms of communication and interpersonal skills required by the change agent and clients to install the innovation. Janowitz (1971) identified an additional flaw in earlier change efforts. He found that prior to 1969, most change efforts were segmental in nature, largely directed toward establishing model projects in a narrow aspect of program or organization, rather than with devising strategies to better the school's capacity to plan and cope with changing needs and priorities emerging from the cultural context. Street (1969) had researched similar conclusions and had suggested:

a great deal of work in the area of innovation in education still remains to be done. The studies which have been done to date have been unable to add much in the way of theoretical elaboration. Great numbers of innovations have been tried but most have been only piecemeal and many have been unstudied. (pp. 1-15)

Horvat (1967) and Leithwood and Russell (1973) concurred, adding that a disproportionate amount of educational research and development resources were allocated to product development while attention and resources were needed for study of the poorly elaborated implementation and leadership processes. Troost (1973) reviewed studies of the radical school reform efforts and offered criticism of the implementation processes used in these attempts to start alternative organizations.

The constraint consists largely in the widely accepted definition of the task to be accomplished: some identified body of knowledge must be transmitted from an outside source to the schools in a form that will be usable. Schools then become regarded as clients, teachers are thought of as consumers

of products, change agents are seen as possessing the right answers, and change is regarded by those inside the school as what those outside are advocating. Innovation, in this definition is too often perceived by teachers to be ideas developed elsewhere by experts. Participation in changing and renewal, in deciding on what is important and what should be changed is sometimes rejected by the staff trying to maintain a situation with which they feel comfortable and which they feel works. (McNally, 1974).

Strategies developed from the kind of assumptions about change typified by the first two of Getzels categories, enforced and expedient change, largely failed to address the problems of the participation in decision making, in setting objectives, and in coping with the changing demands of teaching that professional staff members face when working in the school organization.

Essential Change

The idea of essential change directs attention not to whether schools change, but to how well they continue to handle the problems they face. The mechanisms of this type of change are to be found in strategies that increase and maintain a school's ability to cope effectively with a changing environment in the pursuit of its goals.

Over the past decade there has been a shift in the focus of some of the change studies from "how to change schools" to studying "changing schools" and trying to identify the strategies characteristic of self-renewing schools. Early discussions about the idea of self-renewing organizations are found in the work of Gardner (1963), and Miles and Lake (1967). School setting was considered and descriptions of what was called "school climate" were attempted.

School Climate and Organizational Health

The personality of the school described by Halpin (1957) as its "organizational climate" drew attention to the environmental conditions within the school organization that vary from building to building. Some early work on describing the climate of an organization was done by Halpin and Croft (1963) in their development of the Organizational Climate Description Questionnaire (OCDQ).

Miles (1965a) discussed factors needed to make organizations "healthy", as he described them: system goals that are clear, reasonable and possible; inter and intra-organizational communication that is relatively distortion-free; equitable distribution of influence; effective utilization of resources including personnel; cohesiveness; diversity; autonomy; adaptability; and structures for sensing and dealing with problems.

Halpin (1967) was concerned that little was yet known about how to change a climate, and warned about plunging into action programs in that area. The question of what can be done to induce a greater degree of organizational health in a system was addressed by Miles (1965b) and formed a pattern for many studies and interventions that were to follow. He recommended: survey feedback; role workshops or job-alike meetings; target-setting and action planning; organizational diagnosis and problem solving; and the organizational experiment as a temporary system approach when trying new things.

Increasing and Maintaining Organizational Health

The single school became the target for interventions designed to develop self-renewing capabilities. Particular emphasis in the recent research has been on enhancing the quality of awareness among staff members of the ways in

which things do or do not get done in their school. The way in which the professional staff members go about approaching and coping with problems that confront the school has been observed, described, and assessed. Strategies and techniques for adjusting these processes have been developed.

Diagnosing Quality of Staff Relations

One essential component of self-renewal that was needed by a staff before entering an action program was a process for assessing organizational needs and diagnosing areas in which adjustments might be undertaken. The Cooperative Research Project for Educational Development (COPED) reported in studies by Chesler (1966), Chesler and Fox (1967), and Hilfiker (1971) examined the relationship between teacher innovativeness and internal staff relations. These studies focused on the social system of the school staff with the purpose of gaining a better understanding of such factors as teacher background, teacher's perception of and attitude toward peers, teacher perception of and reaction to the principal's behaviour, common staff attitudes, principal's priorities, and principal's sensitivity to issues of staff social relations and innovation. Educational level, teaching experience, and felt and desired influence were factors that related positively and significantly to innovativeness. Some aspects of peer relationship also appeared to be related positively to one or more of the measures of innovativeness.

The issue of "felt and desired influence" has proved to be an important aspect of strategies developed to facilitate school self-renewal. It relates to the insights of Miles (1965) (b) who advocated equitable distribution of influence and participation in organizational diagnosis and problem solving to promote healthy organizations.

Staff Core Planning Group

Joyce (1969) recommended that a "group of responsible parties" from the staff engage in on-going study of the school's goals, design of the curriculum, and the criteria for evaluation that would be used in the school.

Schmuck and Nelson (1970) proposed that:

...the principal performs as the facilitator of a team, or as the convener of several groups in interaction, to help bring conflict into the open and to work on organizational problems systematically. (p. 1)

In addition, these researchers suggested that the principal could use volunteer interest groups within the faculty to do a great deal of the preplanning for innovation. Other ad hoc groups could be convened to work on problems unique to such aspects of the organization as scheduling, parental visits, or public relations. The idea of the principal working with a team of professionals from the staff in a problem solving and planning mode would change the formal structure of the school and influence the informal structure as well. They warn against the potential problems of the core group becoming an "inner circle", and suggest a free flow of data about suspicious and negative feelings that may be developing, and an on-going diagnosis of the nature of problems that appear, both linked into an appropriate action planning process.

Goodlad and Klein (1970) reported on a study that examined the gap between the endorsed expectations held for schools and the actual practice in sixty seven schools. Very few of the schools had what the researchers called a "critical mass" of concerned persons working on problems identified by the whole staff as important. The few schools that had such a core group tended to be the most dynamic in the study sample.

The research in the area of making greater use of the human resources throughout the school in planning and assessing organizational health seems to

be largely supportive of the core planning group concept. Certain communication and decision making skills are necessary to maintain the quality of staff involvement, however, and much research reports efforts to develop and teach these skills to school staffs.

Quality of Staff Meetings

McLaughlin (1975) studied attempts to implement some fundamental change in classroom organization funded by Title III money. The findings about the problems peculiar to this sort of innovation, and the general lessons to be learned about implementation support the recommendations of Miles (1965b) about achieving organizational health. McLaughlin reported that by attempting more, more is likely to be accomplished. The complex nature of classroom organizational projects tended to require an adaptive implementation strategy that permitted goal and methods to be reassessed and refined during the course of the project. By studying cases in which staffs were successfully implementing such change, McLaughlin observed that change was occurring over time in both the project or concept and in the institutional setting. Both the treatment and the objectives as well as the participants were adapting. She observed three crucial features of the implementation of change. First, local development of materials occurred, giving teachers a feeling of involvement, pride, and accomplishment. This task provided a focus on an identified problem on which the staff could work cooperatively. Second, was staff training. The constant interaction among staff in regular workshops and meetings provided for the re-socialization of teachers in the planned change. Third was the provision of staff planning meetings on a regular basis. She noted that:

projects that made a point of scheduling staff meetings on a frequent and regular basis had fewer serious implementation problems, and the staff demonstrated

higher morale and greater sense of cohesiveness. (p. 12)

Runkel (1975) reported a case history of a lengthy involvement with a school district in Washington called Kent. A feature of this project was staff training to encourage adaptations of professional staff members and to enhance the functioning of the system. He reported that collaborative decision making skills, and processes to encourage power-sharing between principals and teachers were taught to the school staffs. In this case, a cadre of organizational specialists was used in the Kent district to advise and assist the schools with the training project. The importance of staff members all knowing and using a variety of decision making, communication, and action taking skills in the process of their meeting together to plan and assess the school's progress was underlined by this case history.

The Use of Survey Feedback

Miles, Hornstein, et al. (1969) described and evaluated an effort to use the feedback of survey research results to administrators of a school system as a way of inducing organizational change. Survey feedback is a process in which external advisors and members of the client organization collaboratively gather, analyze, and interpret data that deal with various aspects of the organization's functioning and its members' work lives. Using data as a base, corrective alteration of the organizational structure and the members' work relationships is attempted. Survey feedback has three components: 1. data are presented, 2. meetings of various groups occur, and 3. in the course of the meetings, advisors and members of the client organizations begin to analyze the data and the process of the personnel's interaction. This leads to certain results that can promote organizational health, if the process operates successfully. Miles, Hornstein, et al. suggested several positive

outcomes: attention to and acceptance of the data, liking for the group and its activities, clarification of the client's own and others' positions, the practice of new behaviours, and the development of norms supporting open, collaborative problem solving. Research presented by these scholars was gathered during a survey feedback program that was developed for a small school system. The conclusion was that the survey feedback program did begin a process of change followed by regression with the net effect that no durable changes were made. It should be noted, however, that the process was conducted among administrators from a variety of schools, and not with whole staff groups, including the administrators. It may have, thus, violated the principle of working with the whole school as a unit. (Goodlad, 1973).

Bowers (1973) compared empirically the impacts over time of four interventions: interpersonal process consultation, task process consultation, laboratory training (group development), and survey feedback. Also two control conditions were compared on a host of attitudinal variables: handing back survey data, and no treatment. Survey feedback, interpersonal process consultation, and data handback led to positive changes on a majority of the dependent measures, while task process consultation led to no change. Further analysis indicated that changes in perceived organizational climate (human resources primacy, communication flow, motivational climate, decision making practices, technological readiness, and lower-level influence) influenced the impacts of the interventions. Without positive climate changes, no interventions had very positive effects, and with them, even laboratory training helped. The only intervention that directly improved organizational climate, however, was survey feedback.

Deal (1975b) emphasized the importance of survey feedback approaches as a useful tool for problem definition. He saw this strategy as the basis for social reorganization of a school, where such reorganization is indicated, so

as to increase the ability of the school to cope with what he has called "environmental complexity". It is his contention that through such diagnostic strategies as survey feedback and discussion, a staff can respond actively, rather than passively to uncertainty and change in the school's environment. Deal outlined four stages to the survey feedback approach: an information gathering stage, a feedback stage, a problem definition stage, and a solution generating stage. He proposed three basic types of feedback settings: peer group, family group that includes supervisor and subordinates, and a combination of peer and family group settings. In all of these group settings, a consultant could act as an advisor to the problem solving process or play an active role. The survey feedback approach as developed for the Environment for Teaching group at Stanford is essentially a formative evaluation approach. As such, it is a means to adaptation and reorganization that can increase organization-wide consensus on important problems and generate possible solutions. Such a process increases the probability that proposed solutions will be successfully implemented.

The Use of Consultants

The use of a subsystem such as teams of consultants, specialists, or external experts to recommend, carry out, or to stimulate change in schools has been well documented. The focus on the use of consultants to facilitate school staffs becoming self-renewing, however, is more recent.

Wyant (1972) reported the experiences of consultant groups using three approaches to changing school organization in three projects conducted between 1968 and 1970. One project used a planned change strategy in which an "innovative subsystem was expected to assess its own school's needs, prescribe remedies, and assume the initiative for carrying out its prescriptions."(p19)

The second project was a planned change strategy in which an innovative subsystem in a school district was to assess the system's needs, prescribe remedies, train others in the skills and processes needed to carry out the prescriptions, and then manage the change process." The third project was the Kent, Washington project also reported by Runkel (1975) in which a subsystem of organizational specialists "was expected to carry on the functions previously performed by outside consultants and to make organizational training available to all parts of the subsystem." (Wyant, 1972, p. 19)

Wyant found the Kent project to be the most successful of the three approaches. The cadre of organizational specialists facilitated the district's openness to the environmental demands for change. The team members were prepared for their role with exercises that built skills in communication, problem solving, and intervening. They were given practice in carrying out real and simulated interventions in consultations with trainers from the University of Oregon. The adaptive responses that resulted proved to be more appropriate to self-renewal than the types of long-range structures that locked in staffs in the other two projects. The innovative teams and the change agent teams presumed to plan others' futures for them and encountered considerable resistance to their efforts. Wyant assessed these two strategies to have little positive impact upon the school organizations under observation.

In a case study examining the Individually Guided Education model for secondary schools (IGE/S) being implemented by a Wisconsin junior high school, Popkewitz (1976) reported several conclusions relating to the role and responsibility of advisors or consultants in assisting schools to become planning, self-renewing organizations. During the 1975-76 school year, consultants from the R and D Centre at Madison, Wisconsin worked with the staff of the junior high school on the IGE/S project with three major purposes: to help teachers develop individualized instruction programs, to develop organizational

patterns concerned with individualizing instruction, and to help the school use shared decision making as a part of its planning processes. Similar IGE procedures have been used extensively in parts of the United States and to some extent in Canadian elementary schools. The development of the process and the strategies for use in secondary schools is of particular interest to this research as the process reported on in this thesis will be used at all grade levels.

Popkewitz reported that at the end of the year, the IGE/S approach had produced no rationale or coherent curriculum plan for school-wide individualization of instruction. He drew out some implications of the findings for the problem of school change that give insight into the changing role of the consultant working with self-renewal strategies in schools. He noted that the problem of change

should be considered, in part, a political process. There is an interplay between the teachers' beliefs and the organizational structure of work in schools. The subject centered perspective is related to a school organization which fragments knowledge into 'objects' to be learned, defines professional status and privilege through the structure of school activities, and so on. To make the teaching perspective problematic is to challenge not only one view of the world but the vested interests which are legitimated by the view. (pp. 26-27)

To lead the staff to discuss their ideas about teaching in the middle school situation, Popkewitz concluded, would have also led the staff to examine the nature of appropriate power for principal and teachers in controlling the arrangements for students. This situation of political realities involved the consultants in controversy and dialogue with the staff that required exceptional skill.

Popkewitz reported that the notion of "technical assistance" needed to be reconsidered. The consultant's role should be to stimulate and encourage a dialogue among staff members about the priorities and underlying characteris-

tics of institutional life that entails looking at the responsibilities of teaching in a context of social action. The dialogue and assessment, in his opinion, must consider the interplay of curriculum, organizational structures, and ethical choice. The dialogue's purpose should not be to impose, but to develop a professional consciousness of problems, leading to a consideration of appropriate actions that link to the staff's academic tasks. The reduction in conflict among staff members was a major consideration in their deliberations, and made staff commitment precarious. Popkewitz concluded that technical assistance from the consultant must be expanded to include skills of cooperative conflict resolution, skills of problem definition, and methods of gathering information on priorities and current conditions.

It is noteworthy that the consultant team reported in the Popkewitz study, like the less successful change agent in Wyant's review, had a preconceived notion of what the change was to be. The findings in these two studies underline the idea that the consultant must be prepared to identify personal motives, and then to prevent them from outweighing the evidence on the kinds of activities and sequences that will best reach the goals of the organization with which he or she is working.

Comprehensive Efforts to Study Essential Change

Several lengthy and comprehensive research efforts into essential change have been operating within the last decade. These have yielded a number of productive strategies for schools concerned with increasing their ability to become self-renewing organizations. One of the research programs has been conducted by the University of Oregon's Center for the Advanced Study of Educational Administration (C.A.S.E.A.), now the Center for Educational Policy and Management. This program is known as Organizational Development, (OD).

Another program carried out by the Institute for the Development of Educational Activities (I.D.E.A.) was known as the Five Year Study of Changing Schools.

Organizational Development

Organizational Development is a conceptual framework and a strategy aimed at helping schools to become self-correcting, self-renewing systems of people. It assumes that many of the problems confronting changing schools arise from the nature of the group or organization in which the change is occurring. This concept stresses that it is the dynamics of the group, not the skills of its individual members, that is both the major source of problems and the primary determiner of the quality of solutions.

Schmuck and Miles (1971) outlined several types of intervention modes that are particularly useful in large-scale OD projects that may involve more than one school. These are parts of a sequence of problem solving, plan making, establishment of a task force for continuing consultation, and some modification of the technostructural activities of the client system. The strategies of OD attempt to facilitate a release of energy by helping people learn productive ways of working on their problems, improving their organizational capabilities, introducing new ways of interacting, assessing and setting goals, and taking action.

The consultant in this strategy does not impose solutions, but rather brings to bear his or her knowledge about human interaction, the processes of change, and the workings of organizations.

The Five Year Study of Changing Schools

The research team of I.D.E.A. examined the change literature and concluded that all too often, the school involved in a change project reverted to its accustomed patterns of operation after the outside experts left and the staff was once more on its own, implementing the innovation with the same old organizational patterns and methods of communication. Few change strategies had worked with entire professional teams in a school to plan and implement actions that were meaningful in their situation. The role of change agent was seen largely in terms of the outside expert who could tell the staff what to do or inform them of innovations they should adopt. The close association of an outside resource person or consultant with a school staff could bring about change, I.D.E.A. thought, if the expert could tailor his services to meet conditions in the school. The two would have to work together, plan, and learn together.

The purpose of the study, therefore, was to discover what had to happen in a school, to a staff, before significant, long-term change could begin to occur. A number of questions were posed by the researchers and the participants: why do so many elementary schools that embark on major programs of change either fail to affect significantly what goes on in the classroom, or give up in the attempt; what are the major problems impeding change; what strategies can be employed to get schools past the blocks; who brings these conditions about; what is the role of the consultant; what is the role of the staff and of the principal in the process; and what are the elements involved in being self-renewing?

The study examined a school staff's receptivity or lack of receptivity to change. Previous studies had examined this question by selecting a specific innovation, then assessing the degree to which the innovation was adopted in various schools, or by various types of teachers. The I.D.E.A. researchers

attempted to devise intervention strategies that would be feasible and effective in many kinds of schools, that could take into account conditions which varied from place to place, and that would operate when only a limited number of resource personnel were available to work with school staffs. It assumed that the principal would be a key change agent for his school. It also assumed that some mechanism must be employed to assist the school to set improvement norms for itself.

Culver and Hoban (1973) reported that the strategies used in the study were designed to help the schools bring about changes that the schools themselves wished to effect. Sessions aimed at helping each staff develop skills of communication, decision making, and problem solving were offered. Reading materials, films, expert consultants, and inter-school visitations provided a supportive peer group climate in which member schools could search for ways to improve, share experiences, and get assistance.

Leaguings

I.D.E.A. invited elementary schools in southern California to participate in the project. Eighteen schools were eventually selected from a variety of districts representing many types, sizes, and locations of schools. The project schools were a real cross section of American elementary schools. They were to take part in testing out new strategies for improving education, but were not committed to implementing any specific solutions. The schools were joined together as a League of Cooperating Schools. Rather than searching for support for the school within its own district alone, the study created a new social system with a set of expectations and norms, designed to encourage innovative behaviour. The new system was brought about by banding together eighteen school staffs with opportunities for principals, teachers, and con-

sultants to meet in peer groups for planning and mutual support.

Although it was a temporary system, the League did provide support for its member schools. This peer group evolved into a strong supportive and decision making body. As the League matured, the influence of the external consultants became less and less depended upon. The consultants had to abandon the traditional interventionist role of telling the client schools what to do, and instead had to learn to work together with the staffs to develop needs assessments, and action plans for changing circumstances. A sense of group competence and direction emerged as the study progressed.

The Process of Dialogue, Decision, Action and Evaluation

The Dialogue, Decision, Action, and Evaluation (D.D.A.E.) process was a communication model that evolved into a particularly strong strategy for assisting member schools to become and remain self-renewing. School-based efforts to cope more productively with problems of educational improvement were described by the component parts of the D.D.A.E. process. The study sought to observe, describe, and improve the interaction and communication process that occurs in a staff involved in dialogue, decision making, taking actions, and evaluating the effectiveness of those actions. Also studied were the relationships of this process to other attributes of school self-renewal. It was assumed that ultimately a school staff, with the students and parents, must learn to work together to make their settings for daily work better places for human beings to spend a large portion of each day. The I.D.E.A. consultants sought to establish only one major change in each of the League schools. They encouraged the staffs to have an increased ability to look closely at what they were doing. They attempted to focus the staff's attention on how the processes of D.D.A.E. were operating in the school, and to

think about how it would like them to be operating.

To facilitate these processes, the consultants and staffs of the participating schools developed a number of techniques and instruments that would help them to assess their needs in the critical dimensions of D.D.A.E. The Criteria Instrument was used by League schools to gather information on the operation of school practices and interaction and to focus feedback sessions in which consultants and staff members could discuss the data, use the information, and develop actions for improving the quality of interaction in the organization.

Subsequent Work

Following upon these major research efforts studying essential change in schools, there have been numerous studies that elaborated upon, or developed the strategies described by C.A.S.E.A. in their OD studies, or by I.D.E.A. in their Five Year Study. Illustrative of this growing body of work are several recent studies outlined below. Others, while useful and important to the whole literature on essential change, do not contribute substantially to the process developed for study in this thesis.

Elaborating upon the overall strategy of Organizational Development are studies by such researchers as Smith (1972), Schmuck, Arends, and Arends (1974), and Schmuck, Murray, Schwartz, Smith, and Runkel (1975). Noteworthy in Smith's work comparing two elementary schools involved in major organizational change that appeared similar at the beginning of the OD training, but which differed markedly in outcome, are the factors observed to characterize the successful school: a norm of spending extra time in collaborative planning, no expectation of remuneration for participation in the project, a leader with a clear understanding of the innovation being implemented, and an

accepting attitude toward the trainers and consultants helping them. A paper by Schmuck et al. (1974) offers three major guidelines for consultants that take into consideration the special attributes of school organizations. The guidelines developed have been based upon observation of many OD interventions and provide a useful resumé for advisory personnel. They stress the need to continually restate the goals of the consultation, and that OD requires sustained effort over many months. The authors point out that the process is sequential and cyclical and requires careful assessment of progress at each stage to determine which processes and techniques need re-teaching. The guidelines stress the collection of data on present conditions, including the state of any follow-up or lack of it on previous problem identification. Another work that gives numerous recommendations for consultants based on the results of applying OD in two different ways to help elementary schools to adopt team teaching and multi-unit structure is reported by Schmuck et al. (1975). This study contrasted OD training for an entire staff with training for only a small group from within the staff, called GD. Data compare the nature of changes among the schools and relations of the changes to goal clarity, to readiness for change, to satisfaction with job, to interpersonal relations, and to norms for collaboration in the schools. The preferability of giving training to the entire staff is suggested.

A study by Kiser and King (1978) identified the organizational factors that aided or hindered the successful introduction of comprehensive planning systems in four selected school districts. The knowledge was used to develop a conceptual model to guide school districts in the successful introduction of systematic planning. Somewhat smaller in scope than that study, but applicable to a large school system is the work being done to study the use of OD strategies in high schools in New York. An example is to be found in case histories of the school self-renewal projects described by Bassin (1977) and

the assessment of the OD strategy for change in urban secondary schools by Bassin and Gross (1978). These projects represent the largest and longest running OD programs, to date, in the United States. The renewal model used in the 24 participating high schools was found to be a powerful influence on the schools in the area of participative problem solving processes. It proved to be flexible in its application to a variety of subgroups: school wide staff groups, student groups, administrative teams, and academic departments within the high schools.

An example of a more detailed and specifically focused application of OD strategies is the study reported by Duncan (1977). She studied the use of OD as a professional development tool and found the strategies broadened the perspective of teachers, enabling them to conceptualize the school as an organization with various related units working to achieve the same goal. The increased awareness of interdependence among teachers was seen to be of value in schools trying to implement changes such as school based budgeting, team teaching, and planning for the total curriculum.

An overview of OD in the schools (Hayman, 1977) suggests a need for continuation of the research into these strategies as little hard data exists on the effects. It is pointed out that certain conditions necessary for OD strategies to work require further investigation. Such factors as goal ambiguity, low interdependence, and low technological investment, must be considered. Hayman also points out the danger in regarding OD as a fad. He urges that data on results be produced within the general system theory orientation. This review was based upon OD applications in the various cities in the United States where it has been implemented. The critique points to the need to relate such strategies as OD to more comprehensive planning sequences involving goal clarification and setting of priorities, among other conditions necessary that should be present in the larger system.

Williams, Wall, Martin, and Berchin (1974) reported on results from the Five Year Study of Changing Schools with a focus on effecting organizational renewal in schools. They looked at the eight schools from the League that comprised the four lowest scoring D.D.A.E. schools and the four highest scoring D.D.A.E. schools. There was much more role conflict in the low organizational schools, which confirmed that high role-personality conflict may affect the degree of success in attempting to develop dynamic renewal processes.

Louis (1978) explored the impact of school structure and culture on the implementation of planned change, adding a dimension to the insights mentioned above. She pointed out the interactions between the structure and culture variables that impact on change: patterns of authority, size, and teaching technology and collegiality, morale, and tensions or conflict. Quality of change and quantity of change are best predicted by different sets of variables. She found a need to develop a more sophisticated conceptualization of the outcomes of the change process relating to the structural and cultural dimensions of the school, and suggested future research focus on both.

CONCLUSION

This chapter has provided an overview of some perspectives on change and changing as it applies to the problems of facilitating self-renewing organizations. Within a tripartite scheme for examining change in a system developed by Getzels (1970), the literature related to enforced change, expedient change, and essential change was reviewed and selected for its bearing upon the research reported in this thesis.

The literature on essential change in schools in particular yielded insights that guided the formation of a self-evaluation process as one component of a school-based needs assessment strategy. The strategy is being

developed for use in an urban school district. It emerges from pilot work with a school-based planning and renewal project and subsequent efforts to develop planning processes and materials that will assist district schools.

The study seeks to investigate the process of self-renewal through the use of the needs assessment process in three case schools. More specifically, the thesis reports the development and field test of an instrument that will give school staffs information about their functioning as problem solving groups, a feedback process for survey information, and some systematic methods of locating areas in which there may be disagreement, or emphasis, and a discussion process for suggesting action.

Chapter three outlines the research methods used in the study both to assess and describe the development and testing of the instrument and to observe and document the operation of the process in the three case sites.

METHODS USED IN THE STUDY

Overview

This study investigated one aspect of a very broad area of educational inquiry variously referred to as "Planning for Change", or "The Educational Change Process". It involved the development and field trial of a self-evaluation process that could be used by staff members of a school. The process was designed to provide information for a staff on the quality of its interaction along dimensions of interaction considered essential to the self-renewing school. Self-renewing implies that the school staff can cope successfully with on-going operational problems and with planning for change. The multi-dimensional nature of staff interaction suggests that the process should be looked at through a variety of research strategies. This has resulted in an eclectic methodology for the study.

The methods used are well suited to the purpose of the study: to develop a self-evaluation process for use by school staffs. In such practical, school-based projects, research is not designed to yield knowledge that is universally valid. It is, rather, designed to help practitioners make judgments about practical matters. It cannot be independent of the context from which it is derived. (Stufflebeam, 1971). Such methods, states Tesch (1975), can add valuable new approaches and goals to research. They can be used in decision-oriented research, and contribute to the development of theory in the social sciences. For certain types of field-oriented investigations, state Lutz and Iannaccone (1969), no other methods will serve quite so well.

Features of the Methodology

The field trial activities were organized as three case studies, with the interaction among staff members being the primary concern. To obtain the data required to develop the case studies, the following methods were used:

- a) ethnographic research strategies such as observation by both participants and researcher, interviews with key informants, structured interviews and questionnaires with participants, for obtaining descriptive information about the self-evaluation process in operation,
- b) statistical methods relating to the development and evaluation of an instrument for use in assessing staff interaction and role characteristics,
- c) quasi-experimental methods involving a one group, non-randomized, pretest-posttest design for researching some aspects of questions dealing with the use of a self-evaluation process as a change catalyst, and
- d) the evaluation instrument as a reactive measure introducing the guinea-pig effect (Isaacs and Michael, 1971) for use as a planned change strategy,
- e) the direct involvement in the study of the subjects who reacted to the Instrument and the researcher, and who were giving as well as receiving feedback about the evaluation process.

Particular emphasis in this chapter, therefore, is placed on the ethnographic methods adopted for use in this study. There are sections describing the observer's role, the population observed, the sites selected, and the measures used. Another section deals with the strategies selected for collecting, recording, and analysing the data relevant to each case study.

Ethnographic Methodology

Definitions

The term "research" encompasses projects of such diversity that before entering a discussion of methodology it is appropriate to distinguish among some categories. For the purposes of this discussion, the distinction made by Cronbach and Suppes, (1969) between "conclusion-oriented" and "decision-oriented" research appears useful. They relate the definitions to the terms "basic" and "applied" research, though not assuming total congruence.

A conclusion-oriented study is not performed for the mass of educators; it is performed for the enlightenment of the investigator and the small community of specialists thinking about the same problem. The evidence for a particular hypothesis, or the accurate description of a particular phenomenon, is the harvest the investigator offers his specialist colleagues. (p. 127)

The decision-oriented study is done with the explicit intention of applying the results to specific ends. In a decision-oriented study the investigator is asked to provide information wanted by a decision-maker.

The decision maker believes that he needs information to guide his actions, and he poses the question to the investigator. (p. 20)

The methods of conclusion-oriented research are rigorous and controlled. The widely accepted definition of Kerlinger (1964) will be used in this discussion for the conclusion-oriented, scientific research methods.

Kerlinger states that:

Scientific research is systematic, controlled, empirical, and critical investigation of hypothetical propositions about the presumed relations among natural phenomena. (p. 13)

Decision-oriented research has been in need of alternative methods for searching and generating information. The alternative methods of inquiry, however, should be systematic, rational, objective, and realistic. Such methods conform closely to the definition of "evaluation given by

Stufflebeam (1971).

Educational evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives. (p. 19) (b)

It is in the area of decision-oriented research that this study of a staff self-evaluation process falls. The information generated from this inquiry will apply to the larger task of developing and transmitting evaluation strategies to practitioners engaging in school based planning. The strategies developed are to be gathered in a C.E.P.S. manual¹, for use by schools.

"Information", in this discussion of methodology will therefore be defined as Stufflebeam (1971) (a) uses it:

... descriptive or interpretive data about entities (tangible or intangible) and their relationships, in terms of some purpose.

Decision-oriented research is concerned with data drawn both from precedent and experience. The process for gathering the data is multi-faceted and iterative.

"Process" will be taken to mean

... a particular and continuing activity subsuming many methods and involving a number of steps or operations,

as described in Stufflebeam (1971, p. 19-25) (b)

Limitations of Conclusion-oriented Research

Kerlinger's definition of research is viewed by some research methodologists as too restricted an interpretation of the term within today's educational vocabulary. (Wiles, 1972). Current criticism of the conclusion-oriented research model does not focus on the scientific method as such. It centres on the belief that only the scientific method for educational research

is legitimate. Advocates of a broader interpretation for the term "research" claim that educational inquiry cannot rely exclusively on one methodological approach and still deal with all the kinds of questions for which practitioners need answers. (Tesch, 1975).

In commenting on the difficulty of using conclusion-oriented, research design in situations requiring information for use by decision makers. Steele (1973), Stufflebeam (1971), Tesch (1975), and Patton (1975) make basically the same points.

1. Conflicting Purposes

The purpose of conclusion-oriented research is to produce knowledge that is universally valid. Decision-oriented research seeks to generate information that makes possible judgments about some phenomena. The information need not be generalizable; it should be transmittable.

2. Alternative Views of Context

The scientific methods of conclusion-oriented research seeks to generate knowledge that is independent of the context from which it was derived. Decision-oriented research methods incorporate the context within which the phenomena operate, utilizing it as an integral part of the information required to form judgments.

3. Contrasting Ideas on Control

The researcher using the scientific methods of conclusion-oriented research design arranges conditions in order to study an interaction between

variables. He contrives a situation which otherwise might not have occurred. In contrast to this type of investigation is the decision-oriented methodology in which information about an actual situation is sought. The conventions and on-going practices of operation should not be disturbed for the sake of a research design.

4. Varying Ideas of What is Researchable

Conclusion-oriented research emphasizing scientific methodology has acted to limit the kinds of questions that are asked. (Patton, 1975). Certain types of phenomena are easier to control and measure. Scientific methodology emphasizing quantification assumes the desirability of applying empirical standards to social phenomena. Relevant research questions which cannot be bent to fit these designs have been neglected. They have been considered uncontrolled, and hard to analyze because they involve intricate social interactions ... which can only be approached holistically. (Tesch, 1975). Decision-oriented research is concerned not only with quantitative methodology, but with qualitative methodology.

5. Differing Roles for the Researcher

The conclusion-oriented researcher using scientific methodology contrives and controls an experiment. He intervenes in existing social systems to such an extent that he becomes part of the resulting data. The decision-oriented researcher works within an existing social system. His interaction with that system may also affect the data, but to a lesser degree. Steele (1973) states that the given circumstances may make compromises in design necessary. The amorphism and inter-relatedness of reality and the natural process of the

participants with whom the researcher is working in a school setting have to be considered.

6. Differing Applications for the Data

The conclusion-oriented research design produces data at the end of the study. The treatment is kept constant throughout. In decision-oriented research, the treatment or methods may be altered if feedback indicates a change is needed. The feedback itself is considered data. Benefits are desired not only for future users of a technique or process, but for those involved in the study or project.

The points made above are well summed up by Shapiro (1973).

Research methodology must be suited to the particular characteristics of the situation under study An omnibus strategy will not work. (pp. 523)

A paradigm governs not a subject matter but a group of practitioners, explains Kuhn (1970). The dominance of the conclusion-oriented, scientific method appears to have cut off many practitioners from consideration of alternative research paradigms. (Patton, 1975). Such alternatives may rely on field techniques from an anthropological rather than a natural science tradition. The alternative methodologies needed for decision-oriented, evaluative research can change the idea of what kind of problem can be assumed to have a solution, or ought to be studied.

The Applicability in Educational Research of Ethnographic Methods

Field study techniques are not new to the social sciences. An early master of the social anthropological techniques pointed to the necessity of careful description if one was to know the process of human behaviour,

(Malinowski, 1922) and the methods have been used widely in the study of various cultures. For example, studies of the Trobriand Islanders, (Malinowski, 1922, 1929, and 1935), and the Navajo, (Kluckhohn, 1962) used ethnographic methods. Human behaviour in small social groups has been studied using ethnographic techniques, with some studies involving street corner society, (Whyte, 1955), some involving student groups, (Merton, 1957) and (Becker, 1961), and some looking at labour-management and industrial groups, (Mayo, 1945) and (Roethlisberger and Dickson, 1939), to cite but a few. The methodology is now used to investigate and describe various sized groups, both formal and informal and in attempts to understand social and cultural behaviour. The settings in which observations occur vary from such naturalistic settings as streets, places of work, classrooms, to more structured laboratory sites.

Daniel Griffiths (1959) called for the increased use of observational and descriptive methods in educational administration studies and a move away from a purely experimental research design approach, stating: "The method is a proven one and educational administration is long overdue in its use." (p. 35) Recently there has been an increase in the use of the methodology in the study of administration. There are studies concerned with school boards, power and decision-making by Kimbrough (1953) and by Goldhammer (1954), with the informal systems of teachers in schools by Boyan (1954), Iannaccone (1958), and Rubin (1965), with administrative and policy changes by Atwood (1960), Lerner (1965), and Robbins (1966), and more recently, with problems of innovation in a school staff by Smith and Keith (1967 and 1971), to cite some examples.

Developing Strategies of Ethnographic Research

The method has been variously described by researchers as "ethnographic" (Malinowski, 1922), "anthropological" (Valentine, 1968), "field study" (Lutz and Iannaccone, 1969), and "humanistic" (Tesch, 1975). In their descriptions of methodology, these writers refer to many of the strategies outlined in a recent presentation by Rist (1976). He suggested the following strategies for data collection in ethnographic research:

- 1) observation, both participant and non-participant,
- 2) key informant interviews,
- 3) structured interviews,
- 4) questionnaires,
- 5) unobtrusive measures.

This range of strategies, in Rist's opinion, could be applied in a wide range of studies dealing with educational and sociological problems. Rist believed that the above-mentioned strategies could assist the researcher to replace superficial impressions with more accurate insights. In areas of study such as those focussing on the culture of the school and life in classrooms, ethnographic methods have been used in:

- 1) discovering and describing what is convention in a school's operation,
- 2) understanding what purpose conventionalities serve for the participants,
- 3) understanding why things are the way they are, and not some other way, and
- 4) understanding why some things do not happen and what inappropriate actions can reveal about the parameters of a society. (Rist, 1972).

In the various kinds of studies mentioned above, descriptions are collected both by direct observation and by questionnaire and interview techniques. In few of the studies are the descriptions published, or are the data and analyses in complete form. This is largely due to the fact that such collections are so lengthy and detailed. Kimbrough (1964) in a work on political power and decision making, published some descriptions that give an

idea of the sort of material resulting from the use of observational methods. In studies about the decision making in a differentiated staffing school, Pellegrin has included some of the descriptions and observations as well as the results of sociological methods such as questionnaires, and interviews.

A major requirement, therefore, in applying ethnographic methods to the study of complex group processes, is establishing a framework that can serve as a guide to data collection and assists the observer. Decisions must be made about the focal sub-system to be observed and the units of observation or categories within which observations will be collected. Another essential requirement is to determine the role to be played by the observer. Then, data collection methods must be outlined, and they are, in part, determined by both the framework being used and the role occupied by the researcher.

The Observer's Role

In order to observe the staff self-evaluation process in operation, and assess its usefulness and impact, it was necessary for this researcher to select a role based on the purposes of the study and the opportunities available at that time, in that place.

Roles Available to the Observer in Ethnographic Studies

Lutz and Iannaccone (1969) describe three main roles that are open to the researcher as observer. These roles are: 1) the participant as an observer, 2) the observer as a participant, and 3) the observer as a non-participant. The participant as an observer has a natural role in the society and decides to use it to study the group he belongs to. His role is likely hidden from the group or society he is studying. The observer as a participant differs,

for he enters the society for the purpose of research and takes a role, or is assigned one. He participates at the invitation and with the knowledge of the group he is studying. As Schwartz and Schwartz (1955) have stated,

... participant observation is a process in which the observer's presence in a social situation is maintained for the purpose of scientific investigation. The observer is in a face-to-face relationship with the observed, and by participating with them in their natural life setting, he gathers data. Thus, the observer is part of the context being observed, and he both modifies and is influenced by this context. (p. 344)

The non-participant observer role occurs only when the researcher is neither physically nor psychologically present in the society and in the minds of the participants. Smith and Geoffrey (1968), think that if the observer is present, even in the minds of the individual members, he is present in the society, and so interacts with it. Though an observer may attempt to withdraw, or not to participate, the non-interfering role can never be total. The presence, physical or psychological, affects the interaction.

George Homans (1962), who studied labour groups and outlined the techniques used by industrial sociologists, described the major role-emphases for field observers. The observer:

1. is ready to observe human behaviour rather than the statistical results of it. He considers the establishment and maintenance of relationships with his subjects of paramount importance. He takes all information, not what he wants from the field, but what the field has to offer. He assumes that nothing is irrelevant. His willingness to accept whatever comes along makes him all the more acceptable to his subjects.

2. Non-directive interviewing and participant observation are observational tools likely to be used ... For his initial work these two methods serve in maintaining relations and they have important implications for the kind of data he seeks to collect and for the ways in which he intends to use the data. He

collects his information in bits and scraps dealing with a wide spectrum of topics.

3. ... studies social organization. His interest is with groups and the accumulation of material on many topics about them. He relates the different topics to one another. He deals with relations among things. Indeed, to him, social organization means just this relatedness. He studies the case. He believes that the study of organization is best begun by a study of some one organization. His population then becomes the series of observations he records concerning one group.

4. ... seeks to discover and describe rather than prove. Pre-occupation with proof can affect the choice of questions to be studied. Hypotheses are often selected merely because of the facility with which they can be given quantitative demonstration.

5. ... gains his enlightenment from relationships and discovering the facts of social organization. He wishes to understand the conceptual social system, not just the concrete social system. (pp. 259-260)

The Appropriateness of Various Possible Combinations of Roles

Data collection methods are limited by the role occupied by the researcher. One can select a role based on a reasonable guess about the likelihood that certain data collection methods will or will not be available. There are advantages and disadvantages to each variation of the participant observer role. Lutz and Iannaccone (1969) indicate in the following chart the appropriateness of various possibilities: (p. 113)

DATA COLLECTION METHODS RELATED TO
OBSERVATION ROLE

Methods Useful in Data Collection	R o l e s			Comment
	I	II	III	
	Participant as an Observer	Observer as a Participant	Observer as a Non-Participant	
1. Observation and recording of descriptive data	+	+	+	Particularly useful to Role 1 in areas of guarded interaction and sentiment
2. Recording direct quotes of sentiment	+	+	*	Same as above
3. Unstructured interview	+	+	*	If the researcher is skillful, a structure emerges
4. Structured interview guides	-	*	+	Most useful in survey work (e.g. census)
5. Detailed interaction tally guides, e.g. Flanders & Bales interaction guides	-	-	*	Most useful in small group work
6. Interaction frequency tallies	+	+	+	Meaningful in leadership studies
7. Paper and pencil tests: Questionnaires Scales Achievement or ability	- - -	- - -	+ + *	Very helpful in certain circum- stances for certain purposes
8. Written records: Newspaper Official minutes Letters Speeches	+ + + +	+ + + +	* * * *	These are very important to Role 1 in checking reliability of observed data
9. Radio and T.V. reports	+	+	*	Same as 8.

Key: + Likely to be used
* May occasionally be used
- Difficult or impossible to use

Observer Roles Adopted for Use in This Study

Thus for the study of the self-evaluation process, this researcher adopted the "observer as participant" role. The schools were entered with a purpose of investigating a self-evaluation process. The researcher took on the role of leader for part of the process, and of information processor, provider of feedback in other phases of the process. The school staffs agreed to take part in the study and were aware of the role that this researcher was playing.

In addition to this role, information was gathered from a participant observer, the contact person from each staff who kept notes and made observations which were communicated to this researcher at regular intervals throughout the course of the study. This additional source of data fulfilled two purposes: 1) It provided for a check on the reliability of observations made by the researcher, and 2) It increased the quality of involvement of school personnel in the study and assisted in legitimization in the eyes of the staff of the processes being used to collect the data required for the study.

The ethnographic methods useful in data collection for this study were: 1) Observation and recording of descriptive data, 2) Recording direct quotes of sentiment, 3) Unstructured interviews, 4) Structured interview guides, 5) Paper and pencil staff self-evaluation questionnaire, and, 6) Reference to some written records.

The Population Observed

Identifying Sites for the Field Trial

The self-evaluation process in this study was being developed and tested with the goal of including it in a planning processes handbook for distribution to staffs in a large, urban school district.² Thus, it appeared wise to observe the process as it operated in a variety of school sites, such as might be found in a large district. To provide a sufficiently large sample for observing the operation and the evaluation process, at least sixty staff members were to be involved in the project. It was decided to seek the cooperation of at least three schools that were involved in some change activities, a small, a medium, and a large staff group from different types of communities and with elementary and secondary grade levels. In setting these selection criteria, consideration was given to the time of the school year when the study had to take place,³ the fact that only one researcher was available to observe the process, and that the process to be observed was relatively complex and lengthy.

Accordingly, two districts in the lower mainland area of British Columbia were contacted: a large urban school system and a large suburban/rural district. Meetings were requested with personnel from the central office staffs of these districts to discuss the project proposal, the type of involvement anticipated for the schools participating, and the procedure for identifying some schools that might be interested in taking part in a staff self-evaluation study during the second half of the 1975-76 school year.

In December, 1975 and January, 1976, two meetings were held with personnel from the research department of the urban district. A project proposal and an outline of the involvement requested of project schools were presented.⁴ The district personnel agreed to cooperate and decided to send out a letter outlining the proposed study and inviting the participation of a number of schools which, they thought, met the criteria for selection. The interested schools were directed to contact the central office people who

would, in turn, inform this researcher. After a three week interval, the research department indicated that four schools had responded positively to the letter: a medium sized, new, community elementary school, and three large, older, elementary schools.

A meeting and a phone interview with the Director of Instruction of the suburban/rural district took place in January to discuss the possible participation of schools from that area. The director suggested the names of three schools: two large secondary schools and a small, community elementary school. He sent out a copy of the project proposal, the document outlining the nature of involvement requested of project schools, and a letter inviting schools to participate. Those interested were asked to contact this researcher directly. All three did so, contacting by phone to request additional information.

Thus, the initial procedure of contacting school districts resulted in indications of interest from seven schools of varying types and sizes and where staffs were involved in some change activities and wanted to do a self-evaluation of interaction processes and procedures.

After further consideration of the self-evaluation study proposal, one of the four schools from the urban district agreed to meet with the researcher to learn more about the project. The other three decided that their professional development time for the school year was so fully committed in other ways that they could not become involved in so lengthy a project.

Of the three schools from the suburban/rural district that indicated initial interest, two eventually decided to participate. Early discussions with the teachers and principal from the other school revealed that they could not commit sufficient time to the self-evaluation during the remaining months of the school year to make participation worthwhile. Some departments in that secondary school would have liked to participate during 1975-76, but others

did not have time. The principal asked to keep copies of the proposal and the instrument with a view to using the process at a later date.

The selection process resulted, therefore, in obtaining the cooperation of three schools - two elementary schools, one with a medium sized staff group and one with a small staff, and one secondary school with a large staff group.

The Three Schools Selected for the Study

School A

The case which will be referred to as School A in the remainder of the thesis, is a medium sized, elementary school in a large urban school district of the lower mainland of British Columbia. It is situated in a new area of the city and is designated to serve the neighbourhood as a community school.⁵ The facility is a new and striking open plan which includes a centrally located library/resource area surrounded by flexible spaces designed to accommodate teams of teachers working with multi-age groups of children organized into larger than ordinary class-size units which can be re-grouped into smaller or larger instructional groupings. In addition to the open areas, there are several closed, class-sized spaces which may be used for a variety of activities or levels of the programme, e.g., for the kindergarten or for special classes. The students are in kindergarten through grade seven, with some grouped into special learning opportunity classes. Some of the closed space is in the form of portable classrooms located near the main building. Twenty professionals, including a principal, vice-principal, librarian, and special class teacher make up the staff of School A.

School B

The secondary school will be designated for the rest of this study as School B. It is located in the suburban/rural district referred to in an earlier section of this chapter. It, too, is situated in a fairly new part of its district, but many of the students travel to school by bus from more distant, rural parts of the district. At the beginning of the self-evaluation study, School B had been in operation for approximately three years, providing programmes for eighth through twelfth grade students in new but fairly traditionally designed, classroom facilities. The staff includes a full-time principal, a vice-principal, specialists in guidance and counselling, and a librarian. The principal takes some of the teaching load.

School C

The elementary school situated in an older suburb of the suburban/rural district, will be designated as School C in the remainder of the study. It is designated by its district as a community school. The professional staff number fifteen, with the principal half time at this school and half time at a neighbouring school. There is a vice principal and a full time counsellor, as well as a recreational coordinator on the staff. The children attending all come from the immediate neighbourhood which is quite small and characterized by diverse zoning ranging from residential to industrial land use. The school is an older, one-storied facility composed of a number of self-contained classrooms grouped along corridors in several wings. A number of portable classrooms have been located near the main buildings to accommodate additional pupils. Children are in grades one through seven, and the school also provides a special class, and a kindergarten programme.

Thus the three schools selected have small, medium and large sizes of staff groups, are in a variety of urban and suburban areas, and have considerable variation in staffing patterns. Facilities and organizational patterns range from self-contained classrooms to family grouping and cooperative teams in open areas, with a departmental organization in the high school. Varying levels of support staff and administrative release time are present in the three schools. The three cases will provide a useful sampling of types of schools and situations that could be found in a large urban school district such as that for which the planning material is being designed.

The Instrument

Background Development

The project used and adapted some materials and techniques developed by a team of researchers from I.D.E.A. That research team worked with a group of eighteen California schools between 1966 and 1971 on a study of change and how it affects schools. The major focus for the study was the question of what happens when a school staff tries to cope more effectively with the problems inherent in schools. They were interested in studying the process of change, the process of renewal and how it related to certain characteristics of staff interaction and organizational climate in the schools.

Through the course of the five year study, Dr. John Goodlad, who headed the research group working out of University of California, Los Angeles, and the staffs of the eighteen schools, worked together to discover new ways of assessing and describing the staff interactions and role characteristics which seemed to affect the change process. The research study team devised several instruments which were used in the I.D.E.A. study for informing a staff about

the extent to which it was engaging in the processes necessary to the self-renewing school. (Overman, 1973). One of these was called The Criteria Instrument, referring to the descriptive statements it contained on self-renewal.

Description of the Criteria Instrument

The Criteria Instrument consists of 68 items describing six major categories of school activities and role characteristics: Dialogue, Decision Making, Action, Meetings, Principal and Teachers. The first three of these categories related to the D.D.A.E. process⁶ and the other three related to the role definitions of principals and teachers and the setting in which much of their formal interaction occurs: staff meetings.

Six response categories are used for rating the 68 criteria items. This "rating scale", as it will henceforward be called has response categories of: "never", "seldom", "sometimes", "frequently", "usually", and "always".

The instrument does not constitute a complete list of criteria for a good school. In the original I.D.E.A. study, however, it was found to describe desirable, and responsible receptivity to change by a staff. A complete picture of all the variables at work in the process of planned change in a school would be hard to manage within the confines of one or even several instruments. This Criteria Instrument was thought to provide necessary and relevant information for staffs in a self-evaluation and feedback process.

Modification of the Criteria Instrument

The instrument used in the self-evaluation study under discussion in this paper is based on the Criteria Instrument. (Overman, 1973). The areas

included in it relate strongly to the areas of staff interaction involved in the process of planned change. An additional rating scale: "I feel it needs discussion" with a choice of "yes" or "no" response categories has been placed beside each of the 68 criteria statements of the instrument. This "discussion scale" as it will be referred to in subsequent sections of this paper, is designed to give staff members an opportunity to indicate if they feel the practice described in the criteria statement, as it now exists in their school, needs discussion. The resulting data are designed to provide additional useful information for the feedback meetings and followup discussions among staff members.

The original instructions for the Criteria Instrument have been modified to take into account the change in format and content. The title has been changed as well to avoid the connotation that the word "criteria" has for some teachers. Some feedback on this word was received in the early pilot situations.⁷ The instrument has been renamed "School Practices Inventory"⁸.

A page that asks the respondent for six types of biographical information has been attached to each inventory. This page was included in order to gather additional information about the case school staffs for the purposes of evaluating the process under development in this study.⁹ Such a page is not foreseen to be a necessary part of the School Practices Inventory when used in an ordinary school situation.

Collecting and Recording the Data

Data exist everywhere. Within the social system of a school, the teachers, students, and administrators are constantly behaving and interacting in various ways. Numbers, patterns, and sequences could be specified empirically; actions, events, and places described accurately. However, one could

not possibly observe all the data concerning a phenomena under investigation. The observer must have decided upon a model and some objectives to guide data collection. Some technique by which to shape and analyze the data is required. An important sub-system of the whole should be selected in order to permit the researcher to focus on a manageable area. The units of observation within which observations will be collected have to be determined in relation to the model.

A Theoretical Framework

Since the content and focus of change activity in a planning process could be quite different in every school, the original I.D.E.A. research tried to find what parts of the process schools shared. They developed the concept of the self-renewing school. The Criteria Instrument provided one means of focussing on a portion of the staff interaction by measuring the quality of D.D.A.E. and other conditions that indicate responsible receptivity to change. Any planning for innovation requires some dialogue among the staff involved. Decisions have to be made; action has to be taken in order to implement the decisions. The role behaviour of principals and teachers influences the success of any activity and the interaction of these two roles in the form of staff meetings is also seen to be a good indicator of the level of D.D.A.E. This basic staff D.D.A.E. process documented in the study was selected as the framework for the staff self-evaluation.

The Focal Sub-System

The study of a school staff self-evaluation narrows the focus for observation from the total school as a system, (pupils, teachers, administrators,

parents, support staff), to a more manageable area, (the group of professional teachers and administrator(s)). The activities, interaction, and sentiments observable in this group as the members engage in dialogue, decision-making, taking action, leading, and evaluating their actions will become the framework for collecting the data.

The organizational device suggested by Lutz and Iannaccone (1969) which has been adapted for use in this study is the Organizational Taxonomic Unit (O.T.U.). This unit of observed behaviour provides an observer with the means to maximize the opportunities for observation available to him. It leads the observer to look at the same elements in each situation. The O.T.U. contains: 1) the purpose of the behaviour, 2) some background, 3) the actors or persons involved, 4) description of the behaviour observed, including some dialogue, 5) the outcome of the behaviour.

Each O.T.U. can be gathered separately but if several focus on the same topic, a total description of behaviour, relating to the topic being investigated, can be formed. This should not be considered a description of the total behaviour.

The units selected for this study were those key events in the sequence of the schools' activities which related to the field trial of the self-evaluation process: 1) the preliminary contact meeting with the school principal, 2) the first staff meeting, 3) the first application of the School Practices Inventory at a staff meeting, 4) the followup meeting at which feedback was given, 5) the staff room interviews, 6) the posttest application meeting, 7) the key informant interviews.

Procedures Used in the Study

The procedures and sequence of activities followed in this study are

are summarized below in Table 2. More detailed descriptions of the activities, as planned and as they actually took place, follow the table.

Comparison of Planned Activities with Actual Events

The self-evaluation process for use by school staffs involved the following major activities:¹⁰

- initial contact and introduction of procedures,
- a preliminary contact meeting to explain the process to the staff with consultation to design on-going involvements,
- an initial assessment using the School Practices Inventory with staff,
- a feedback and discussion session with the staff,
- a second assessment after three to four months.

Because of the natural turn of events occurring in each of the case schools, the actual events or sequence of activities varied, to some extent, from the planned process. The steps in the process are included below, along with an indication of the changes that were made. The effects of the changes will be assessed and reported in Chapter Four.

1. Initial Contact with Staff

The first meeting at School A was with the principal and one staff member. The principal, at an earlier meeting, had introduced the idea of doing a self-evaluation to the rest of the group, using the material that had been mailed out from the central office during the selection of case schools period of the study. As a decision to participate had already been made, only clarification of procedures was required at the contact meeting.

PROCEDURES, PURPOSES AND SEQUENCE OF ACTIVITIES FOR THE THREE SCHOOL SITES

Unit of Observed Behaviour	Activity	Purpose	Date Sequence		
			School A	School B	School C
Initial Contacts with school personnel in each site	Note observations of early contacts with school personnel	Explain the self-evaluation study to the staff and invite their participation Obtain data on initial D.D.A.E., initial role characteristics and staff interaction patterns.	phone Feb. 6 Visit Feb. 9	phone Feb. 10 visit Feb. 16	phone Feb. 10 visit Feb. 12
Preliminary Staff meeting in each school	Discussion and consultation with school staff	Design the type of ongoing involvement desired by each school	"	Feb. 23	Feb. 17 Feb. 19 Feb. 20
Staff meeting in each school	Pretest administration of the School Practices Inventory in each case school	Initial assessment of staff interaction and school procedures to get data for feedback report for each school	Feb. 18	Feb. 23	Feb. 23- Mar. 1
	Arrange for a contact person in each school Preliminary analysis of data	Participant observers follow the process, make observations and set up activities with staffs Preparation of a feedback report for each school staff Obtain results that can be used as a baseline for making comparisons with posttest results	" Feb. 18 to 25	Mar. 18 Feb. 24 to 29	Mar. 18 Mar. 2 to 10
Feedback meeting with staff of each school	Presentation of Feedback	Discussion of the information in the feedback report Identification of areas that are deemed important enough by staff to require further planning or action	Mar. 3	Apr. 21	Mar. 18
Staff room visits and interviews at each site	Observe interaction, gather observations and comments from staff members	Obtain further data on the D.D.A.E. process as modified by the use of the criteria	Feb. 18 Mar. 3 May 10 May 19	Feb. 23 Feb. 27 Mar. 15 Apr. 6 Apr. 8 Apr. 21	Mar. 1 Mar. 15 Mar. 18 Mar. 26 Apr. 5 May 10
Critical incidents	Contact person and researcher note their observations of the evaluation process	Documentation of staff responses, actions, and evaluation of the process	Feb. 18 to June 14	Feb. 23 to June 17	Mar. 18 to June 11
Staff meeting	Administration of the Posttest School Practices Inventory	Second assessment of staff interaction and school procedures to get data for analysis	June 11	June 3 to June 9	--
Key informant interviews	Structured interviews with key staff members of each school Analysis of data	Obtain data related to the staff's evaluation of the total process Obtain information from inventory posttests	June 2 June 11 June 14 June 11 to June 30	June 3 June 9 June 17 June 11 to June 30	May 31 June 8 June 11 --

In School B, the initial contact by phone with the principal was followed, at his request, by a meeting with the principal. After some explanation of the process was given, he invited the researcher to attend a full staff meeting to present the proposal to them. At that subsequent meeting between the principal and the researcher and the staff meeting, the school's staff committee had looked at the proposal for a self-evaluation and had decided to participate.

In School C, the initial phone contact was with the principal. After lengthy explanation and discussion, a date for a meeting at the school was set. This half day meeting included a two hour discussion with the principal and a brief introduction to the staff in the staffroom during morning recess. Mention of the project was made to the staff during the introductions which took place over coffee.

2. Preliminary Staff Meeting

The preliminary staff meeting and the pretest administration of the Inventory coincided in School A. The explanation of the process and the decision to participate were led by the principal and staff committee at an earlier meeting. In School B, the preliminary meeting with the full staff unexpectedly became the meeting at which the Inventory was administered. In School C the preliminary staff meeting took place after school. The researcher and a faculty member from Simon Fraser were present. The self-evaluation item was one of several on a long agenda. The proposal was introduced by the principal and an explanation supplied by the researcher. A follow-up visit and call were required to further explain the process before dates for subsequent activities could be set. No joint decision by staff and principal was made during the staff meeting.

3. Pretest Administration of the School Practices Inventory

In School A, the first self-evaluation Inventory was done at a regular staff meeting that took place after school. It was the first meeting between the full staff and the researcher. The contact persons were selected after the questionnaire was completed. A request for interested persons to volunteer yielded two responses.

In School B, the first self-evaluation Inventory was done at a regular staff meeting held after school. It followed a brief explanation of the process both by the researcher and by members of the staff committee. A contact person was suggested by the principal. The person agreed to act.

In School C, the Inventory was done by each staff member on his own time. The questionnaires, with no mention of using envelopes for returns, were left at the school on a Monday. Teachers were requested by the principal to complete the forms and return them to a box on the office counter by the following Monday. The researcher visited the school, talked with the principal and two staff members and collected all but two of the Inventories from the principal the following Monday. A staff member was called to the office and asked to be the contact person for the project. After a brief explanation of the role, the person agreed.

4. Feedback Meeting with Staff

In School A, two weeks after the pretest, a special session was set as part of a Wednesday afternoon planning meeting to hear and discuss the feedback report. At School B, three dates for the feedback meeting were made. Each had to be postponed. This moved the feedback further from the self-evaluation pretest than planned. After two months, a staff meeting was held

at last. At School C, one feedback meeting set for March 15, two weeks after the pretest, had to be cancelled due to staff absences due to illness. Another meeting was called for March 18, after school. It was not a regular meeting time, and not all members were present for the feedback report.

5. Visits to the Schools, Interviews and Observations Made Between Pretest and Posttest Inventories

School A invited the researcher to visit the school, call on the contact persons and observe the staff in meetings whenever an opportunity was available. School B made a similar invitation. School C arranged for the contact person to call the researcher from time to time with a report on activities. An invitation to attend a professional day meeting was extended.

During this period, at all three sites observation notes were made, interviews with contact persons were recorded and descriptions of critical incidents noted, both by the researcher and by contact persons.

6. Posttest Application of the Inventory

In School A, a section of a professional day program was set aside for the second application of the Inventory. This occurred four months after the first self-evaluation.

In School B, due to events at school year-end, it was impossible to set a special meeting time at which to complete the posttest inventory. As an alternative, the contact person distributed the forms with envelopes and later collected the completed, sealed evaluation envelopes and returned them to the researcher.

In School C, the posttest application did not occur. At a meeting the staff decided not to participate in the final stage of the study as a group.

Only two staff members did the posttest on their own time and returned the Inventories to the researcher by way of the contact person.

7. Key Informant Interviews

The Interviews were timed to take place after the posttest had been completed in Schools A and B. In the case of School C where no posttests were done, staff members were interviewed after a similar period of time had elapsed from the pretest as in the other two cases.

Five out of nineteen people participating in School A were interviewed. Seven out of twenty-one staff members completing the posttest at School B were interviewed. Five out of thirteen people who did the pretest were interviewed in School C.

The Interview sessions were from thirty minutes to an hour and a half in length. They followed a set sequence of questioning. Responses were recorded on an interview Protocol form.¹¹ The form included six questions, some of which had up to four sub-parts.

Interviews were, in all cases, between the researcher and one or more staff members.

Shaping and Analyzing the Data

Observations were recorded in writing as soon as possible after the events which formed the O.T.U.'s in which direct leadership participation was required, or during events in which the researcher was not acting as leader. The participant observers in each school were asked to keep notes or records of their observations. Periodic contacts with these observers were recorded by the researcher. Tape recordings were not used as it was feared the

presence of mechanical recording devices would inhibit discussion in the groups under observation.

The critical incident technique was also used to collect data related to the self-evaluation process, as was the case approach, in that each situation varied slightly in terms of its structure and context, and in the ways people reacted to the process under study.

The total description of behaviours collected by the above-mentioned techniques provided a sample of the total population from which data were being collected. The data were selected according to some observation units and criteria, and thus provided some measure of the society's behaviour in the area of self-evaluation, the focus for the study.

Data relating to each of the five research questions was analyzed in two major categories: 1) the subjective data resulting from the ethnographic methods employed in the study, and 2) the objective data resulting from the two applications of the School Practices Inventory.

The procedures are outlined below and are related to the "decision oriented" intent of the study.

Analysis of Data Obtained from the Ethnographic Methods

R. S. Weiss and Martin Rein (1972) writing about data analysis in process-oriented, qualitative research state that: "... there are no data reduction devices, only a variety of techniques for organizing the data." They suggest several procedures for assisting in organizing and treating the data generated.

1. Materials may be organized to provide descriptions of what happened in the concrete cases.
2. The investigator can describe the types of systems, structures or pro-

cesses observed. Concrete details serve as illustration and as evidence of theoretical models.

3. Materials may be organized so as to develop a model for understanding the consequences of introducing a program for change of the sort studied.

Adequacy of the model is checked against the experience gathered in the field, and the model is modified as a result of the observations and evaluation.

Research Questions

In this study of a staff self-evaluation process most of these organizational procedures were used to derive and report information which could apply to the five research questions.

Question One

How did the case schools compare at the beginning of the study?

Data from the initial contact session and from preliminary meetings about the self-evaluation were recorded and analyzed into cases. Situations observed were grouped into the aspects of the D.D.A.E. process and concrete details about quality of dialogue, decision, action, etc. were noted as they related to the theoretical framework of the self-renewing school.

Question Two

Has change occurred as a result of the use of the process?

Data from the staff meetings, from contact persons' observations and from observations made during the researcher's visits to each case site were recorded and analyzed as cases. Descriptions of what happened following the

self-evaluation activity were built up for each case school.

Adequacy of the theoretical model was checked against the experiences described. Comparisons between ratings derived in statistical analysis of the Inventory and processes observed in the case sites were recorded.

Question Three

What is the over-all evaluation of the staff self-evaluation process?

Data from the key informant interviews and from the observations of critical incidents compiled by the researcher and the contact person at each case site were applied to this question. The data yielded information about the effectiveness, reliability, and validity of the process and the instrument it incorporated. The data also were applied to the question of adequacy of the theoretical framework.

Question Four

Should modifications be made to the Inventory Instrument?

The analysis and application of data from the interviews and from observation of critical incidents were used to address this question. In addition, details of data drawn from the case descriptions in earlier phases of the study activities supplied useful information about the need for modification.

Question Five

What is the relationship among subscales on the Inventory?

To respond to this question, case descriptions, built up from observation notes, interview data, and key informant's comments were applied. Comparisons

between the theoretical framework for the evaluation instrument supplied by the D.D.A.E. process and the actual system observed in the case schools were recorded and applied.

Analysis of Data Obtained from the Use of the Self-evaluation Instrument

Not all data collected during the study resulted from observations. In addition to information derived from ethnographic methods, data obtained from the pre and post test applications of the School Practices Inventory were analyzed using statistical methods. The work was done on an I.B.M. 370 computer at Simon Fraser University.

The data from the Inventory were analyzed for two major purposes:

1. To Obtain Feedback for the School Staffs

Analysis of staff responses to the Inventory was done immediately after each of the pretest and posttest applications. The Testat item analysis program was used to obtain descriptive statistics on all items and scales.

The resulting statistics were compiled into a feedback report for each school.¹² The reports include such information as: a) frequency of item responses, b) item means, c) range of responses, d) the principal's rating for each item.

This report and the discussion it engendered was a major strategy in the self-evaluation process.

2. To Obtain Information on Research Questions

Further analyses of the data resulting from use of the Inventory were

made. Some of these analyses related to judging the efficacy of the self-evaluation process. Others related to an assessment of the Inventory instrument itself as part of the self-evaluation process.

All the statistical procedures applied programs from the Statistical Package for the Social Sciences, (S.P.S.S.). To generate the statistical information which would assist in responding to the research questions, the following kinds of analyses were made:

- a) To compare schools at the beginning of the study, an ANOVA (analysis of variance) among subscale mean scores was computed. F-values were obtained for each case school.
- b) To ascertain whether change occurred as a result of the use of the inventory, pre and posttest data from two case schools were analyzed. Pre and posttest means were compared and T-values computed for each of the subscales.
- c) To get an over-all evaluation of the staff self-evaluation process, in such aspects as: i) usefulness of the subscales, ii) reliability of the subscales, iii) validity of subscales, the pre and posttest data were analyzed for two schools. Internal consistency indices (Coefficient Alphas) were computed for all subscales to examine statistically the reliability question. Concurrent validity of the rating scale and the discussion scale was tested by obtaining correlation coefficients on pretest and posttest data from the Inventory as used in two schools.
- d) To determine whether modifications should be made to the Inventory, item-scale correlations were computed for both pretest and posttest applications of the Inventory in two schools, and on pretest data from three schools.
- e) To explore the relationship among the various subscales of the inventory, pretest and posttest data were analyzed to obtain Pearson Product-Moment Correlation Coefficients for scales in two schools, and for pretest data in three schools.

Representativeness of Matched Sample for School B

In school B, not all staff members completed both pretest and posttest administrations of the School Practices Inventory.

Discussion

To do some of the kinds of statistical analysis proposed for this study, it was necessary to have data from two applications of the Inventory. In order to match up respondents from the pretest group with those from the posttest group in Case School B, it was necessary for two judges to compare biographical data sheets for identifying categories of teacher characteristics as well as to compare marking characteristics. A matched sample of eighteen was obtained by this procedure. This type of analysis was deemed unnecessary in the case of School A as only one person was not present at both administrations of the Inventory.

Objective Data

Scale means for pretest data from the group completing the posttest and from the group not completing the posttest were compared. Scale means for posttest data from the group that were administered the pretest were compared to those from the group that did not complete the pretest.

The results of this analysis are displayed in Table 3 below.

TABLE 3
 REPRESENTATIVENESS OF MATCHED SAMPLE FOR SCHOOL B*

Scale	Pretest Means		Posttest Means	
	Group doing posttest N = 18	Group not doing posttest N = 13	Group doing pretest N = 18	Group not doing pretest N = 3
Dialogue	31.11	32.69	32.72	33.00
Decision	33.17	35.46	34.11	35.33
Action	29.61	30.69	30.89	34.67
Meetings	36.55	38.54	36.50	39.67
Principal	68.05	67.62	65.83	77.00
Teachers	51.61	51.54	51.06	53.00

* Analysis was performed only for School B as only one person was not present for both administrations of the Inventory at School A.

An examination of the table shows that the group means are quite similar on all scales except for the principal's scale. On this scale, the posttest mean for the group of three was much more positive.

Subjective Data

The pretests were handed out in School B at an after-school staff meeting on February 23rd, 1976. Most teachers on the staff, the principal and vice-principal were present. Several teachers who were unable to attend the meeting on that day completed the Inventory at a later date and returned it to the contact person for the school, as did two teachers who had to leave the meeting before completing the Inventory. No staff members refused to

participate, but some teachers were either away on school activities or ill. A total of 31 staff members completed the pretest.

The posttests were distributed by the contact person on June 7th. Staff members were requested to return the completed Inventory by June 11th. As pointed out in a section of chapter Four dealing with the contextual factors, the staffing crisis was coming to a head just at the time the posttests were scheduled. Teachers were also involved with grade twelve graduation ceremonies, with preparation of marks and with completion of records for members of the graduating class. In addition to these regular end of the year activities, staff cuts and changes made it necessary to call a number of planning meetings with central office personnel and with staff members from various school departments affected by the decisions. The staff committee had to change the focus of discussion for planning meetings scheduled for the last week of the term; further discussion of the self-evaluation was moved ahead to the fall. In Key-Informant Interviews several of the staff members expressed the opinion that the pressure of these events prevented many staff members from taking part in the second testing. Two days of observation and interviewing in the school at this time confirmed the opinion expressed by the contact person that some staff members were not motivated to complete a second Inventory when the staff committee could not get time until fall to consider the results of the first assessment and bring its recommendations to a full staff meeting. Those teachers who were not as fully involved in the additional planning brought about by the staff cuts were able to take the time to do the second Inventory, as well as those who expressed interest in the study and wanted to see the comparisons between the first and second inventories. A total of 21 staff completed the second test.

Conclusion

The matched sample is sufficiently representative of the total group completing the Inventory to permit its use in further analyses of the Inventory instrument and the self-evaluation process. Observations regarding the timing and rather artificial introduction of a second testing at the end of a school term, support the application of the criteria for evaluation processes stated by Steele (1973): procedures must be adjusted to fit in with the natural process of the school. The circumstances which so altered the course of events toward the end of the year in School B had to be taken into account in planning and implementing the study. Posttest procedures were altered accordingly.

This chapter has outlined the methods used in the study. Emphasis was placed on the ethnographic and statistical methods selected for the decision-oriented purposes of the research. Particularly, the chapter presented definitions of terms, distinguishing between conclusion-oriented and decision-oriented research, elaborated upon the applicability of ethnographic methods in decision-oriented research, and outlined the features of those methods as they applied in the research study under discussion. The research questions were stated and the procedures used in organizing the study into case study sites; designing the instrument; collecting and recording the data; analyzing the statistical aspects of the questions; and exploring the relationships of findings to the theoretical structure for the study were described.

Chapter Four presents the analysis and results of the research.

ANALYSIS AND RESULTS

Contextual Factors Affecting the Field Trial Sites

The observation and evaluation of a school's context is becoming a recognized part of studies of the change process. A changing environment produces new demands with which a school staff must somehow cope since organizations as well as individuals respond to their environments (Getzels, Lipham, and Campbell, 1968). Guba (1970) underlined the importance of context and suggested that the function of "context evaluator" become an important new role in school districts working with programs of planned change.

Some aspects of the environmental context which may interact and thus influence the renewal processes¹ in a school are listed below.

1. School district policies and controls over the resources a school requires to do its job.
2. Community environment, expectations and parents' goals for the children attending the school.
3. Professional environment of priorities, expectations and norms for members.
4. Personal dispositions, value orientation and the composition of the school staff.

Factors relating to all these aspects of context influenced the case schools in this study. Even the invitations to participate in a research study became an externally directed intervention that was part of the case schools' changing context.

A brief description of some of the most important factors observed will serve to place each of the case schools within an operational context that will assist in subsequent interpretations of the results. Equally important, if the results of systematic inquiry in the area of staff interaction and change is to be cumulative, is the need for researchers to discuss the

contextual factors operating, so that as studies become more numerous, a more thorough analysis can be made of the influences on the staff interaction process of such contextual factors.

The contextual factors most relevant to this study will be discussed in three main sections: first, those factors observed at the beginning, second, the factors observed at the conclusion of the study, and third, the objective data obtained from the biographical information sheet included with the School Practices Inventory.

Contextual Factors Operating at the Beginning of the Study

Early observations in the three case schools revealed differences in the factors affecting School A and those affecting Schools B and C, both of which were located in the same school district.

1. School A

School A is a new facility in a new area of a large, urban school district. District policy established the school as an open-plan, community school. Increases in student enrolment necessitated expansion of the school into several portable classrooms located adjacent to the original open-area facility.² Selection of administrators and of teachers for the school was, to some extent, guided by expectations that the programs should make maximum use of innovative teaching practices in an atmosphere of concern for the individual needs of pupils, and should use to the fullest extent, the centrally located library/materials area and the flexible space design of the building.

These expectations were heightened by the fact that both the major universities in the area take advantage of the unique features offered by the

school's design and orientation to operate student teaching practica and demonstration programs. This type of recognition affects staff attitudes toward renewal and contributes to a climate within which innovation and experimentation with new teaching practices are encouraged and supported.

The British Columbia Teachers' Federation (B.C.T.F.), advocates that the staff committee assure teacher involvement in decision-making. In this school an active staff committee meets at least once a month, but in addition, several staff members, including the principal were active in the work of professional organizations, serving in various offices and on committees. This active participation brought the opinions and positions of professional organizations directly into the school's staff.

District policy provided for parent advisory councils to work with the schools. An advisory council existed when the present principal took over the school. The opinion expressed by the principal was that the group saw itself as a decision-making body eager to achieve change in the forms and governance of schooling in their new school. He noted that their philosophy and the practical requirements of operating the school were assessed to be incompatible, and, after six months of trying to work with the group, it was disbanded. According to the principal, they were set on one way of operating the school and did not appear willing to enter into dialogue with the staff with whom responsibility for the school's program lay. Despite this early setback to community participation in advisory groups, at the time of the study, many community people were in and out of the school, visiting, taking part in programs offered and assisting in the classrooms. Neither teachers nor administration identified community pressure as a factor inhibiting renewal. Rather, participation of parents was sought and encouraged, as was contact with other schools in the area. For example, students from a nearby secondary school were observed giving a musical concert for children from

School A. Teachers commented that other visits were planned.

The general orientation of the staff toward the context in which the school operated was quite positive. Administrators and teachers both commented supportively about efforts being made by the district to involve them in making plans for the school. For example, plans for an addition to the school to replace the portable classrooms were being studied by the staff. Comments and alternative suggestions were being noted. Revisions were taken back to the central office by the principal. Opinions expressed by the staff indicated that they valued taking part in the decision-making process. Observations confirmed that attendance at planning meetings was consistently high. One half day per week non-instructional time for planning was organized in conjunction with community recreation staffed programs.

2. Schools B and C

Schools B and C are located in widely separate parts of a large, geographically spread out district which includes both suburban and rural areas. Certain contextual factors evident at the beginning of the study influenced both schools. Other factors related more directly to the immediate community of one of the schools, or to the professional and personal disposition of staff in a school. It is important to look first at the contextual factors related to school district policies and controls.

About the time the study was introduced in Schools B and C, an issue arose in the district resulting in the B.C.T.F. speaking out strongly against the board of trustees. The board wished to designate an existing neighbourhood school as a "Values School".³ The B.C.T.F. opposed both the concept of having teachers assigned to work in such a school and the idea of an existing attendance area being named as an alternative school. The B.C.T.F. declared

the school "in dispute". The period during which the schools worked with the self-evaluation study, January to June, 1976, roughly coincides with the rise to prominence, increase in tensions, and eventual defusing of the issue, that occurred when the board changed its plans and decided against setting up a Values School. Throughout the duration of the study, extraordinary meetings of the district local of the B.C.T.F. were being held to keep teachers informed and to decide on a response to the proposed board policy and action.

Another related issue arose out of the board decision to open a Values School. The trustees were attempting to remove a clause in the collective agreement referring to consultation with the professional organization prior to instituting major policy changes that might affect schools and staffs. The policy of establishing Values Schools was considered by the B.C.T.F. to be a major shift in the direction of district policy.

The concept of participation in decision-making, so vital a part of the renewal strategy under study in the self-evaluation project, was raised to a high level of awareness among teachers in this district by the events relating to the Values School issue. Opinions expressed by staff members indicated that both the B.C.T.F. and district positions on participation were held by teachers in these schools. Some took the position that they were passive recipients of policy; others felt that as professionals they had a responsibility to participate in shaping policy. Any discussions of the staff self-evaluation process turned inevitably to the issues of how and to what extent to involve teachers in educational decision-making at both school and district levels.

In both schools there was a high level of concern, at times bordering on apprehension, for community and school board opinions. This sensitivity was communicated through staff comments and by the types of items discussed at the staff meetings observed. Staff members indicated that they feared for school

programs if board decisions weakened teachers' power to make instructional decisions. Many staff members perceived the majority of the community to be conservative, favouring traditional programs, discipline, and orderliness. These kinds of expectations were thought by many to be in conflict with some professional priorities emphasizing change and innovation to broaden the objectives of educational programs. For example, the issue of the elimination of the Family Life program and certain related emphases from the Social Studies program was identified by some staff members.⁴ At the same time, it must be noted that not all district residents were in favour of the board's actions regarding Values Schools and the return to the "Three R's". Groups representing other value orientations existed in the community.

School B was allocated additional staff in the first part of the new year, 1976. Staff interpreted the additions as evidence of administrative support for efforts to improve the curriculum in Physical Education life activities courses. Many of these programs involved use of community resources for learning which took students off campus. If students were seen outside the school during the day, whether or not they were on school authorized activities, some people living near the school would phone the district office and complain about the lack of discipline and order at School B. Staff tended to interpret such community criticism as indicative of lack of understanding for the kind of program being offered by the school.

School C was designated by the district as a community school and provided a recreational focus for the small, somewhat isolated area it served. The area has a mixture of industrial and residential land use. Students come from a wide range of socio-economic backgrounds. Much of the district is quite old and the school has been operating for a long time. Staff comments indicated that some families are long-time residents of the area while others are more transient, using the available housing temporarily while waiting to

move into some other area. The principal reported a fairly high student turn-over rate. Teachers identified different expectations from these two types of residents. District staffing allocations gave this school a half-time principal, a full time counsellor, a recreation-community program leader and a special class teacher in addition to the regular classroom teachers for kindergarten to seventh grade.

Contextual Factors Observed at the Conclusion of the Study

Certain factors remained active during the entire course of the study. These were the basic board policies in both districts, the general environment of the community, the long-range expectations of the parents, the professional orientation and policies of the B.C.T.F. Some changes within each of these categories of influence affected each of the three field trial sites.

1. School A

School A received word of several important staff changes made by the district office. A new vice principal was appointed and new staff members to replace some teachers who were being transferred or who were leaving teaching were identified. New staff members were invited to attend the last professional day in June.

Construction of the new addition to the school was scheduled to begin. The principal was away frequently from the school, attending meetings at the central office of the district. The constant round of meetings was interpreted by the principal as evidence of decentralized decision-making being carried too far. Principals were too often involved in making decisions about areas for which other senior administrators had responsibility, thus slowing

down the whole administrative process and keeping principals away from their own schools. Staff members indicated that they felt a lot of work was needed to get plans for next school year ready.

2. School B

School B experienced several important changes in context. The issue of the Values Schools was at least temporarily defused by the board decision not to go ahead with its plans to designate a school as a Values School alternative. Also in the contextual area of school district policies and controls, was a decision to reduce the number of staff that would be assigned to the school for September. Several key members of the staff were affected. For example, Life Activities program staff were cut. Staff interpreted this action as arbitrary and a reversal of previous actions in that it did not take into account school plans and priorities. Staff members who were active in the teacher's association prepared a strategy for informing the local paper of the effect staff cuts would have on the school's programs. Members of administration and staff attempted to meet with people from the central office of the board. Over the two week period during which the final interviews and posttests for the self-evaluation were being done, the indications of staff solidarity appeared to increase as the "we", "they" feeling intensified. Central office personnel concerned with the staffing issue were characterized as elusive and unsympathetic. Concerns similar to those expressed earlier in the year over board erosion of teachers' decision-making power in instructional matters were now directed toward central office figures. Meetings of departments affected by the cuts increased in frequency and staff plans for professional development meetings that had been scheduled for the end of June had to be changed in order to deal with the program changes made necessary by

the staff cuts.

3. School C

School C teachers attended a district sponsored professional day program on interpersonal relations and group dynamics. Staff indicated good support for this sort of program and for the concept of "Helping Teachers". However, district policy about the Values Schools and the controversy with the B.C.T.F. tended to increase many staff member's fears of getting involved in any planned change in the school. Some members of the staff interpreted continued participation in the self-evaluation activities of the study as dangerous in the district climate as they perceived it. Administration in the school became increasingly concerned about the kinds of items on the Inventory and saw in them a criticism of the principal and the school as it was presently operating. To suggest to the staff that they should be participating in dialogue and decision-making as described in the Inventory items was interpreted as supportive of the B.C.T.F. position of staff committees, and since the school did not have such a committee, could cause trouble in the staff. Some staff comment indicated sensitivity to senior administration at the central office. For example, concern was expressed about the possibility of teachers' opinions as recorded on the Inventory getting back to central office, or even being identified by their own principal. They did not want to direct any district attention to the school or staff and its operation. "We", "they" feeling expressed by the staff divided teachers from administration, and included, for the most part, principal with central office personnel and the board in the one group as "they".

The staff decided not to complete the Inventory posttest. It was reported by some staff members interviewed that many people felt uncomfortable

about taking part in a self-evaluation process because the administration might identify individual's ratings. The climate was seen as being too sensitive at that time for the process to operate comfortably. However, observations and interviews about the instrument and the process were encouraged, and staff members participated in these aspects of the study.

The Staffs Participating in the Study

A face page was attached to each copy of the School Practices Inventory used in the case schools. The purpose of this part of the instrument was to obtain additional contextual and biographical data about the case school staffs.

All respondents were asked to provide data in five areas: age, sex, highest level of education, years of teaching experience, years at the school. All five factors have been studied as variables which may influence a school staff's responsiveness to change. (Elliott, 1967; Lortie, 1966). Principals were asked to state their years of administrative experience. This factor had been found by Elliott (1967) to affect receptivity to change. It would have added important data to the context description. However, not all staff members completed the face page questions. The inclusion of such a sheet was viewed by some staff members as unnecessary and by others as a contravention of the B.C.T.F. policy. The format⁵ proved to be somewhat misleading as the "For Principals Only" section heading mistakenly appeared above both questions five and six. This may have caused some teachers to leave out question five. No analysis was done on questions five and six.

The data from the three schools from the pretest was analyzed using Testat program and is presented below in the form of several tables.

1. Age

The responses to the first question on the biographical information page have been gathered and are presented in Table 4 below.

TABLE 4
PERCENTAGE BREAKDOWN OF AGE

School	n	Under 25	26-35	36-45	46-55	56-65	Missing Data
A	19	16	63*	11	11	0	0
B	31	3	6	61*	23	6	0
C	13	8	54*	23	8	0	1

* Indicates the category in which the mean age is located.

The information derived from Table 4 indicates the staff in School A was somewhat younger, on the average, than that of School B, and School C had teachers in all age groups with the average age falling in a category higher than in School A or School B.

2. Proportion of Males and Females on Each Staff

The second item on the biographical information sheet gathered data on the proportions of men and women on each school staff. The results from this question are shown in Table 5 below.

TABLE 5
 PROPORTION OF MALES AND FEMALES
 PERCENTAGE BREAKDOWN FOR EACH SCHOOL

School	n	Male	Female	Missing Data
A	19	37	63	0
B	31	58	32	10
C	13	46	46	8

Table 5 shows that the highest proportion of males were on the staff of the secondary school, School A had the lowest proportion of males to females, and School C was fairly equally divided.

3. Highest Level of Education

The third question on the biographical sheet related to the staff's level of education, i.e. in terms of formal professional training. The results of this question are displayed in Table 6.

TABLE 6
 PERCENTAGE BREAKDOWN OF LEVELS OF EDUCATION

School	n	First year	1-5	6-10	11-15	16-20	21-25	26 or More	Missing Data
A	19	32	32	21	5	5	5	-	-
B	31	3	39	42	13	3	-	-	-
C	13	8	38	15	15	25	-	-	8

Table 6 shows that about one third of the staff at School A were in their first year of teaching, and another third in their first five years of teaching. School B had a staff with more experience, and School C had the greatest percentage of staff with more than ten years of experience.

Conclusion

The I.D.E.A. studies found little or no relationship between teacher characteristics such as chronological age, years of teaching experience, years of teaching experience in their present school, and the quality of D.D.A.E. in the League schools. However, there were substantial associations between these teacher characteristics and D.D.A.E. in the comparison, non-League schools. (Bentzen, 1974)

It is interesting to hypothesize on the degree of association between staff characteristics and D.D.A.E. patterns observed in case schools. Differences among the staffs were noted in particular in the areas of "level of education" and "age". Such differences combined with other aspects of context observed such as district and community climate, and quality of professionalism may have affected the quality of D.D.A.E. processes which operated so differently in each case school. Evaluating the context and noting such differences in receptivity to change can provide the planner either within the school staff or working in an advisory capacity with information essential to selecting and modifying change strategies.

Research Questions

Question One

How did the three schools compare at the beginning of the study?

Discussion

It will be recalled from an earlier discussion of the Selection of School Sites,⁶ that it was considered desirable in a study exploring the use of a staff-evaluation process, to select schools which represented types of schools likely to be encountered in a large school district. Such aspects as size of the school, type of community, levels of program served i.e. elementary or secondary, varying amounts of teacher experience and lengths of tenure in schools, different types of leadership, and school climate were considered.

The differences among the three schools eventually selected for the study can be determined from examining both the objective data and the ethnographic data. Information derived from such methods as the observations, and the structured and unstructured interviews done in each school added considerable insight into the character of each school.

Objective Data

Mean scores on all subscales for the pretest of the School Practices Inventory were obtained for all schools. The matched sample of cases from School A and from School B were used, and all the cases from School C. An analysis of variance (ANOVA) among these scores was run. The results of this analysis may be seen in Table 7 below.

TABLE 7
MEAN SCORES ON SUBSCALES FOR PRETEST (MATCHED SAMPLE)

Scale	N of Items	School A N = 19	School B N = 18	School C N = 13	F-Value
Dialogue	9	4.30	3.46	3.53	11.70**
Decision	9	4.72	3.69	4.29	22.37*
Action	9	5.03	3.29	4.37	49.02**
Meetings	9	5.58	4.06	3.97	5.10*
Principal	17	5.24	4.00	4.37	30.18**
Teachers	15	4.20	3.44	3.70	18.36**

* Statistically significant at the .01 level.

** Statistically significant at the .001 level.

A statistically significant difference among the three schools was obtained on all subscales.

School A scored consistently higher (more positive climate) on all subscales. In some cases, it was as high as one rating category above one of the other two schools. For example, it may be observed that on the Action scale, School A rated "Usually" whereas School B rated "Sometimes" and on the Meetings scale, School A rated "Usually" while School C rated "Sometimes". The scale means for School A in Action, Meetings, and Principal are rated in the category "Frequently"; the other three scale means for Dialogue, Decision, and Teachers are rated "Usually".

For School B, means for four scales, Dialogue, Decision, Action, and Teachers are rated in the category "Sometimes" and the Principal and Meetings scales are rated as "Usually". These differences suggest that the staff perceived the school climate in a less positive way than in School A. In

items related to the conduct of their staff meetings, and the role characteristics of the principal, ratings were stronger.

In School C, scale means for Dialogue, Meetings, and Teachers were in the category "Sometimes" on the pretest. Means for scales Action, Principal, and Decision were in the category "Frequently". In only one scale, Action, was there one category difference between the means of School B and School C, where School B was very low. This was the lowest pretest mean of any scale in any school.

Subjective Data

Notes from the observations in each of the three case school sites included several types of differences in the staff interaction patterns that existed at the beginning of the study. These observations were gathered about two OTUs⁷ which provided indicators of the quality of D.D.A.E. dimensions measured on the Inventory scales.

Initial interviews with the administrator(s) in each school were used to gather indicators of the initial principal style and role as well as some indication of the decision-making patterns operating in the school.

Initial staff meetings held with the schools where proposals for the self-evaluation study were presented and discussed were used to gather indicators of initial patterns of Dialogue, Meetings, and Decision.

1. Initial Interviews

The first interview in School A was with the principal and a teacher who was acting vice principal while the incumbent was away from school with a lengthy illness. Several of the observations noted at that meeting indicate

the pattern of decision-making and some of the role characteristics of the principal and, in this instance, teachers in the school. For example, concerning the extent to which the staff participated in the decision-making process, the following indicators were noted:

- a) a teacher as well as the principal attended the first meeting with the researcher;
- b) the study proposal, sent out by the district office to the principal, had been viewed and discussed by the whole staff at a meeting where it was agreed that to do the self-evaluation process would fit in well with another staff development activity which was being considered⁸;
- c) both the staff members present at the meeting were aware of the I.D.E.A. study, of Goodlad's work, and participated in discussing this research and its relation to other recent publications on the study of change in schools.

This last indicator also relates to the role characteristics of the principal and teachers, i.e. it indicates some reading of professional literature, and sharing among staff members of the information derived from this activity.

Other indicators of the principal and teacher role were:

- a) questions asked about the Inventory were knowledgeable and concerned more with application of the results and possible ways in which the staff might assist;
- b) principal's concern for the amount of staff time that would be required during the study;
- c) interest of teachers in an evaluation process for the staff;
- d) establishing date and time for the first application of the Inventory at this meeting; and
- e) meeting climate was open, but businesslike, brief and to the

point.

These indicators suggest the principal's role was characterized by a high degree of communication and interaction with the staff, the teachers were participating to a large degree in the decision-making processes of the school, and that the procedures by which such processes occurred, i.e. meetings, methods for handling requests, and patterns for coping with extraordinary events, were well established, but flexible. The principal was a leader, but appeared to encourage staff participation.

The initial contact in School B was with the principal, who had just come in from teaching a class. Of the observations noted at this meeting, the following indicators of patterns of decision-making and of principal role may be cited:

- a) the principal's role in this school included teaching as well as administration;
- b) the principal communicated effectively with students and teachers who frequently dropped by to ask a question or to see him during the course of the meeting;
- c) questions posed about the self-evaluation indicated that the proposal sent out in the mail had been read, and consideration given to the question of how it would fit in with school goals;
- d) planning for the next year was already in progress and the benefit of the self-evaluation in preparing for an accreditation report was noted by the principal;
- e) a date for the staff meeting at which the self-evaluation study proposal could be recommended to the staff could not be set without first consulting the staff committee;
- f) the principal would not decide to use the self-evaluation

- without first discussing it with the staff;
- g) the principal was aware of the usefulness and potential benefit to the staff that might result from an examination of its procedures;
 - h) a comment was made on the need for constantly improving communication among teachers and between teachers and administration.

These indicators suggest that this principal's role was characterized by considerable involvement in the on-going instructional decision-making. He instructed students, attempted to maintain contact with both students and teachers, interacted with the staff committee, and initiated long-range planning and monitoring of plans for the school's program. The decision-making patterns and patterns of communication in the school were complex, in part due to the size of the staff, the number of departments, and the various levels in the organization. Procedures for arriving at a decision, or for taking an action were not so well defined nor as efficient as in School A. The processes of consultation and participation were more time consuming. The staff committee was important in the decision/action pattern of School B.

Initial contact at School C was with the principal, who had had no time to read over the self-evaluation study proposal sent out to him by his district office. From the observations noted at this long, two hour initial session, the following indicators of aspects of the D.D.A.E. process such as quality of decision-making and initial principal role characteristics can be cited. First, regarding principal role:

- a) the principal had not familiarized himself with the proposal for the study and asked the researcher for a thorough description of the instrument, the process, the involvement required of staff, etc.;

- b) Inventory items were examined one by one, the principal commented that the principal's role appeared to be singled out, that the items were critical of the school as it was, that the instrument was biased toward the concept of participation by staffs in decision-making, that it was aimed at supporting the notion of staff committees, and that the questions should be directed more toward the staff as a group, not examining any one role like the principal's role in isolation;
- c) the current situation in the district relating to the dispute between the B.C.T.F. and the board over the Values School issue was referred to in discussing several items on the Inventory that the principal considered "sensitive";
- d) the history of the school's staff committee and its termination was recounted;
- e) the district's teachers were described as militant and its administrators characterized as facing a dilemma: how to include teachers in the decision-making process without sacrificing efficiency, while recognizing the right of all to be included, without being dominated by one or two strong voices on staff;
- f) the concern was expressed that some teachers would not want to comment on Inventory items referring to the principal for fear of hurting him;
- g) during recess, while having coffee with the staff, the principal introduced the researcher to the teachers as a "person from the university who was there about staff

evaluation";

- h) the principal and staff talked informally and easily in the staffroom;
- i) during the preliminary meeting, the principal took several phone calls from parents, saw a student, and also dealt with some questions from the secretary.

Regarding the patterns of decision-making operating in the school, the following indicators were noted:

- a) the staff had not yet been shown the printed proposal and the outline of the study that had been sent to the principal by the district office;
- b) the principal's explanation that he would not recommend the study to the staff for fear of influencing their decision, as they were sure to agree if he advocated it;
- c) the reiteration of the statement several times that "we decide everything together here";
- d) the principal's perception that some people on staff preferred the principal telling them what to do;
- e) the principal's description of when there had to be a decision, how a few key people were contacted by going "around to the rooms" before administration decided and brought the decision to a staff meeting for comment;
- f) the principal's statement that although the staff did not like meetings, they would have one to hear the research proposal, to ask questions, and to vote on the matter of participation in the self-evaluation;
- g) The principal's comment that he called staff meetings on an irregular basis, and drew up the agendas for them.

These indicators suggested that the principal was aware of opposing views among staff members about the degree to which teachers should be involved in decision-making. He seemed aware that doing the Inventory might bring the issue of the staff committee to the surface once more. He was sensitive to the problem of district context influencing staff morale. This principal assumed most of the leadership and responsibility for decision-making while consulting some key people on staff and communicating decisions to others by means of informal staff meetings or conversations in the staff room, the halls or the classrooms. The decision-making patterns for whole-school planning were centered in the administration. Teachers were chiefly concerned with day-to-day instructional decisions relating to their own classes. Few formal staff meetings were called, and the procedures for making a whole-staff decision on an issue were not well defined. The principal took a central role in arranging communication with the community and the district, and in arranging for and distributing resource information and contacts. Despite his central role, the principal was very sensitive to any question or discussion that even hinted at role redefinition, and appeared unwilling to participate in the self-evaluation project unless the Inventory could be rewritten to leave out any mention of the principal's role.⁹

2. Preliminary Staff Meeting(s)

The preliminary staff meeting with School A personnel was held in the library centre of the open area. Of the observations noted at that time, the following have been selected as indicative of patterns of Dialogue, Meetings, and Decision existing in the school at the beginning of the study:

- a) the principal acted as chairperson;
- b) the principal gave a resumé of the project proposal, asked

- the researcher to expand on it, and invited the staff to discuss the proposal;
- c) about half the staff members at the meeting asked questions to clarify, specify times, procedures or intention of some aspect of the study procedure;
 - d) no debate on whether or not to participate took place;
 - e) formal rules of order were not followed; discussion flowed easily and members of the group listened well to one another, minutes were kept;
 - f) the Inventory pretest took about twenty minutes to complete;
 - g) the principal reminded the group that a contact person would be needed to work with the study for the remainder of the term;
 - h) the teachers asked questions about time and type of involvement required of contact persons;
 - i) two teachers said they would like to be school contacts;
 - j) the principal indicated he would keep in touch with the project but that the contact people would look after most of communication from then on;
 - k) about one third of the teachers came over to talk about the Inventory, discuss one or two items, invite the researcher to visit their areas of the school, or to criticize the wording of a particular item, offering their evaluation of the instrument;
 - l) a great deal of interaction occurred among staff members as the group disbanded with people making social and professional arrangements for the time remaining on that

planning afternoon.¹⁰

Such indicators suggest that the degree of teacher participation in dialogue was high and that staff members were accustomed to taking part in decision-making. Meetings were purposeful, but somewhat informal, with many people actively contributing ideas. Interest in staff development activities was high and time was available for the staff to engage in whole-school and team planning. Staff members other than the principal took responsibility for certain types of actions, and procedures for deciding on staff action were well established, understood by all, and sufficiently flexible to handle unusual requests.

The preliminary staff meeting with School B was held in a large classroom, after school. Of the observations noted at that meeting, the following indicate existing patterns of Dialogue, Meetings, and Decision operating in the school at the start of the study:

- a) not all staff members were present at the start of the meeting but most came in as school activities finished;
- b) the principal acted as chairman and leader for only those items on the agenda about which he had information;
- c) the vice-principal acted as chairperson for all others, and notes on the meeting were kept;
- d) formal rules of order were not used, but formal votes were taken on decisions relating to issues that required action;
- e) the teachers who had voted against an item banning smoking in the lounge at noon cried out for a re-vote when more "smokers" arrived late for the staff meeting, after the first vote had been lost;
- f) there was a misunderstanding about whether or not the

- decision had been made to go into the self-evaluation project and the principal asked the researcher to give a brief overview of the proposed study, the type of involvement required, and the time it would take;
- g) the principal asked whether the staff wanted to vote on going in on the project but after a general discussion it was concluded that the decision had really been made in the staff committee meeting and that they were in favour of it;
 - h) a suggestion was made and agreed upon that the first use of the Inventory should be at the current meeting, as the next few staff meetings were already allocated to the discussion of other lengthy items and issues;
 - i) during the administration of the Inventory instrument, good-natured bantering occurred among staff members, e.g. on the item about "Decisions are carried out with enthusiasm and good will" (Item #46), and several jibes were directed at the "smokers" who had just lost that vote;
 - j) several staff members arrived after the start of the evaluation and after a quick explanation of what was in progress joined in the Inventory activity;
 - k) a number of people had to leave early, and took the Inventory with them to complete later;
 - l) after the Inventories had been collected, the principal asked if any staff member was interested in acting as contact person;
 - m) staff members asked what the role would entail, and, after an explanation, a volunteer was accepted;

- n) discussion of many other agenda items followed with the number of members in the group in attendance at the meeting growing smaller and smaller as more teachers had to leave;
- o) an arrangement was made with the researcher that after the staff committee had looked at the next few meeting agendas, they would get in touch about scheduling a feedback meeting;
- p) several staff members came up at the end of the meeting to criticize some items on the instrument, to clarify some wording or to indicate interest in the process;
- q) arrangements were made for the researcher to come back to the school, visit the staffroom or classrooms and talk with teachers whenever there was an opportunity.

Such indicators suggest that the degree of teacher participation in dialogue and decision processes in this school was high. The staff committee was responsible for leading a large portion of the D.D.A.E. process, while leadership for various aspects of the school's program was delegated to a variety of departments or individuals. Staff interaction was open and meetings were characterized by contributions from a high proportion of the teachers present. School and student activities had high priority, taking precedence over prompt or continuous attendance at staff meetings; communication of decisions taken was not always efficient. The staff was highly committed to and involved in operation of the new school's program and had less time and energy to devote to staff development activities. Planning time available was used for development of new programs and activities and for solving emergent problems. The principal was concerned with long-range planning and the community-school relations¹¹ and appeared in close contact with

students and teachers through involvement in teaching in the program.

The preliminary staff meeting at School C took place after regular school hours in the small staff room where the whole group crowded around tables. From the observations recorded at this meeting, the following items provide indicators of the quality of Dialogue, Meetings, and Decision patterns operating in the school at the beginning of the study:

- a) the principal acted as chairperson;
- b) the meeting did not start until all staff members were assembled;
- c) the principal went out twice to call over the P.A. system for all staff to come to the staff room;
- d) the principal introduced the proposal to participate in the research study by mentioning to the staff that they had been recommended by the district central office, a selection that was flattering for them;
- e) the principal directed the teachers to consider the proposal, ask questions and then decide, saying that he would not wish to influence their decision one way or the other, but that there was nothing in the Inventory that he was not prepared to answer;
- f) the outline of the project was distributed and the researcher gave a presentation of the proposal, outlining the involvement requested of project schools and the nature of the process, as none but the principal had seen the document;
- g) two or three staff members asked questions about the use of the research, the source of the instrument, the possibility of results going to the board or to the central office, the possibility that individual teacher's responses to items

would be identified, and about the potentially sensitive nature of some of the items on the Inventory;

- h) one or two persons spoke in favor of doing a self-evaluation in that it would help the staff to know how well they were functioning as a group;
- i) the principal drew the agenda item to a close with a statement that he was in favour of doing the project, but that the teachers would have to vote on it;
- j) he suggested that they discuss it further and vote on it later after the researcher left;
- k) the staff agreed verbally but no record of decision was made;
- l) formal rules of order were not used, but the use of voting and submission of motions were referred to as ways of coming to a decision on the issue of participation in the research study;
- m) a large number of staff members made no active contribution to the discussion; and
- n) the meeting continued with other agenda items introduced by the principal.

Two further interviews on the phone were required to ascertain whether School C would participate in the study. These discussions provided additional indicators of the D.D.A.E. process in School C. Some observations gathered in these interviews indicated the degree of difficulty the school was having with the request:

- a) the principal stated that almost all staff members contacted had agreed to participate;
- b) the question was posed whether they could still take part if

- only thirteen out of fifteen staff members participated;
- c) the principal stated he had "been around to the rooms" and asked every teacher if he or she wanted to do the project;
 - d) the principal stated that he really would like to do the project and felt sure the staff would take part;
 - e) he would phone back to confirm.

The next day the principal phoned to confirm the participation of School C in the project, with thirteen people agreeing to do the Inventory. Indicators noted from this call were:

- a) the principal said the staff requested that they be allowed to do the Inventory on their own time, not at a staff meeting;
- b) the principal offered to distribute and collect the Inventories if they could be delivered to the school;
- c) the principal requested delivery of the Instruments as soon as possible.

These indicators suggest that the degree of teacher participation in dialogue and decision in the setting of formal staff meetings was limited and that people were not used to having to deal with an idea like needs assessment. The principal was accustomed to taking charge of meetings, providing the agenda, and organizing the discussion. The presence of an outsider was difficult for some staff members who preferred to discuss the question and vote on it in private. The procedures for reaching consensus depended upon the technique of the principal going around to classrooms and gathering comments from teachers. The teachers depended on the advice and orientation of the administration in the school to guide their decision-making and were fearful of doing the self-evaluation, lest information go beyond the school.

Some staff members felt the group needed the stimulus of participation in the self-evaluation; others felt it was dangerous.

Conclusion

On all subscales there was a statistically significant difference among the three schools on the pretest application of the School Practices Inventory. The main differences is between School A and the other two.

Differences shown in the analysis of test data are supported by observations and interviews gathered upon initial contacts with the three schools. Such differences may be grouped into the categories of initial principal role characteristics, initial patterns of decision-making, staff communication, and meetings.

In School A, where Dialogue, Decision, and Teachers scale means were very high, the decision to participate in the project was made through a process involving teachers and the principal. The procedures were familiar to the group and the school could cope with this type of request in an efficient and satisfying way. Information procedures and staff development activities could accommodate a self-evaluation process within the existing framework.

In School B, where Dialogue, Decision, Action, and Teachers scales received "Sometimes" ratings, the process of deciding to take part in the study and the initial information sessions were less easy to schedule and organize. There was greater fragmentation of staff involvement. Teachers belonged to departments, to the staff committee, and to the total staff group. Communication was more complex among these various decision-making groups, and the relationships among them, including decision-making prerogatives were less clear, as were the procedures for taking of action. The principal's role in the process appeared to be one of orchestrating and monitoring, with leader-

ship given for some types of decisions. The low rating of the Action scale for School B may relate to the difficulty the group was having getting these diverse groups together.

In School C, where Dialogue, Meetings, and Teachers scales received "Sometimes" ratings, the process of deciding to participate in the study was arduous. The procedures for making such a decision were somewhat unfamiliar to the group and characterized by a high level of principal involvement and anxiety, administrative control of information processes, limited participation by the teachers in a formal meeting, and lack of consensus on the final decision. Procedures for discussing an issue that would affect the whole school were not agreed upon by the whole staff. Many teachers appeared to have been influenced by the principal to take part, and it seems that agreement to take part was never reached in the staff meeting, but gathered by the process of "going around to the rooms". The low rating on the Dialogue scale is supported by observations of initial interactions in this school. Several staff members were not in the habit of meeting the rest of the staff in the staff room, and rarely participated actively in discussions in a meeting. Principal, Decisions, and Action scales were rated higher with many teachers considering a centralized pattern for decision-making to be quite acceptable and even preferable to a more collegial model.

School B rated Meetings and Principal scales as "Usually", a high rating indicating that, in their perception, these aspects of staff interaction processes were working well. The openness and rapport between the staff members and between teachers and principal support, through observations, the objective data.

Very early in the study, it could be concluded that schools with three very different types of climates had agreed to participate in the project. This information influenced the decision to treat the project data as three

case studies, and reaffirmed the decision to employ techniques of ethnographic methods.

Question Two

Has change occurred as a result of the use of the process?

Discussion

This question is designed to explore a suggestion by Culver and Hoban (1973) that use of the Criteria Instrument might, in itself, serve as a catalyst for change in the D.D.A.E. process within a school staff. This suggestion assumes that the increasing awareness of and discussion of D.D.A.E. process might affect staff interaction. The Instrument will monitor and reveal over a period of time, change that occurs in a staff's perception of the various D.D.A.E. processes. (Overman, 1973). For effective use as a needs-assessment instrument, the School Practices Inventory should be able to give staffs the capability to compare D.D.A.E. processes over time, and monitor changing patterns.

Objective Data

Two schools completed both the pre and post-test administrations of the Inventory. Pre and post test means were compared and T-values for each of the subscales obtained for the matched sample group from School A and from School B. The combined scores of the pretests and posttests from the two schools were analyzed and T-values obtained for each subscale. The results of this analysis are included as Table 8.

TABLE 8
 MEANS, STANDARD DEVIATIONS
 AND T-TEST FOR ALL SUBSCALES

Subscale	School A				School B				School A and B Combined			
	N	Mean	Standard Deviation	T-* Value	N	Mean	Standard Deviation	T-* Value	N	Mean	Standard Deviation	T-* Value
Dialogue	pre	4.30	.66	.16	18	3.46	.54	.91	37	3.89	.73	.73
	post	4.33	.58			3.64	.66			4.00	.70	
Decision	pre	4.72	.59	.65	18	3.69	.55	.57	37	4.22	.77	.88
	post	4.85	.43			3.80	.55			4.33	.72	
Action	pre	5.03	.56	.03		3.29	.55	.78	37	4.18	1.04	.51
	post	5.04	.43			3.43	.55			4.26	.94	
Meetings	pre	5.58	.70	.11	18	4.06	.52	.03		4.33	.66	.06
	post	5.61	.50			4.06	.69			4.34	.66	
Principal	pre	5.24	.50	.21	18	4.00	.43	.75	37	4.64	.77	.42
	post	5.27	.32			3.87	.54			4.59	.83	
Teachers	pre	4.20	.40	1.06	18	3.44	.48	.21	37	3.83	.58	.57
	post	4.36	.39			3.40	.53			3.90	.67	

* None of the T-values was statistically significant at the .05 level.

An examination of the results in Table 8 reveals that pretest and posttest means on all subscales are very similar in Schools A and B.

The staff in School C decided not to complete the posttest. Consequently, no statistical comparison could be made of D.D.A.E. processes there.

Subjective Data

The limited information available from the objective data can, however, be supplemented with data gathered from observations of feedback meetings, from observations by the contact persons, and from interviews made in all of the three sites over the five month period of the study.

An analysis of the subjective data reveals that in all the study sites, use of the Inventory and its subsequent discussion in a feedback meeting engendered activity and affected the D.D.A.E. processes. These data will be examined school by school for information on the effects of the self-evaluation on the D.D.A.E. process.

1. School A

When the staff in School A examined the feedback report from the pretest they noted that the items related to the subscales of Dialogue and Teachers received the lowest ratings, were considered by more staff members to require discussion, and had a wider range of opinions among staff members than items relating to other aspects of the D.D.A.E. process.¹²

Items such as the following received discussion at the feedback meeting and were reported to have influenced some subsequent actions:

- a) Item 3, "Decisions are clearly communicated to all persons who are affected by the decision";

- b) Item 13, "Teachers periodically visit other classrooms in the school";
- c) Item 17, "Each meeting is followed by a written memorandum that summarizes the proceedings of the meeting";
- d) Item 23, "Teachers try to evaluate the extent to which school goals have been realized";
- e) Item 36, "Teachers critique each other's teaching";
- f) Item 51, "The principal encourages the staff to visit other classrooms";
- g) Item 64, "Teachers evaluate their teaching in terms of achieving school goals".

These items related, it was reported in the interviews, to the staff's desire to improve communication among the various area teams, and between staff members working inside the school and those situated in the portable classrooms outside the main building.

Steps were planned and carried out to help all staff members better understand the programs of all parts of the school. The principal asked staff members from each area team to prepare brief descriptions of the team's plans for next year's programs. The reports were presented to the entire staff during the last professional day meeting of the school year which took place on June 11th.

Teachers joining the staff in the fall of 1976 were invited to attend this meeting. The new vice-principal also attended. In this way, the staff planned to orient the whole group to the entire school program, discuss the student placements, make changes and list areas in need of further development and evaluation. These reports were presented at the June 11th meeting immediately following the second application of the School Practices Inventory. It is unlikely that a change in staff climate would have been achieved by the

preparation for this information sharing session. However, subsequent interviews with staff members produced comments that indicated a more positive feeling resulted from this communication effort. Teachers felt they had had a chance to find out about the other areas teams. In particular, several of the teachers interviewed who were in their first year at the school, indicated that they felt differently about Items 23, 64, 3, and 17 after the professional day session.

2. School B

Observations and interviews in School B revealed that little change in D.D.A.E. processes had occurred since the initial application of the Inventory and the first feedback session. Staff members in leadership or administrative positions who were interviewed, discussed plans they had to use the information from the feedback report in a series of staff planning meetings to be held during the latter part of June, after the students were out of school. Their objective was to develop a series of recommendations which could be presented to the full staff, debated and revised, and then result in decisions made about future action. Concern was expressed over items on the Inventory relating to the sub-scales of Decision and Action. These kinds of items received the widest range of staff opinions, and the lowest overall ratings. Many staff members interviewed mentioned that action was not their strong point, but that they were good at open discussion in meetings about any sort of problem. Most strongly rated scales were, in fact, meetings and teachers.

3. School C

Although there is no posttest data for School C, analysis of the interview

and observation data gathered at the school between February and June, 1976 point out many actions which occurred subsequent to the first Inventory and feedback session that in the opinion of those interviewed are related to the self-evaluation.

Several areas of concern to the staff arose during the discussion of Inventory items at the feedback meeting. These were:

- a) the need for regular staff planning meetings, (Items 5, 64, 24, 44, 45);
- b) the desire to visit other schools and classrooms to see programs in action, (Items 10, 13); and
- c) the quality of debate, the type of leadership in meetings and the need to provide a written report of proceedings and decisions, (Items 20, 21, 22, 23).

Some possible actions about these concerns were suggested by staff members at the meeting. One teacher suggested that a regular weekly meeting attended by all the staff was needed for planning and sharing ideas. It could deal with the concerns that were placed by any staff member on an agenda. The idea received general agreement, with only a few staff members objecting to the time it would take for school-wide or staff discussions. The next Monday noon after the feedback meeting, was set for the first such meeting. Additional but related suggestions subsequently instituted were to have a different staff member take over as chairperson each week, to post an agenda notice each week in the staffroom on which people would write their suggestions for items that required discussion, and to provide a written report of the items discussed and the decisions reached that would be circulated at the end of each meeting to all staff members by a teacher acting as secretary who would then become the chairperson for the next meeting. One staff member commented that this type of meeting was required instead of the type where notices were read and

announcements were made. At the feedback meeting, the principal agreed to the suggested changes about staff meetings.

It had been noted by this researcher during the initial contact session with School C that the administrator stated emphatically that teachers did not like to have meetings, that he liked to avoid burdening them with additional meetings, and that his staff decided everything together. This preference, voiced by the principal, had caused the researcher to agree to do the first administration of the Inventory on a "complete-on-your-own-time" basis, with the completed papers being collected at the school office. It was to accommodate the natural process of the school which, it seemed, was a wish to avoid meetings.

In Key Informant interviews which occurred in June, several staff members stressed the importance they had placed on such items as:

- a) #45, "Meetings are such that persons can engage in an open and frank discussion of issues";
- b) Item #58, "Meetings are such that there is an interaction of teachers"; and
- c) Item #66, "Meetings can be called by both teachers and principal".

They felt that an important change had occurred in all these areas. Action on Item #10 "Teachers visit other schools" was also noted by two staff members interviewed. They described the events on the staff's professional day which occurred in May. All but four teachers arranged for and went out on visits to observe other school programs in action. Two teachers requested permission to attend a conference on an aspect of teaching of particular interest to them. They arranged with another teacher in the school to look after their classes, and received permission to attend the conference. The comment was made that, before the feedback meeting discussion about the importance of bringing ideas

and information on other ways of doing things in school-wide meetings, they would not have thought it possible to arrange for such visits to other schools or to conferences. "We just didn't do that here", they said. The effect of the intervention had been to heighten staff awareness of the D.D.A.E. process. One comment that captures the spirit of remarks made by several staff members interviewed was that "It was a good idea to do a self-evaluation like this as it made one analyze the ways the staff members work together. Before doing this, I used to think of us as people working here, not about how we got along, the ways we communicated or about how the meetings were operated. Each person was going along on his own. It really brought us closer together as a staff."¹³

Conclusion

No change in the level of D.D.A.E. as assessed by analysis of the subscales on the Inventory can be seen. Because of the short time between tests, no major changes were picked up by the instrument. However, in all three schools, analysis of interview and observational data revealed that some activity did ensue after the survey application and feedback sessions. Action plans were made to heighten awareness of the D.D.A.E. process, to increase efforts to involve staff members in school-wide meetings, to begin teacher involvement in planning or to introduce certain types of school-wide meetings, to begin teacher visitation to other classrooms and schools, and to increase awareness on the part of all staff members of the need to be better informed, not only about programs in other areas of their own school, but also in other schools and districts.

In two out of the three schools, plans were implemented dealing with information resulting from the Inventory and feedback session. In the third

school, although plans were made to use the information derived from the feedback meeting, they had to be postponed until fall because of a staffing crisis that suddenly arose and caused a total shift in the focus of staff energies at the end of the term.

Question Three

What is the overall evaluation of the staff self-evaluation process?

This question is designed to explore three major aspects of the Inventory

Instrument:

- A) How useful are the six subscales?
- B) How reliable are the subscales?
- C) How valid are the subscales?

These questions related to the use of the information in the feedback process.

Discussion

The data related to Research Question Three were generated in two ways. One, through a statistical analysis of the pre and post-test survey results to obtain objective measures related to the reliability and validity of the items and scales, and, two, through a consideration of the data gathered during a series of structured interviews conducted with a sampling of teachers, and from observations during the process.

The discussion of Research Questions 3a and 3c will draw most heavily upon the subjective data gathered through the interviews. The discussion of Research Question 3b will draw chiefly upon the objective data, with supporting observations and remarks from the interviews, where applicable.

Each of the three sub-questions will be dealt with in turn in the follow-

ing discussion.

Question 3A

How useful are the six subscales and the self-evaluation process?

In adapting an instrument that describes school practices found in one system for use by teachers from another school system in a different country, consideration should be given to several aspects of its construction:

- 1) the practicality and accessibility of the statements, that is, the extent to which the items are free from cultural bias, and the degree to which statements apply to the school situation in question;
- 2) the clarity of the introduction and explanation of the process; and
- 3) the length and format of the instrument.

Observations were made at the initial meetings with staffs, at the first test sessions, at the feedback meetings, and at the second test sessions. In addition, interviews were held with about one-third of the staff members in each school to gather reactions to the self-evaluation. In particular, interview question 2, 3 and 4¹⁴ probed into the staff's reactions to questions of practicality and usefulness of the instrument and the process surrounding its use.

1. Practicality and Accessibility. Staff members were asked to respond to Interview Question 2 which inquired: "In your perception, could the process be used by a staff on its own as a self-evaluation process?" The majority of respondents (94%) thought that it was quite possible, and that staffs would have no difficulty using the instrument and discussion procedure. Generally,

teachers thought the items were clearly worded and applied to situations in their school.¹⁵ Seven people commented that a leadership role is involved in getting the evaluation material ready, organizing the meetings, and preparing a tabulation of results. The staff committee was suggested by some teachers as a logical group to do this. Others thought that all the staff members might agree to do a self-evaluation and select a sub-group of teachers to organize the procedures. One school suggested that a district consultant or university resource person could assist the staff in conducting the process. In another school, (School C) three staff members out of five interviewed suggested that the self-evaluation should be carried on by teachers without the presence of administration. The discussion results and teacher's recommendations could then be presented at a meeting with administration. This would facilitate more open discussion of the school practices described in the items. This comment relates to the feeling present in this school about open and frank discussion of issues at meetings, (Item #45 on the Inventory). That item was rated with a wide range of opinion, tending toward the lower end of the rating scale, and showed wide divergence between the teachers' perception of the situation, and the principal's. Four of the five staff members interviewed in case school C commented on the importance of this criterion, but said that if it were to operate, the principal would have to respect that openness. Four of five interviewed in this school mentioned that doing the self-evaluation had made the staff think about staff climate, and brought them closer together as a group.

Concerning another aspect of the "usefulness" question, staff members interviewed were asked, "What was the effect, if any, of having an outside resource person involved in the evaluation process?" (Interview Question 2b). In that the evaluation process was designed to operate with as little involvement as possible from an outside resource person, this was an important con-

sideration. The researcher was aware that asking the case schools to participate instead of the schools requesting assistance to do an evaluation put the experience into the realm of an external intervention rather than a self-determined part of a series of planning activities. In no case, however, was the presence of an outside resource person, (the researcher who was working on the study) considered to have seriously affected the process, either positively or negatively. The only negative aspect of the process mentioned was related to the timing of the self-evaluation. The selection of dates was directed by the development of the research study, and not by the preferences of the staff as it should have been. Five of seven people interviewed at School B believed that the timing was important. In their view, the self-evaluation had occurred at the wrong time for their school. They would like to do the Inventory earlier in a school year so there would be more time to use the resulting information. The timeline of this field trial made the second phase of the self-evaluation coincide with an end-of-year peak workload. Poor scheduling of the evaluation events in relation to school needs prevented the planned discussion of results from occurring.

2. Clarity of Introductory Materials and Explanations. School Staff Evaluation may have a negative connotation in the minds of some teachers who have been involved in externally directed staff evaluations. Being mindful of the sensitive situation existing in the district to which two of the study sites belonged, (Schools B and C), staff members were asked, "The self-evaluation process was introduced to your school by means of a letter, and through a presentation at a staff meeting. Your participation was invited. When you first heard about it, what did you expect it would be like?" and "When you heard it called a self-evaluation did that concern you?" (Interview Question 3 a and b).

Staff expectations for the process derived in part from descriptions given at the initial contact meetings, and from the print materials¹⁶ sent out. The expectations were met, in large measure, by the actual experience. The majority of people interviewed reported that the self-evaluation process was very much what they had hoped it would be. Four people said that the Inventory Instrument was much more detailed than they had expected. This was seen as a good feature, as it made people think about the various ways in which they interacted. One typical comment was that "descriptions were very penetrating and got right at a lot of issues which were quite touchy, and that was good for us."¹⁷ None of the teachers and only one principal interviewed felt that the items dwelt too much on the principal's role, singling him out for criticism.¹⁸

3. Format of the School Practices Inventory Instrument. Questions about ease of use related in large part to the format of the Instrument. Observing and noting the way in which the Inventory was answered provided most of the information for this question.

The Inventory included 68 items, each with a five-point rating scale, and a yes/no scale (discussion scale). The average time required to complete the instrument (in three of five applications, i.e. pretests in three schools, posttests in two schools, where groups worked on the Inventory at a meeting), was approximately thirty minutes. This time included an opportunity to ask questions, the time it took to distribute and collect the papers and the actual writing time. When questioned about the time it took to complete, only two of seventeen respondents criticized the length of the instrument.¹⁹ For two out of five applications, teachers took the Inventory home or completed it on their own time. This procedure was followed in both cases to avoid calling a staff meeting, and not because the instrument was too long. Two of seven-

teen people interviewed pointed out items which to some degree duplicated one another (Items #11 and 60). 3/17 of those interviewed suggested additional items that should be included.²⁰

Conclusion. The majority of teachers in the study found the inventory and the self-evaluation process to be practical and usable by a school staff working on its own. The format and wording of the instrument was seen to be clear and of satisfactory length. The introduction and explanatory material conveyed clearly the nature and types of involvement required to complete the process.

Suggestions received during the interviews regarding format and wording of the instrument ranged from a majority who found the format acceptable to one person who felt too much attention had been placed on certain aspects of staff interaction, i.e., the principal. Other suggestions related to the timing and the process by which the staff decided to undertake the self-evaluation process. Such suggestions are entirely compatible with the original evaluation criteria established for this study, and actually would enhance the staff's development of D.D.A.E. processes. Comments were heavily in favour of the depth and perceptiveness of the six sub-scale areas describing the basic interactions that go on in a staff.

Question 3B

How reliable are the six subscales?

Discussion. The main thrust of this inquiry is at the structure of the instrument used in this self-evaluation process to gather the survey data. Hence, the analysis in this question is largely objective and statistical. The School Practices Inventory is made up of 68 items, in six sub-scales. All pretest and posttest data were analyzed to obtain reliability coefficients. Cronbach's Alpha was used. Coefficient Alpha measures the

degree to which a total scale score is positively correlated with the item scores of which it is comprised. (Cronbach, 1951). The coefficient may range from -1 to +1 such that the larger its value, the more internal consistency, i.e., the greater the relationship between the items in the group or subscale examined. The results of this analysis are displayed in Table 9 below.

TABLE 9
INTERNAL CONSISTENCY INDICES (COEFFICIENT ALPHAS*)
FOR ALL SCALES ON ALL PRETESTS AND POSTTESTS COMPLETED

Scale	** N of items	Pretest			Posttest		
		School A N=19	School B N=31	School C N=13	School A N=20	School B N=21	School C -
Dialogue	9	.74	.61	.81	.89	.81	-
Decision	9	.68	.78	.79	.90	.66	-
Action	9	.64	.82	.84	.94	.75	-
Meetings	9	.51	.65	.84	.91	.79	-
Principal	17	.74	.89	.94	.97	.89	-
Teachers	15	.65	.76	.85	.91	.83	-

* L.J. Cronbach, "Coefficient Alpha and the Internal Structure of Tests", *Psychometrika*, 1951, 16, pp. 297-334.

** Indicates total group completing the Inventory.

All subscales tend to be reliable. For example, eighteen out of thirty Alphas shown in Table 9 are equal to or higher than .79. In all but one instance, the Pretest in School A Meetings scale, the Reliability Coefficients were higher than .60.

Conclusion. Despite the small number of items, the subscales are sufficiently

reliable.

Question 3C

What validity does the School Practices Inventory have?

The discussion of the question of validity will be divided into two sections:

1. face validity, and
2. concurrent validity.

1. Face Validity. The statements on the Inventory describe 68 practices. They relate to six areas of staff operation and interaction: Dialogue, Decision, Action, Meetings, Principal's role and Teacher's role. It will be recalled from an earlier discussion of the Criteria Instrument used in the I.D.E.A. study of changing schools,²¹ that the statements for this instrument were developed by the principals and teachers who took part in that study. These staffs thought the statements described valuable practices used in attaining a well-functioning, self-renewing school (Overman, 1973). The six areas do not constitute a complete list of criteria for the ideal school, but they do relate to six aspects of staff life in schools indicating the extent to which a school is engaging in the process necessary to be self-renewing and able to cope with change. (Bentzen, 1974).

The researcher asked each staff member interviewed to comment on the scales. First, the items making up each of the six scales were presented to the person being interviewed and each was asked whether the items described practices that are important in his/her school. The majority, sixteen out of seventeen staff members interviewed, commented that the statements did describe the important procedures in their schools. Only one person felt that

these statements portrayed a negative attitude toward the school, and would have preferred staffs to develop their own criteria statements.

Next the relation of the statements to other activities going on in the school was explored with the question: "Are they related to other efforts you are making in this school?" The comments on this question ranged from a majority who thought they related strongly, to one or two respondents who believed some of the Items were focusing unnecessarily on certain roles of the staff, namely the principal's, and that this emphasis was not related to the question of group decision-making. Other comments made specific reference to on-going staff development activities to which the items related. For example, in one school, teachers mentioned the DACUM process, in another, the goal setting activity (Analysis of Variance process in School A). These teachers felt the staff interactions described in the statements of the Inventory were basic to all school staff planning and interaction.

Items about the principal's attendance at conferences and the need for teachers to become familiar with the literature (Items 67 and 60), were pointed out as being less relevant than items that described more practically oriented methods of learning about new teaching methods. For example, some teachers suggested that the items about visiting other classrooms and schools, and attending workshops taught by practitioners were much more important to the renewal process.

"Are there important areas of practice left out?" was the third area of practicality which the Interview explored. Here the majority of respondents stated that the six areas covered in the 68 items include the most important phases of staff life and interaction. Only three modifications were suggested. A reference to the quality of interaction is lacking in the items as presently written. The scales look at frequency or quantity. The suggested changes in emphasis cover three major aspects of staff interaction:

- i) encouraging participation;
- ii) the operation of D.D.A.E. in subgroups of the staff;
- iii) flexibility in the use of D.D.A.E. processes.

i) Certain practices need to be not only present, as in the wording of existing items, but fostered, as for example, in Item #46 on participation. The quality of teachers' participation is important, as is the amount. To achieve the desired quality of participation may require the presence in the group, of an attitude of encouragement, especially from the leaders in the school. This attitude was mentioned by nine of the seventeen people interviewed.

ii) Certain types of discussions are not mentioned in the Inventory items as presently written. For example, discussions among teachers on a team, or between cooperating teachers, and one-to-one discussions are not included. All these interactions may contribute to the over-all or final quality of decisions made when the total staff is meeting. All items presently in the Inventory assume that staff meetings will include the total staff group. Four people commented that in many schools, some kinds of decisions are taking place within area teams or departments. The comments came chiefly from teachers in Schools A and B where teams and departments are operating.

iii) Flexibility of decision-making and action should be referred to in some of the items. As they are presently stated, items do not refer to the very practical need to re-examine and sometimes to change actions that is experienced in the day-to-day school planning. This comment came from several people in School B, and reflected their experience with externally directed change

procedures that were affecting the school's plans at the time of the interviews.

The aspects of the D.D.A.E. process commented on in the interviews by the teachers and described above are important. They are reported by Bentzen (1974) in results of the I.D.E.A. study. Such facets of D.D.A.E. quality as who participates in decision-making; who takes action; the flexibility of decisions and actions; the evaluation of decisions and actions; were all explored in other questionnaires designed to give the staffs in the I.D.E.A. study even more specific feedback on the way renewal processes were operating in their schools. Those teachers perceived the need to continue exploration of renewal processes in order to improve the operating climate in their schools. Here too, teachers interviewed in all three of the case schools reported a desire to explore further the various qualities and dimensions of the D.D.A.E. processes.

Conclusion. The scales were considered to be very practical and related to important aspects of staff interaction. Most people interviewed found the list quite all-encompassing. Only one person mentioned that the items were biased or critical of any particular aspect of the staff interaction process, i.e. over-emphasis on the principal's leadership role. Over one half of those interviewed identified three important aspects of D.D.A.E. that the Inventory does not presently sample. These are: quality of participation, flexibility of decision and action, and amount of involvement in decision and action. These aspects are included in other more detailed inventories available from the original I.D.E.A. study and could be used in follow-up work with a staff.

2. Concurrent Validity. How closely related are the Rating Scale and the Discussion Scale?

Discussion. Does the addition of the Discussion Scale increase the capacity

of the instrument to generate feedback useful to the school staff? It will be recalled that one of the modifications made to the original Criteria Instrument was to build in an opportunity for teachers to indicate beside each item describing a school practice whether or not they felt the procedure should be discussed further.²² "I feel it needs discussion" was the heading. The accompanying opportunity to indicate that the practice needs to be looked at by the staff had categories of "yes" and "no". This is referred to as the Discussion Scale.

Analysis was done on pre and posttest data from the matched sample groups from School A and from School B. In School C, data from all the staff who completed the pretest were used. Data were analyzed to obtain correlation coefficients between the Rating Scale and the Discussion Scale. In addition to the objective information, the observations and interviews gathered in each case school provided subjective data relevant to the discussion of concurrent validity.

Objective data. The results of the analysis of the pretest and posttest results for correlation coefficients between the Rating Scale and the Discussion Scale are shown below, in Table 10. It is seen from the information in the table that in none of the schools nor on any of the tests, pre or post, are the responses to the two scales significantly correlated. Nevertheless, it can not be said that the Discussion Scale responses are independent judgments. School A shows the most positively correlated scores with a trend toward agreement between the two rating scales, although not statistically significant.²³ In posttest results at School B, there is a slight trend toward agreement between the scales, however, it is not statistically significant. School C pretest results show a small negative correlation between the Rating Scale and the Discussion Scale.

Subjective Data. Information derived from several types of subjective data

TABLE 10
CORRELATION COEFFICIENTS BETWEEN THE RATING SCALE
AND THE DISCUSSION SCALE OF THE
SCHOOL PRACTICES INVENTORY

School	N	Pretest Correlations*	Posttest Correlations*
School A	19	.30	.21
School B	18	-.12	.34
School C	13	-.09	-

* None of these correlation coefficients was statistically significant at the .05 level.

bears on the question of correlation between the Rating Scale and the Discussion Scale. The interaction among contextual factors operating in the case schools was particularly noted. In an earlier section of this chapter, contextual factors that affected the renewal process in the schools were described. The influence of such factors as school district policies and controls over resources, community expectations, and professional expectations on members of the change process was discussed.

In School A, the use of the Inventory coincided with a staff planning process which they called "Analysis of Variance". The staff was examining school needs, developing goals and evaluation processes. The pretest items that were closely related to the topics of the Variance Analysis exercise, whether rated high or low on the Rating Scale, got the highest ratings on the Discussion Scale. In the interviews done at the end of the study, teachers in School A indicated that they knew there was time set aside to discuss such

topics and that there was opportunity to include those topics in their planning. There was no need, therefore, to indicate on the School Practices Inventory that only low-rated items needed discussion.

A similar reaction came from people interviewed at School B. There, some items which received the lowest ratings on the Rating Scale, (#10 and #51) which have to do with teachers visiting other classrooms and other schools, and #36 (having to do with critiquing one another's teaching), were not high on the Discussion Scale. Interviews revealed that in the case of #10 and #51, teachers considered it highly important to visit other classrooms, but believed that with the current restraints on release time for professional development there would be no way it could be worked out. Therefore, there was no point in even discussing the idea. The present timetable and teaching staff ratios, they stated, would not provide time for critiquing each other's work. Time available for staff planning was needed for discussing issues related to staffing, the course cuts, the track meet and other issues externally controlled, as well as items relating to the on-going operation of the school such as graduation, marks, and program planning. Two people thought that the practice of critiquing each other's work would not be approved of by the professional code of ethics. "Critiquing" was not a well understood term; it was suspect, and no one wanted to discuss it. Teachers reported that the item would require much clarification before it was rated "needs discussing" in their school.

These two examples give some idea of the types of interactions among contextual factors that influenced the way staffs used the Discussion Scale. The factors were even more complex in the case of School C, where the items receiving the most discussion during and after the feedback meeting, and about which most of the followup action centred, were not rated high on the Discussion Scale. Items #2 and #17 having to do with meetings and with the written

memos following meetings were rated higher than items # 20, 21, and 22 having to do with leadership, taking part in discussions, and taking part in forming agendas for meetings. The latter three items had been rated low on the Rating Scale and high on the Discussion Scale. In the feedback session, teachers related these three items to #2 and #17. Interviews revealed that at the time of the pretest, teachers believed that the form for meetings and the procedures for receiving follow-up memos were "given" and therefore no discussion would be possible. The items were so connected to the style of principal leadership that the Discussion Scale was marked only for those items. Total school meetings for planning had not been considered and visitations were believed to be impossible, given present class loads and organizational arrangements in the school. This belief was reported by three of five persons interviewed at School C. Despite low ratings on item #10 on the Rating Scale, and a belief that it would be impossible to implement, the topic did come up at the feedback meeting and at subsequent meetings of the staff. The ideas did need discussing, but staff beliefs about the expectations of their jobs influenced them when completing the Discussion Scale ratings on the Inventory. Hardly anyone in School C rated items having to do with the principal's role as highly in need of discussion. Yet, many of the observations, interview comments and reports from the contact person indicated that there was a high level of concern among staff members about some aspects of the role. Along with the concern was a high degree of resignation and an awareness that in the present situation, discussion was not likely to help. The belief regarding such items as openness at meetings, #45,²⁴ eventually led the staff to decide not to continue with the second Inventory. Anonymity of respondents on the pretest had been violated. A fear of open discussion, heightened by subsequent remarks from the principal which indicated that he knew who had made certain ratings, resulted in a climate of carefulness and closeness. No one

wanted to appear critical of any school practice by saying it needed discussion. Others interviewed stated that people did not wish to be openly critical of the principal, or in any way appear to be critical of the school or the district. The Inventory opened such issues to scrutiny. So, although many items were rated low, few people believed they could be discussed or hoped that they could be remedied.

Conclusion. It would appear from the results of the statistical analysis that the Discussion Scale does not support the Rating Scale. Low values on the Rating Scale for items are not always perceived by staff members as problems which ought to be discussed. Highly positive items on the Rating Scale are not always perceived as being all right as is.

Additional, complex contextual variables relating to external and internal school pressures influence the teachers' decisions about when to discuss a practice, and how to deal with it.

Such factors as coincident staff development activities, schedules for professional development days, availability of release time, and the pressure of other school responsibilities affected teachers' decisions about whether or not an item was in high enough priority to merit a "needs discussion" yes rating. Some items changed priority during the course of the feedback meeting, as it became clear that something might be done about the procedures, and that discussion of the item in question might bring about results desired by the staff.

Question Four

Should modifications be made to the Inventory Instrument?

This refers specifically to items on the School Practices Inventory needing deleting or modification, or to additional items.

Discussion

This question is related to the practicality and accessibility of the instrument, an aspect dealt with in an earlier section of the chapter.²⁵ Each item should relate to its subscale, and should communicate clearly the criteria for a practice to which it refers. The items of the original Criteria Instrument were written by the teachers and principals in the I.D.E.A. project to describe six major areas of staff interaction.

To analyze the relationship between the items and the scales, two types of information were used in this research. First, item-total correlations were calculated for each school for all applications of the instrument, pre and posttest. Secondly, an interview question was used which requested participants to examine the group of items making up each of the six scales and to gather comments on any modifications, deletions, repetitions, or unclear wording that occurred to them. The case schools agreed to assist in the process of examining and suggesting modifications to the Inventory. Staff members were very cooperative and thoughtful in their treatment of this request, resulting in many useful suggestions. The data pertaining to the questions of item modification will be discussed in two sections: objective data derived from the statistical analysis and subjective data derived from the interviews with key informants.

Objective data. The results of the analysis of the item-scale correlations process are displayed in Table 11. A criterion level of .30 has been used to select the items for inclusion in this table. The wording of items is included in Table 12 so that the actual criterion description of a practice may be checked.

An examination of Table 12 shows that seventeen different items out of the 68 that make up the Inventory received item-total correlations of less

than .30 on at least one administration of the Inventory. The highest frequency was for item #36 from the Teacher scale which appeared on three out of five applications of the instrument. The next most frequently appearing item is #67 from the Principal scale which appeared on two out of five applications, and item #30 from the Action scale which also appeared on two out of five applications. The remaining items appeared only once each. School A pretest had the greatest number of low correlations, (9), and their posttest had the smallest number of low correlations.

TABLE 11
ITEMS HAVING ITEM-TOTAL* CORRELATIONS OF LESS THAN .30

	School A			School B			School C**		
	Item	Scale	r	Item	Scale	r	Item	Scale	r
Pretest	2	4	.11	7	6	.10	4	4	.23
	8	5	.12	36	6	.27	10	6	-.04
	18	5	.22	67	5	.13	30	3	.26
	29	5	.08				35	1	.06
	30	3	-.09				37	1	.26
	32	5	.27						
	33	6	.12						
	36	6	.12						
	45	4	.16						
Posttest	36	6	.23	3	2	.27			
				26	2	-.05			
				67	5	.26			
Total	10		6			5			

* Refers to total score on subscale to which the item belongs.

** Note that no posttest was done at School C.

TABLE 12

SCALE NAMES AND WORDING OF ITEMS HAVING ITEM-TOTAL CORRELATIONS LESS THAN .30

Item	Scale Name	f	Item Wording on Inventory
2	Decision	1	Staff meetings are generally reserved for matters concerned with curriculum, instruction, and school organization, not administrivia.
3	Decision	1	Decisions are clearly communicated to all persons who are affected by the decision.
4	Meetings	1	Meetings are on time.
7	Teachers	1	Teachers make instructional decisions.
8	Principal	1	The principal has the respect and good will of the students.
10	Teachers	1	Teachers visit other schools.
18	Principal	1	The principal knows his staff well.
26	Decision	1	Persons become familiar with the experiences of others before making a decision.
29	Principal	1	The principal encourages and assists the staff in developing goals for the school
30	Action	2	Action can be modified to handle unanticipated situations.
32	Principal	1	The principal communicates effectively with students.
33	Teachers	1	Teachers work to implement the goals of the school.
35	Dialogue	1	Dialogue has a purpose.
36	Teachers	3	Teachers critique each other's teaching.
37	Dialogue	1	Dialogue allows for in-depth discussion of issues that are pertinent to the education of children.
45	Meetings	1	Meetings are such that persons can engage in an open and frank discussion of issues.
67	Principal	2	The principal attends conferences relative to his professional growth.

Subjective data. The interviews generated a large amount of comment about individual items which helped to explain some of the ratings noted above. In order to identify the items commented on by teachers and to record the concerns they had with them, the interview notes were analyzed. Item numbers, frequency of occurrence, and type of comment were noted. The results of the tabulation appear on Table 13.

Many of the suggested modifications had to do with the quality or frequency of occurrence of the practice being rated. Such items were numbers

TABLE 13

STAFF RECOMMENDATIONS ABOUT INVENTORY ITEMS*

Item	Scale Name	f	Wording of Criteria Item	Type of Comment
7	Teachers	7	Teachers make instructional decisions.	Instructional decisions needs broadening to include such concepts as: program planning, evaluation, staff and pupil deployment, work on curriculum and materials.
16	Teachers	10	Teachers can arrange to have their teaching critiqued by other teachers.	Use of the word "critique" is not well understood. This item might be combined with #36 and an effort made to find another word with less negative connotations than "critique".
28	Meetings	7	Meetings involve only persons who need to be involved.	Differentiate among the kinds of meetings that a staff has. Some need all present, some do not. Relate this to item #2.
31	Dialogue	9	Issues and Programs discussed by the staff can be suggested by parents.	"Can be" wording is ineffective. Change to read "are" so the rating categories will make more sense.
36	Teachers	11	Teachers critique each other's teaching.	Same as for #16.
41	Dialogue	9	Issues and programs discussed by the staff can be suggested by the students.	Same problem as #31. Anything <u>can</u> be suggested, but a more useful criteria is whether or not this practice ever <u>does</u> occur.
46	Decision	7	Decisions are carried out with enthusiasm and good will.	Differentiate <u>so as</u> to describe what kinds of issues.
60	Dialogue	7	Persons read what scholars and informed practitioners have written on the subject and bring relevant ideas from their reading into dialogue.	Staff is suspicious of reading or adopting too much theory without first seeing practical demonstrations and applications.
61	Principal	7	The principal attends conferences relative to his professional growth.	This item received much humorous comment during the test sessions. "Conferences" was being interpreted by many as "larks", and the staff suggested instead a wording that emphasizes the need for workshops, for the contribution of the professional organizations, e.g. B.C.T.F. seminars, conventions.

*Items mentioned seven times or more, or in other words, by about 50% of those interviewed, are shown in the table.

31, 40, 41, 45, 46, 48. Of these, numbers 31 and 41 received seven or more comments. Teachers were concerned with redefining the criteria statements so that they would include reference to the way in which a practice would occur, not just its frequency of occurrence.

Other items that received comment had to do with the fact that in Canada, teachers as well as principals are members of professional organizations such as the B.C.T.F. The organization makes a considerable contribution to staff life, particularly in the area of professional development. The items as currently written in the Inventory make no mention of this type of influence on the renewal process. Teachers in California where the Criteria Instrument was first developed are not required to belong to such a professional organization, and principals do not belong to the same organizations as do teachers. For the most part, they are considered to be part of management. There are, therefore, some differences in the wording of items concerning principal role, the part played by external sources of information such as conferences, research, written material, etc. Items in which this sort of comment arose were numbers 2, 7, 16, 28, 34, 36, 39, 40, 60, and 67. Of these, numbers 7, 16, 36, 60 and 67 received seven or more suggested rewordings during interviews.

Staff members stressed another change in emphasis. Differentiation among the many types of meetings now held in schools was requested. Most of the present wording of items refers to formal staff meetings with total staff attendance. People interviewed in this study suggested that team meetings, department meetings, special project meetings, teacher/paraprofessional meetings, teacher/advisor meetings, or teacher/administrator meetings might each have unique characteristics worth noting, as well as some criteria in common. Teachers wanted items that differentiated among the scope, depth, and processes of dialogue, decision-making, and the ability to take action that each of such

subgroups might exhibit. Items in the Inventory lacked such specificity making it hard for respondents to relate the practice described to their own group meeting situations and experiences. Items receiving this type of comment were numbers 1, 2, 6, 28, 34, and 46. About 50% of those interviewed thought items 28, 34, and 46 needed the type of clarification noted.

Conclusion. The majority of items in the School Practices Inventory relate strongly to the subscales and clearly describe practices. Only seventeen of the 68 items on the six subscales did not correlate above .30 with their subscale totals on all applications of the instrument. The teachers interviewed pointed out some items in which the wording makes interpretation of the practice difficult in terms of their own experience. Some examples of areas in which modifications were suggested are: redefining the criteria statements to include reference to the way in which a practice will occur with reference to the quality of the interaction; including mention in the criteria statements about the role in professional development and renewal played by the professional organizations, advisory services, and associations; differentiating among types of meetings and among the various levels of decision-making that go on in the school.

Observations and interviews on the specific items of the Inventory appeared to support the results shown in the statistical analysis. Teacher comments were very favorable and provided many suggestions that would strengthen and clarify items, and adapt the instrument for local use.

Question Five

What is the relationship among subscales on the Inventory?

Discussion

It will be recalled from an earlier discussion of the I.D.E.A. study of changing schools (Bentzen, 1974), that the Criteria Instrument upon which the Inventory used in this study was based, was developed by teachers from the group of eighteen schools involved in the California based study.²⁶ It was designed to provide relevant information about the D.D.A.E. process in the school. Scale items describe desirable criteria for Dialogue, Decision-making, and Action. Also included were criteria for three facets of staff life that reflect the redefinition of roles that was occurring in the schools of the I.D.E.A. study. These items list criteria for the behaviour of principals, teachers, and for the operation of the most common, formal setting for their interaction, the staff meeting. The I.D.E.A. research found these six areas of staff interaction and role characteristics to be the common threads observable in any planned program of change in a school. The six interrelated areas of climate, when operating in a healthy way, support responsible receptivity to change. The theory underlying the instrument assumes there is interaction among the six areas identified by the subscales.

It is of interest, therefore, to examine the interrelationships among the six subscales as rated by teachers involved in the self-evaluation study reported here. Information relevant to question five was obtained both through the analysis of objective data from the Inventory pre and posttests and of the data obtained from interviews and observations in the case schools.

Objective Data

Pretest data were analyzed to obtain Pearson Product-Moment Correlation Coefficients among all the scales. The results of that procedure are

displayed below in Table 14.

TABLE 14
PEARSON CORRELATION COEFFICIENTS FOR PRETESTS*
**

Scale	School	N***	Dialogue	Decision	Action	Meetings	Principal	Teacher
Dialogue	A	19	1.00	.26	.46**	.20	.27	.58*
	B	18	1.00	.69*	.42	.43	.20	.59*
	C	13	1.00	.72*	.74*	.90*	.67**	.77*
	A & B	37	1.00	.72*	.71*	.51*	.63*	.77*
	A,B & C	50	1.00	.70*	.67*	.65*	.65*	.77*
Decision	A	19		1.00	.71*	.27	.61*	.74*
	B	18		1.00	.73*	.66*	.41	.60*
	C	13		1.00	.89*	.79*	.91*	.81*
	A & B	37		1.00	.90*	.64*	.82*	.85*
	A,B & C	50		1.00	.90*	.64*	.83*	.83*
Action	A	19			1.00	.57*	.65*	.84*
	B	18			1.00	.48**	.32*	.40
	C	13			1.00	.79*	.87*	.76*
	A & B	37			1.00	.64*	.87*	.83*
	A,B & C	50			1.00	.59*	.82*	.79*
Meetings	A	19				1.00	.51**	.40
	B	18				1.00	.51**	.45
	C	13				1.00	.84*	.83*
	A & B	37				1.00	.64*	.61*
	A,B & C	50				1.00	.71*	.66*
Principal	A	19					1.00	.53**
	B	18					1.00	.30
	C	13					1.00	.79*
	A & B	37					1.00	.76*
	A,B & C	50					1.00	.77*
Teacher	A	19						1.00
	B	18						1.00
	C	13						1.00
	A & B	37						1.00
	A,B & C	50						1.00

* Statistically significant at the .01 level.

** Statistically significant at the .05 level.

*** Sample for Schools A and B includes only cases who wrote both the pretest and the posttest.

The results of a similar analysis for the posttest results are shown in Table 15.

TABLE 15
PEARSON CORRELATION COEFFICIENTS** FOR POSTTESTS

Scale	School	N*	Dialogue	Decision	Action	Meetings	Principal	Teacher
Dialogue	A	19	1.00	.83	.83	.80	.52**	.78
	B	18	1.00	.87	.76	.63	.53**	.73
	A & B	37	1.00	.87	.78	.76	.65	.80
Decision	A	19		1.00	.88	.89	.71	.80
	B	18		1.00	.81	.87	.59**	.63
	A & B	37		1.00	.90	.87	.81	.83
Action	A	19			1.00	.82	.61	.78
	B	18			1.00	.87	.50**	.69
	A & B	37			1.00	.74	.85	.85
Meetings	A	19				1.00	.74	.75
	B	18				1.00	.59	.50
	A & B	37				1.00	.66	.66
Principal	A	19					1.00	.75
	B	18					1.00	.55**
	A & B	37					1.00	.81
Teacher	A	19						1.00
	B	18						1.00
	A & B	37						1.00

* Sample for schools A and B include only cases who wrote both pretest and posttest.

** Statistically significant at .05 level but not at .01 level.
All others are statistically significant at .01 level.

In general, correlations among subscales on the pretest are moderate to high. The correlation coefficients between Teacher/Action, Teacher/Decision, and Teacher/Dialogue; and Decision/Action were the most uniformly high. These scales are strongly related in all the case school data.

About 17% of the correlation coefficients (thirteen out of seventy-five)

are statistically significant at the .05 level, and about 73% of the coefficients are statistically significant at the .01 level. Noting the small size of the sample, these results indicate that the subscales are well interrelated.

Correlation coefficients obtained on the posttest results from the matched samples in two case schools which completed both test sessions show an even higher overall pattern of correlation among subscales than on the pretest.

The low correlation coefficient values among many subscales in the data from School A indicate that for this school the variables seem to be independent of one another on the pretest. For example, with all but the Teacher scale, Dialogue has a correlation coefficient of less than .5, and has values too low for significance at .05 level with Decision, Meetings, and Principal scales. Action/Teacher scales, and Teacher/Decision were the most strongly related subscales in this school, with Decision/Principal scales next in order.

In School B, the Decision scale showed highest correlations with all other subscales and the Principal subscale, the lowest. The coefficient for Principal/Dialogue was lowest of any scales of any case on the pretest.

In School C, the relation of the Meetings scale with all other scales is strongest, followed closely by Decision/Principal scales. These scales showed correlation coefficients that were the highest for any scale on the pretest data.

Subjective Data

Observations and interviews in the case schools showed that staff members were aware of D.D.A.E. processes and conscious of the interrelationships among

them that modify the staff climate in a school.

In School A, it was observed that considerable emphasis was placed on involving staff members in decision-making. High value was placed on inter-personal communication. Arrangements had been made to foster such interchanges both through formal planning time, staff organization into teams, and through such informal means as the informal staff room atmosphere, staff luncheons and parties. Many staff members shared the responsibility for taking and initiating action. The scales receiving the highest pretest coefficients were Teacher/Action and Teacher/Decision. Interview comments drew attention to the role teachers played in school-wide planning and on the efforts to improve the planning strategies used. The role of the principal was seen as important but not as closely tied to all the other aspects of D.D.A.E. as was the teachers' role. These teachers were working with each other in many different groups, at various types of meetings, and with diverse opportunities for dialogue. It is possible that in rating these scales, as two staff members pointed out, teachers found it difficult to generalize and assign a rating. The Inventory items described too broad a range of events for this group to use, since quality and quantity of discussions and meetings were being assessed in a more particular way. At the feedback meeting in School A, the staff and the researcher discussed the results of the pretest. The ratings, the relationships among items and scales and the need to use such information in the on-going planning for the school were mentioned. In the months between the pretest and the posttest, contact persons reported, the Inventory results and the Analysis of Variance procedure were topics of a long series of team meetings which ultimately involved all staff members. A much heightened awareness of the need to nurture staff climate and of its component processes may have influenced the increased posttest correlations.

All staff members interviewed in School B stated that there were many

opportunities for teachers to be involved in decision-making. All felt there was healthy discussion of issues both at formal meetings, by staff representatives at the Staff Committee meetings, and informally, e.g., in the staff room. However, a majority, (six of seven interviewed), felt that although meetings were important for getting decisions made, more teachers should take responsibility for implementing in recommended actions. Observation of this case school and reports from the contact person verified the difficulty experienced by this staff in both communications and then taking decisions through to the action phase. In this school, staff did not perceive the principal's role as closely related to either the quality of discussion or the types of decisions made. The processes existing for department, Staff Committee, and staff meetings related to quality of discussion. The idea of having a professional prerogative to decide what would go on in the school program was strongly supported by all staff members interviewed, as was the expectation by the administration for such teacher involvement. Decision/Action, Decision/Meetings, Decision/Teachers, Decision/Dialogue showed the highest correlations in this school on the pretest. The lowest correlations occurred in the Principal's role scale.

The crucial interrelation of the Principal's role to all other aspects of the D.D.A.E. process was mentioned by all staff members interviewed at School C. The importance of this interaction was observed in initial meetings with the staff, the feedback meeting, and during information gathering contact and interview sessions. The teachers' perception of the administrator influenced ratings of all other school practices. The principal disliked the emphasis on Principal role as one of the six subscales in the Inventory. He commented both during the initial meeting with the researcher and in a later interview that he felt the items about principals overemphasized and singled out this role for comment. He would have preferred the Inventory to be more general

and to make no special analysis of the role of the principal. In the interview, it was also stated that he felt the Inventory supported the concepts of the Staff Committee and of teacher involvement in decision-making; ideas with which he was not in full agreement. He further stated that the Staff Committee was no longer operating in his school. Further related to the centrality of the principal's role to the D.D.A.E. processes in this school were comments by the principal about his role in making decisions. He described how he went round to the rooms to get people's opinion about a decision he was making, then announced the decision in a staff meeting or placed on the agenda the issues that he felt required action. He believed that teachers preferred not to have meetings, and that each teacher liked to run her own class, and leave school-wide planning to the administration.²⁷ Observations of subsequent events and reports of the contact person underlined the initial information about the relation between principal role and all other aspects of staff climate. Teachers were so unaccustomed to contributing to the dialogue in a meeting that both the initial presentation and the feedback session were very embarrassing for them.²⁸ The quality of dialogue and decision-making that occurred with the principal and two outsiders present was characterized by hesitancy to question the proposed action (self-evaluation), reliance on the administrator's direction, suspicion about the motives for the proposed action, (some thought it was the district evaluating them), dominance of the discussion by a small minority of staff members, and lack of strategies in the group for dealing with an issue requiring whole-staff participation in the decision-making.²⁹

Subsequent interviews revealed that ultimately, concern over the fact that the Inventory pretest had been collected and looked over by the principal before returning them to the researcher led most staff members to request that the school be withdrawn from the second testing session. Four of five people

interviewed stated that teachers were worried about the principal knowing how they had rated the Inventory items, and whether or not they had completed a self-evaluation. Of particular concern, mentioned by all, were the items having to do with Principal role. Most saw all other practices, e.g., openness of discussion, participation in decision-making, or success of meetings, tied to that role, and to the incumbent's perception of the job. Most had felt little could be done to change the situation, but at the same time, did not want to be critical of the principal, or of any staff members.

Conclusion

Correlations among the six subscales of the School Practices Inventory are moderate to high on the pretest with 73% significant at the .01 level. The correlations for the posttest in the two schools involved are higher than on the pretest. These results may indicate the influence of increased awareness among staff members of the interrelationship among D.D.A.E. processes gained during the self-evaluation process, through consideration of the follow-up actions, and from discussions in the feedback meetings and school visits.

Information derived from the Ethnographic methods of data collection support and enhance the statistical relationships derived from the objective data. For example, in School C, the strong correlation among the Principal/Meeting scales and all other scales was amply illustrated by events in the school observed by the contact person and the researcher, and by comments gathered during the interviews. Subsequent actions resulting from the self-evaluation correspond to staff ratings of these two scales and the interrelation perceived between Principal role and all other scales.

It can be concluded that in the three cases studied, the interrelation-

ships among the six subscales is strong. Both statistical and ethnographic data support the theory of the original I.D.E.A. study that the Inventory provides a staff with relevant information about the quality of operation and interaction among six major facets of the renewal climate in a school.

Chapter four presented the analysis and results of the study. Opening with a description of contextual factors pertaining to the environment in which the research was conducted, it next outlined the research questions reporting the subjective and objective data related to each. The five major questions, designed to generate information for later application in completing the final format of the self-evaluation component of the C.E.P.S. needs assessment materials, yielded information on the usefulness of the Inventory, the effectiveness of the Discussion Scale, and the strength of the feedback process.

Chapter five will present the study conclusions and implications, and discuss some recent developments of the self assessment process.

Chapter Five

CONCLUSIONS, IMPLICATIONS, AND RECENT DEVELOPMENTS

The purpose of the study reported in this thesis was to develop and field test a self-evaluation process destined for use in a school-based needs assessment strategy as one part of a planning system project called C.E.P.S.¹

One objective of the study was to modify and explore the use of an evaluation instrument called the Criteria Instrument originally developed during the I.D.E.A. Five Year Study of Changing Schools. It was designed to provide information for school staffs about their capability to function as problem solving groups coping with a changing environment. The modified instrument developed for use in this field test was called the School Practices Inventory. It uses criteria statements describing various school practices related to Dialogue, Decision making, Action, Meetings, Principal's role, and Teachers' role, and provides a Discussion Scale on which to rate each practice in terms of its need for discussion by the staff.

A second objective of the study was to observe the use of the survey instrument set in a process of data feedback to the staff and a discussion of the resulting information. The School Practices Inventory was used to survey three school staffs. Survey data were discussed with each staff at feedback meetings in which practices needing further discussion and action were reviewed systematically, as were well functioning practices. Areas of agreement and disagreement emerged, and plans for dealing with the areas of concern were formed.

The use of the instrument and the process in three case schools was observed and documented by a combination of ethnographic and statistical methods. Since the self-evaluation process was being designed for use in a

variety of school settings within a large school district, the relation of the results to certain contextual and organizational variables among user schools was studied. Staff members in the case schools evaluated the process and participated as observers and recorders of the events occurring during the field trial period.

INFORMATION GENERATED FROM THE STUDY

Within the theoretical framework of the self-renewing school, and the model of "essential change" (Getzels, 1970), the use of survey feedback and discussion of needs assessment data about school climate were observed and documented. The major research questions posed in the study were of a "decision-oriented" research type² typical of a practical, school-based project. They were designed to generate information helpful to planners developing planning materials. The specific questions were, thus, related to the usefulness of the Inventory, the effectiveness of the Discussion Scale, and the strength of the feedback process in creating awareness of the D.D.A.E. process among staff members. Data and observations recorded were analyzed for later application in designing the final format of the self-evaluation process component of the C.E.P.S. needs assessment materials.

Question One

How did the case schools compare at the beginning of the study?

The study design called for schools representing some of the diversity likely to be found in a large, urban school district. Size, type of community, grade level of students served, types of staffs, and leadership were considered in selecting the case schools.

The three case schools were compared in terms of the objective data derived from the scores on the first application of the Inventory, and on the basis of subjective data gathered through ethnographic methods. Both kinds of data supported the conclusion that three very different schools had agreed to participate in the study.

Analysis of the Inventory survey data revealed statistically significant differences among the three schools on the pretest. The major difference was between School A and the other two schools. On all subscales, there were differences that were supported by observations and interview data gathered during the initial contacts with the schools. The differences were grouped into the categories of initial principal role characteristics, decision-making patterns, staff communication, meetings, and contextual factors.

School A was characterized by consistently higher scale means for all scales than those for Schools B and C. Action, Meetings, and Principal scores were the highest of any in the group. It was observed to have well developed procedures involving both teachers and the principal for coping with changes such as the request for participation in a research study. Existing school procedures were used to study the request, decide upon the staff's response, inform members of the time-line, and set up the activities for the self-evaluation.

School B was characterized by medium or "sometimes" scale means (between 3.0 and 3.9) for Dialogue, Decision, Action, and Teachers scales. It was observed to have less well established patterns for involving staff members in the type of communication process needed to set up the self-evaluation process in the school. The procedures were by necessity more complex in that it was a bigger staff, with sub-departments and a staff committee all operating in a relatively new school setting where some practices were still in a formative stage. The diversity and diffuseness of decision-making and action procedures

was reflected in both the objective and subjective data gathered in this school. The ratings of Meetings and Principal scales were "usually", a fairly high rating indicative of procedures thought by many staff members to be working well. These findings were born out by observations of the openness and rapport that existed among staff members during formal meetings, informal contacts, and interviews.

School C was characterized by medium or "sometimes" ratings (between 3.0 and 3.9) for Dialogue, Meetings, and Teachers scales on the Inventory. Observations made it clear that the decision making process in this school could be most arduous and that procedures for "whole school" decisions requiring input from all staff members, school-wide meetings, or communication procedures were not well established, not agreed upon by all, and not all staff members were used to participating in group activities. The focus for Decision, Action, and Principal items, rated higher in importance by this staff, resided in the administration, and many teachers preferred the centralized model. Others, however, were quite dissatisfied with the level of D.D.A.E. characteristic of this staff, and both comments made during meetings, and statements gathered during interviews indicated that, in some teachers' estimation, there was a real need for improvement.

Question Two

Has change occurred as a result of the use of the process?

It was suggested by Culver and Hoban (1973) that use of the Criteria Instrument and a feedback process with a school staff might, in itself, affect the quality of staff interaction. Increased awareness of the D.D.A.E. process and the perception of how the staff saw it operating in their school could be a catalyst for efforts to change and improve the practices discussed on the

Inventory. This question was included in the study in order to gather information on the effect, if any, of the use of the instrument and feedback process on the staff. If, in addition to its ability to monitor the D.D.A.E. process over time, it heightened the staff's awareness of the way it functioned and of the work climate in the school, it would be a bonus to the whole needs assessment process under development.

Data for this question were gathered from two applications of the School Practices Inventory at two schools, and from observations and interviews over a five month period at all three case schools.

Analysis of the Inventory survey data for the two case schools surveyed showed no major change in the level of D.D.A.E. as revealed in the subscale means. The short time elapsed between the two applications of the Inventory may have been insufficient for such changes to show up on subscale means when compared and T-values obtained. The means on all subscales were very similar between the two tests in each of the two schools.

The ethnographic data, however, provided useful information about the effect on the staffs of the use of the process that supplements the information obtained from the statistical analysis of subscale means. The use of the process engendered activity and affected D.D.A.E. process in a variety of ways in every one of the case schools.

In School A, practices related to communication and inter-school as well as intra-school visitation were highlighted. Action plans were prepared to improve staff interaction in regard to these areas of concern. Plans were carried out before the end of June, and other attempts were made to follow up on the items from the Inventory that revealed less than satisfactory operation of practices.

School administration in School B planned a series of recommendations to present to the staff based on the feedback from the survey. Chief concern was

with Decision and Action items, and this undoubtedly reflected the difficulty this staff had in dealing with the project and with externally motivated changes that were affecting the organizational structure of the school at the end of the school year. All activities coincided with the announcement of staff cuts that severely affected the staff morale. The recommendations having to do with Decision and Action procedures had been designed to improve the staff's ability to plan and cope with changing needs.

In School C, the feedback sessions, as well as the actual event of the survey itself had considerable impact. Such concerns as the need for regular staff planning meetings, the need for open meeting agenda, the desire for visitation to other schools and classrooms, the quality and location of leadership in meetings, and the nature of record-keeping of staff decisions and action plans surfaced and were debated by the group. Changes in the procedure related to the calling of meetings, planning of agenda, and chairing of meetings occurred between application one and two of the Inventory. Teachers arranged to make inter-school visits, and intra-school visits following the first feedback and discussion session. The discussion climate shifted as increased awareness of the need and desire for open and frank discussion was brought to the surface. Some staff members began to analyze the way they worked together, and the problems that had been constraining them. Others retreated into defensive silence and hesitated to participate any further. A clear need for group process skills on the part of the administrator and staff leaders emerged.

In each case school, the use of the self-evaluation process revealed some needs in the D.D.A.E. process and influenced the staff to make some plans for improvement. In each case, the need was shown for additional follow-up procedures that should have been available to assist the staffs to use the information generated by the needs assessment. The strategy of a core plan-

ning group with some leadership skills could have helped the staffs prepare action plans and staff climate objectives. Even without such a process, in the course of this field trial, the case schools attempted to set some plans in motion.

Question Three

What is the overall evaluation of the staff self-evaluation process?

Three major aspects of the Inventory instrument and the information it generated for the feedback process were examined. Again, the data were gathered and analyzed in two ways: by statistical analysis of the survey results, and by analysis of the interview and observation data.

Question 3a: How useful are the six subscales and the self-evaluation process.

This part of the study relied heavily upon the observations and the interview data. The question was important to the future adoption, revision or adaptation of the instrument and the process prior to its inclusion in the C.E.P.S. planning materials. The practicality and accessibility of the statements, the introduction, and explanation of the self-evaluation process, and such factors as the length and format of the Inventory instrument were examined. Important comments and suggestions for modification of the process resulted from this part of the study. The majority of teachers and administrators in the case schools found the Inventory and the self-evaluation process to be practical and useful for a school staff to operate on its own. Some staff suggestions related to the length and to the possible duplication of ideas in several of the criteria statements. Most staff members thought the format and wording were clear and that it was not too long. The nature of involvement expected

of a staff was adequately presented in the introductory material and meetings.

The most frequently offered suggestion for improvement to the process related to the timing of the survey during the school year. It was pointed out by many teachers interviewed that the feedback based on the initial survey application would be of most use if it could be fitted in with a school's planning and objective setting time-line. It might be best to use the Inventory in late spring, or in the fall, so that plans generated could be worked out during the school year, budget allocated where necessary, and new staff members brought in on the process.

Another important finding was that the staffs thought the process could be operated with a minimum involvement from an external advisor. Since the material is being designed as part of a packet of planning materials that would be introduced by an advisor, but used and led in the school by a core planning group of staff members, it is necessary for the process to be a self-help design. Help for the core group in the form of development of materials, provision of skill training workshops, organization of the strategy, production of the materials, and ongoing service in scoring and report preparation will be given by district level resource persons and advisors. The major thrust of the material, however, will remain school-based. This process will be a self-evaluation, within a needs assessment strategy used at the school level, chiefly by school staffs.

Question 3b: How reliable are the six subscales?

This part of the study was directed at the structure of the instrument used for the self-evaluation survey. The School Practices Inventory had 68 items grouped into six subscales. The data generated from all applications of the instrument in all three case schools were analyzed to obtain Cronbach Alpha's. The results of this analysis for reliability coefficients revealed that the

six subscales were reliable. The internal consistency among items was generally high, and in many cases (eighteen out of thirty), was higher than .79. There is a sufficient degree of relationship among the items in the subscales to confirm that the Inventory with six subscales is structured reliably and would not require major modifications.

Question 3c: What validity does the School Practices Inventory have? The question of validity was examined from two aspects: the face validity, and the concurrent validity. The face validity data were gathered from the interviews with key informants and the observations of the process. The concurrent validity data came from an analysis of the correlation between the "Rating Scale" and the "Discussion Scale" on each item. Additional data from the interviews and observations done in each school were analyzed to obtain information on the relation between the two scales.

The staff members in the I.D.E.A. schools who helped to develop the original criteria statements thought the items described practices necessary in attaining a self-renewing school, and for coping with changing needs. Staff members in the three case schools of this study were asked whether the 68 items described practices in their schools.

The majority of staff members thought the items did describe important aspects of staff life and interaction in the school organizational setting. They thought that the 68 items also related to other efforts in which they were involved, and that no important area of practices was left out. Three main suggestions for change in emphasis were made: first, in practices that encourage participation; second, in analyzing how D.D.A.E. works in certain sub-groups of the staff; and third, in assessing how flexibly D.D.A.E. processes are used in the staff. Items related to these concerns, if added to the Inventory, might produce a more thorough analysis of staff interaction,

particularly at the high school level, and raise staff awareness of the need for such qualities in the renewal climate.

The statistical analysis showed that the responses to the two scales were not strongly related. The judgments used in responding to the two were not independent, but the pattern of response between them is not sufficiently related to merit the inclusion of the "Discussion Scale" in its present format in the Inventory. The discussion of the observational and interview data suggests that an alternative structure for the survey might serve to gather the kinds of concerns that staff members brought out. Contextual factors affected the ongoing process in the schools being studied. These factors were mentioned frequently by the teachers in connection with judgments about whether the items on the Inventory needed discussion. Such additional and complex variables relating to external and internal school pressures influenced the teachers' decisions about when it was important to discuss an item, and how to deal with a low-rated item.

A structure for the survey that could give teachers an opportunity to rate both how the practice is currently operating, and how, in their opinion, it should be occurring might capture some of the concerns mentioned by staff members during the interviews. During the feedback meeting, teachers' interest in some of the Inventory items became apparent as the discussion progressed. If it began to appear possible to do something to change a practice that had not been highly rated on the "needs discussion" scale of the Inventory, teachers seemed less hesitant to reveal their concerns. The needs assessment technique of "gap analysis" that looks at the difference between the rating of a practice as it is occurring, and as it should be occurring could show the staff more clearly the areas of highest concern. The question of when and how to discuss them appears to begin another phase of the planning, and should be designed into the follow-up material.

The over-all evaluation of the Inventory instrument and the self-evaluation process is positive, with some suggestions and findings that indicate specific portions of both that can be modified in order to make the process work more effectively and efficiently in the school situation. The suggestions about the timing of the survey during the school year, the inclusion of the instructions and minimum use of external advisory personnel, the deletion of some items and the addition of others, and the use of an "is" and "should be" rating with a gap analysis will assist the development of the final version of the self-evaluation process.

Question Four

Should modifications be made to the Inventory instrument?

This question explored in more detail the issue of whether items on any subscale should be deleted or modified, and whether additional items should be added. Some indication of the need for both kinds of modifications, within the general evaluation of a satisfactory instrument, had been reviewed in looking at the results of question three. In this analysis, however, the relationship of each item to its subscale was calculated. In addition, staff members were asked in interviews for specific suggestions about items and wording of items that might improve the clarity or effectiveness of the criteria statements.

Statistical analysis of the survey data from the case schools showed seventeen items out of the 68 on the Inventory had an item-scale correlation below the criterion level of .30 set for a cut-off or decision point about items. Interviews generated a large amount of comment on individual items that related to the statistical data on the seventeen items mentioned above. Together, the two types of information contributed to the decision making pro-

cess about the need to modify the instrument and to cut out certain items that appeared to be ambiguous or redundant.

The length of the instrument could become a concern when it is combined with two other parts of the needs assessment survey on student outcome objectives, and teacher enabling objectives to form a total packet. Hence, any items that do not serve to assess a particular practice that relates strongly to its subscale should be deleted. If there is room for additional items, it is more important to put in items dealing with the areas of concern pointed out in question three, above. Overall, the items related strongly to the scales, and suggestions for changes will be recommended to the developers on the items pointed out by the staffs and by the statistical processes.

Question Five

What is the relationship among subscales on the Inventory?

The theoretical framework upon which the self-evaluation process was developed assumes there is interaction among the six areas identified by the subscales of the Inventory instrument: Dialogue, Decision, Action, Meetings, Principal, and Teacher. These six aspects of the D.D.A.E. process describing desirable criteria for the communication, decision, and action taking practices in the school, along with the three facets of staff life embodied in the roles of principals, teachers, and their interaction in meetings, were thought to be the common elements observable in any organization's planning process that could be said to be self-renewing.

The research question explored an important component of the decision about the use of the self-evaluation process as part of a more comprehensive planning strategy. For it to be of assistance to schools doing school based needs assessment, the instrument and the process had to reflect adequately the

important interrelation among such aspects of the self-renewal process as those identified in the six Inventory sub-scales.

Correlations among subscales proved to be high. Approximately 90% of the correlation coefficients are significant at either the .05 or .01 levels on the first survey application. The correlations on the second application are even higher. Both statistical and ethnographic data support the assumptions of the original I.D.E.A. study that showed the interrelation of the components of the D.D.A.E. process. The Inventory provides some relevant information for a staff about the quality of interaction among six major facets of the renewal climate in a school. These insights can be applied in subsequent action planning or objective setting processes and can be linked to other activities, plans, and variables that create a changing context for the school organization.

IMPLICATIONS

Insights Into Essential Change Emerging From the Literature

The literature on change, particularly that on "enforced" and "expedient" change, suggests a formidable array of factors about schools as organizations, and about the professionals who work in them that sustain the truth of Sarason's description: "Teaching is a lonely profession." p.106 (Sarason, 1971) These factors affect how well schools handle the problems they face, how effectively they cope with a changing environment, and how creatively they provide for diverse student needs.

March's description of the school as an organizational anarchy where technology is unclear, goals ambiguous, and participation fluid (March, 1978) is heightened by the organizational role insularity, hierarchic role ordering,

and ambiguous decision making prerogative (Bidwell, 1965) characterizing the school as a work place in which professional staffs lack influence, feel powerless, and yet operate within a strongly normative climate. (Dreeben, 1968)

If the more things change the more they remain the same, it is because our ways of looking and thinking have not changed. (Sarason, 1971) (p. 236)

Sarason suggested that recognizing the adversary gives one a basis for asserting that the problem is neither hopeless nor insoluble. A great many of the insights provided by the literature on "essential" change relate to strategies designed to help staffs recognize the adversaries preventing them from changing and improving practice, and to set improvement norms for themselves and their organizations. (Culver and Hoban, 1973)

Essential change is facilitated by such factors as: awareness of community goal priorities; clarification of decision making prerogatives; clarification of planning processes; establishment of continuous communication among staff members; examination of work patterns; on-going organizational diagnosis; identification of needs with surveys and feedback; setting targets for improvement; collaboration of staff and administration in action planning; establishment of an open climate in meetings and in dialogue; use of advisors as stimulators of dialogue or as skill trainers; provision of the supportive peer group climate of leagues of schools; establishment of core planning groups; encouragement of staff leadership and continuity; and sustained involvement in collaborative planning over time in a cyclical process.

Insights Gained from Studying the Self-evaluation Process

The information derived from analysis of data gathered on the self-

evaluation process in the three case schools has a variety of implications for the on-going development of the packet of planning materials destined for use in the C.E.P.S. project. The major insights have been grouped into five sets of implications having to do with: contextual factors, strategies for heightening awareness, management of school based planning, the use of ethnographic methods in formative evaluation, and designing and packaging self-evaluation materials for use by school staffs. Each of these is summarized briefly below.

Contextual Factors

Contextual factors interacted with and influenced the self-evaluation processes operating in the case schools. This observed influence suggests a need to develop ways of linking the self-evaluation process to more comprehensive planning involving parents and community members. Community Educational Needs Assessment (C.E.N.A.) procedures and materials for setting priorities among district goals are now being considered in the school district. Materials for staff planning that result in school objectives referenced to district-wide goal priorities and the priorities of parents in the local school community will provide teachers with greater awareness of expectations and needs that should assist them to focus planning efforts.

The strong influence of contextual factors on the schools in the study supported the findings of the I.D.E.A. research on leaguings. (Culver and Hoban, 1973). The "family of schools" strategy may encourage and support a member school attempting to look at its organization in a new way, or to implement change. The "associated group of schools" concept should be re-examined as a strategy with potential for supporting self-renewal. The single school, as a focus for self-renewal, does interact with a community environment that influences its planning and operations.

Awareness-heightening Strategies

Strategies such as the use of a School Practices Inventory and a feedback process heighten staff members' awareness of work patterns in the school organization. Practices that may have been taken for granted, or that may have been hampering communication and interaction are raised to the surface and examined in the discussions of the criteria items on the survey. The information can contribute to the process of setting improvement norms for the organization in the area of staff climate.

The influence of D.D.A.E. processes on a staffs' ability to provide good learning conditions and to cope with the diverse needs of students can be examined in relation to the ratings of importance and need given by the staff to the criteria items on the survey. The final needs assessment process will include items that describe three major aspects of the school organization requiring consideration in planning: curriculum (student outcomes), learning conditions (enabling objectives), and climate.

Management of School-based Planning

Without extensive, formal leadership from an external resource person, field trial staffs began action planning and objective setting that referred to survey-feedback information. In order for such momentum to continue, theory suggests, there is a need to establish a group within the staff to give on-going leadership. The core planning group can give direction to organizational diagnosis, arrange for skill training, coordinate production of plans and objectives, and act as liaison with outside expertise. The need for continuous communications and face-to-face collaboration between teachers and administration in planning tasks was supported by the experiences with all the

field trial sites in this study. The importance of on-going clarification of decision-making prerogatives among staff groups, and between staff members and administrators was also clearly underlined. The usefulness of the needs assessment process in assisting with improving staff awareness of how this occurs was supported by the study. Material and follow-up procedures for use in designing action plans and objectives are needed so that survey feedback can be applied by a core group to school-based planning tasks.

Use of Ethnographic Methods

The formative evaluation methods and ethnographic methods used in studying the process at the three case schools produced valuable information for the developmental work on C.E.P.S. The combination of statistical and observational analysis of data yielded a wide range of insights useful in modifying the self-evaluation process and adapting it for use in schools. The research methods can be adapted for use in monitoring the implementation of planning project materials, and for gathering data on the related needs for changes.

The power and appropriateness of ethnographic methods for studying developmental projects or decision-oriented research topics derives from such features of the methods as the following: it is concerned with generating information that is transmittable and drawn from both precedent and experience; it incorporates the context within which the study operates and uses it as an integral part of the information needed to make judgments; it attempts to observe on-going practices of operation with as little contrived in the situation as possible; it provides a method of approaching holistically intricate social interactions and recording qualitative as well as quantitative data; it provides a group of strategies for tackling problems of interest to the practitioner that might be too inter-related and complex for conclusion-

oriented methods alone to attempt; and it assists the researcher to gather more comprehensive and accurate insights than are generally possible using a conclusion-oriented design with a limited number of variables being manipulated. Particularly in areas of study such as those related to the culture of the school, ethnographic methods assist the researcher to understand the ways people interact and the reasons for that action within the context.

Designing and Packaging Self-evaluation Materials

Overall positive feedback was received about the process being studied, although variations in the individual case schools suggest the need to develop some modifications to both the survey instrument and the feedback process. The aspects requiring modification or subsequent development are: the flexible timeline outlining the sequence of major activities in the process; the additional criteria items for the survey instrument dealing with qualitative differences in school practices; a packet of support materials outlining the process, roles of core leadership group, roles of resource persons, and support groups; instructions for completing the survey instrument; formats for recording decisions; designs for displaying the data; and directions for compiling the objective statements.

Such modifications or additions will enable a staff to be less dependent upon advisory help. The process will become more truly a self-evaluation, and the resulting plans, more competently school-based, thus fulfilling two major goals of the school district team (C.B.E., 1973) designing this process.

RECENT DEVELOPMENTS

Work on the self-evaluation process and the school-based needs assessment

strategy continued after the completion of the study reported in this thesis. A brief outline of events related to the subsequent development and completion of the work is provided here as it forms a more complete look at the pattern of evolution of the whole planning endeavour.

The following chronology summarizes the major activities related to the development of the planning system 1976-79.

Chronology of Activities Related to the Development of C.E.P.S.

YEAR	DESCRIPTION OF ACTIVITY
1. 1976-1977	<p>Development of an evaluation form on which to gather data about the use of the needs assessment materials in an expanded pilot program.</p> <p>Refinement of the survey instrument, the feedback process, the reporting formats, the design of an action/decision recording form for use in objective setting activities with school staffs.</p> <p>Operation of an expanded pilot project group of ten elementary schools in the Calgary system using the school based needs assessment process.</p> <p>Design and implementation of an evaluation of the A.S.G. project, the group of associated schools.</p>
2. 1977-1978	<p>Reorganization of the administration of the district into a matrix organization in which the Curriculum (Program) Development functions were separated from the Planning and Information, and the Evaluation functions. The Program Development group was linked to the Instructional Division. Personnel from the P.P.E. team developing the needs assessment material were assigned to two divisions.</p> <p>Responsibility for developing planning procedures was assigned to one, while consultative work associated with implementing the process and materials was the responsibility of another.</p> <p>A change in focus for the planning system (C.E.P.S.) resulted.</p> <ul style="list-style-type: none"> • The project moved under the "Statement of Purpose" work. <p>Design of school-based and community-based needs assessment strategies continued. Work on district statements of goals began.</p>

Results of the evaluation of the pilot of the needs assessment in the ten schools was reported and discussed with school district administration.

A modified needs assessment instrument including sections on outcome objectives, enabling objectives, and climate was prepared.

- 3 1978-
1979 Core committee guidelines, data processing techniques for analysis of the survey data, formats for display of information resulting from the survey, recording formats for discussions, and re-cycling procedures were outlined.

A related Community Educational Needs Assessment (C.E.N.A.) instrument and process for surveying a community's rating of district goals was developed. It relates to the school-based needs assessment in its statement of goals, and in its format.

The Elementary Needs Assessment (E.N.A.) kit for users was completed. Planning for implementation in two of the five areas of the district was begun.

The A.S.G. concept was studied by a group of school administrators, planners, and area administrators.

The Secondary Needs Assessment instrument and process development began.

4. 1979-
1980 The materials kit is used in two A.S.G.'s during the fall of 1979, and the C.E.N.A. process is piloted in two A.S.G.'s.

The study of the self-evaluation process and the School Practices Inventory reported in this thesis provided practical and relevant information for modifying the materials under preparation for the needs assessment kit. Insights from both the change literature and the field trial of the self-evaluation process yielded practical insights into essential change that are capable of influencing on-going developmental work at the school district level.

APPENDICES

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APPENDIX ONE

ANTICIPATED INVOLVEMENT OF PROJECT SCHOOLS

Involvement Requested of Project Schools.

1. Meeting With The School Staff.

- to discuss briefly the School Practices Inventory and to answer any questions about the follow-up process.
- to complete the Inventory form.
- to identify a contact person from the staff who will meet with SFU personnel from time to time during the project.
- to set date for the first feedback meeting.

Time estimated: About one to one and one half hours.

2. Feedback Session.

- to report to the staff the results of the Inventory.
- to discuss with them any items that seem to require further consideration.
- to set some dates for follow-up contacts with the staff representatives.
- to do a brief evaluation of the first two sessions, and make comments on the Inventory format.

Time estimated: About one hour minimum, and longer, as staff interest indicates.

3. On-going Contact With Staff Contact Person(s).

- to keep in touch with the follow-up procedures that may be implemented by the school.
- to assist in on-going planning, discussion or action.
- to observe what effect, if any, the Inventory process is having.

Time estimated: 4 or 5 contacts/calls/meetings over a 3 month period.

4. Meeting With the School Staff.

- to use the Inventory form once again, after an interval of approximately three months.
- to interview some staff members about the events related to the Inventory Process.
- to evaluate the process by the use of a short form.

Time estimated: about one to one and one half hours.

5. Feedback Report.

- to provide a written report for future staff use.
- to discuss the report of the two sets of Inventory results, if the staff requests such a third meeting.

APPENDIX TWO

BOWMONT PILOT PROJECT REPORT

FEEDBACK MEETING TO BOWCROFT SCHOOL

BOWCROFT QUESTIONNAIRE RESULTS

A. Description of the Instrument:

The questionnaire consists of sixty-eight items which may be divided into six subscales. These subscales are:

- (1) Dialogue: This subscale measures the degree to which all of the staff have the opportunity to participate in discussion and how well informed they are, the degree to which a variety of persons is allowed to assume leadership positions, and the degree to which content of the discussion is relevant to the total school program and includes issues suggested by teachers, parents, students and the principal.
- (2) Decision-Making: Measures the extent to which the total school staff participates in the decision-making process, the extent to which decisions are clearly communicated to all persons affected by the decision, the extent to which alternatives are examined, and the extent to which there is staff consensus on the decisions made.
- (3) Action subscales refers to the appropriateness of the action taken relative to the decision made, the commitment of persons responsible for implementation, the efficiency with which action is carried out, the degree to which action is modifiable in meeting unanticipated situations, and the evaluation of the completed action relative to its proposed goal.
- (4) Meetings measures the climate and effectiveness of staff meetings by rating the importance of content, the degree to which all teachers have the opportunity to contribute to the agenda and participate in the discussions, the openness and frankness which characterizes the meetings, and the practice of providing written summaries of staff meetings.
- (5) Principal assesses the role of the principal, including his interaction and communications with teachers, students and members of the community.
- and-(6) Teachers (the professional role of the teacher). It examines the degree to which teachers engage in discussions defining school goals, make instructional decisions, read professional literature, experiment with new materials, respect the opinions and beliefs of students and other teachers, and evaluate their teaching in terms of achieving school goals.

ITEM KEY:

Scale #	Scale Name	Items Number	Total No. of Items
1	Dialogue	1, 20, 24, 25, 31, 35, 37, 41, 60	9
2	Decision	3, 9, 21, 26, 34, 38, 46, 49, 55	9
3	Action	6, 12, 30, 44, 48, 53, 54, 57, 65	9
4	Meetings	2, 4, 15, 17, 22, 28, 45, 58, 66	9
5	Principal	8, 14, 18, 27, 29, 32, 39, 40, 43, 47, 51, 52, 56, 59, 61, 63, 67	17
6	Teachers	5, 7, 10, 11, 13, 16, 19, 23, 33, 36, 42, 50, 62, 64, 68	15
7	TOTAL SCALE	ALL OF THE ABOVE	68

B. Scoring of the Questionnaire:

The frequency of responses for each item was determined. Each response was weighted according to this scale: 1 for "Never"; 2 for "Seldom"; 3 for "Sometimes"; 4 for "Frequently"; 5 for "Usually"; and 6 for "Always". Therefore, a middling type of response for any one item would have the value of 3.5. If this value is multiplied by the number of items on each subscale, an average response value can be obtained. This can provide a rough guide for determining the weaknesses and strengths of the school as determined by the subscales.

TABLE II: BOWCROFT RESULTS BY SUBSCALES

Scale #	Scale Name	Mean	Standard Deviation	Possible Range	Average Response
1	Dialogue	27.8	6.2	9 - 54	31.5*
2	Decision-Making	33.0	5.1	9 - 54	31.5
3	Action	32.3	6.5	9 - 54	31.5
4	Meetings	36.3	5.2	9 - 54	31.5
5	Principal	61.9	15.3	17 - 102	59.5
6	Teachers	48.3	8.0	15 - 90	52.5*
7	Total	239.6	37.1	68 - 408	238.0

Scale 4 is very much higher than the average response; Scale 1 and Scale 6 are below this reference point; while Scale 2, 3, and 5 are very close to (though slightly below) the reference points.

C. Items which contribute to the trends described in previous table:

In addition to the data on each of the subscales, information is also available on the distribution of responses for each item. Since there is a tendency for respondents to answer in the middling categories (in this case, the "Sometimes" and "Frequently" categories), items which deviate from this trend are of importance.

Items for which 50% or more of the respondents answered in the "Usually" and "Always" categories are: (Bracketed figure after each item indicated the subscale).

- 3. Decisions are clearly communicated to all persons who are affected by the decision (2).
- 4. Meetings are on time (4).
- 7. Teachers make instructional decisions (6).
- 8. The principal has the respect and good will of the students (5).
- 14. The principal respects the teachers (5).
- 15. Meetings are such that members listen to each other (4).
- 17. Each meeting is followed by a written memorandum that summarizes the proceedings of the meeting (4).
- 22. Meetings have an agenda composed of items that any member of the staff can suggest (4).
- 24. Issues and programs discussed by the staff are suggested by both teachers and principal (1).

29. The principal encourages and assists the staff in developing goals for the school (5).
34. Group decisions are reached by consensus (2).
42. Teachers attend courses at colleges and universities (6).
49. When appropriate, the advice of district personnel is sought before a decision is made (2).
55. Group decisions are made by voting (2).
63. The principal promotes openness in his staff (5).

Note, the predominance of items on Scale 2, 4, 5 (Decision-Making Meetings and Principal), and the lack of items from Scale 3 (Action).

Items for which 50% or more of the respondent answered in the "Never" and "Seldom" categories are:

13. Teachers periodically visit other classrooms in the school (6).
16. Teachers can arrange to have their teaching critiqued by other teachers (6).
20. Persons become familiar with the experience of other schools before making a decision (2).
31. Issues and programs discussed by the staff can be suggested by parents (1).
36. Teachers critique each other's teaching (6).
41. Issues and programs discussed by the staff can be suggested by the students (1).
51. The principal encourages the staff to visit other classrooms (5).

Note, the predominance of items on Scale 1 and 6 (Dialogue and Teachers) and the lack of items from Scale 3 and 4 (Action and Meetings).

APPENDIX THREE

SCHOOL PRACTICES INVENTORY INSTRUMENT

SCHOOL PRACTICES INVENTORY

On the following pages are a series of statements that describe various school practices. They are behaviors or conditions that occur within a school and together will provide a description of the organizational climate or "personality" of your school.

You can respond to each statement in two ways:

1. Indicate to what extent each practice exists or occurs in your school.
2. Indicate how you feel about the practice as it presently exists in your school; does it need discussion, or is it satisfactory as is.

It is important that you respond independently, so please decide on your answers without seeking other opinions. Be frank with your answers, with the assurance that individual responses are anonymous. School results will also remain confidential and the information from the inventory will be used in further discussions by your staff.

SCHOOL PRACTICES INVENTORY

DIRECTIONS:

- a) Read each item carefully; it describes a school practice.
- b) Think about the practice described as it occurs in your school.
- c) Decide whether the practice described in the item occurs never, seldom, sometimes, frequently, usually or always in your school.
- d) Draw a circle around one of the numbers following the item to show the answer you selected.
- e) Check one of the two categories ('yes' or 'no') to indicate if you feel that the practice described, as it now exists in your school, needs discussion.

IN MY SCHOOL THIS OCCURS:	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion	
							yes	no
1. Discussions include contributions by most of the members present.	1	2	3	4	5	6	___	___
2. Staff meetings are generally reserved for matters concerned with curriculum, instruction and school organization -- not administrivia.	1	2	3	4	5	6	___	___
3. Decisions are clearly communicated to all persons who are affected by the decision.	1	2	3	4	5	6	___	___
4. Meetings are on time.	1	2	3	4	5	6	___	___
5. The staff engages in discussions aimed at defining school goals.	1	2	3	4	5	6	___	___
6. When a decision is made action is taken to implement it.	1	2	3	4	5	6	___	___
7. Teachers make instructional decisions.	1	2	3	4	5	6	___	___
8. The principal has the respect and good will of the students.	1	2	3	4	5	6	___	___
9. Persons examine and/or experiment with several approaches before making a decision.	1	2	3	4	5	6	___	___
10. Teachers visit other schools.	1	2	3	4	5	6	___	___
11. Teachers read professional educational material.	1	2	3	4	5	6	___	___

IN MY SCHOOL, THIS OCCURS:	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion	
							yes	no
12. Anyone who is interested is encouraged to take the responsibility for implementing decisions.	1	2	3	4	5	6	___	___
13. Teachers periodically visit other classrooms in the school.	1	2	3	4	5	6	___	___
14. The principal respects the teachers.	1	2	3	4	5	6	___	___
15. Meetings are such that members listen to each other.	1	2	3	4	5	6	___	___
16. Teachers can arrange to have their teaching critiqued by other teachers.	1	2	3	4	5	6	___	___
17. Each meeting is followed by a written memorandum that summarizes the proceedings of the meeting.	1	2	3	4	5	6	___	___
18. The principal knows his staff well.	1	2	3	4	5	6	___	___
19. Teachers attend conferences relative to their professional growth.	1	2	3	4	5	6	___	___
20. Many persons assume the leadership positions during group discussions, depending upon the function to be performed.	1	2	3	4	5	6	___	___
21. Both principal and teachers participate in making decisions which affect the school.	1	2	3	4	5	6	___	___
22. Meetings have an agenda composed of items that any member of the staff can suggest.	1	2	3	4	5	6	___	___
23. Teachers try to evaluate the extent to which school goals have been realized.	1	2	3	4	5	6	___	___
24. Issues and programs discussed by the staff are suggested by both teachers and principal.	1	2	3	4	5	6	___	___
25. Dialogue is appropriate to the problem confronted, for example, brainstorming when seeking new and imaginative ideas and task orientation when attempting to solve a particular problem.	1	2	3	4	5	6	___	___

IN MY SCHOOL, THIS OCCURS:	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion	
							yes	no
26. Persons become familiar with the experiences of other schools before making a decision.	1	2	3	4	5	6	___	___
27. The principal encourages others to provide leadership.	1	2	3	4	5	6	___	___
28. Meetings involve only persons who need to be involved.	1	2	3	4	5	6	___	___
29. The principal encourages and assists the staff in developing goals for the school.	1	2	3	4	5	6	___	___
30. Action can be modified to handle unanticipated situations.	1	2	3	4	5	6	___	___
31. Issues and programs discussed by the staff can be suggested by parents.	1	2	3	4	5	6	___	___
32. The principal communicates effectively with students.	1	2	3	4	5	6	___	___
33. Teachers work to implement the goals of the school.	1	2	3	4	5	6	___	___
34. Group decisions are reached by consensus.	1	2	3	4	5	6	___	___
35. Dialogue has a purpose.	1	2	3	4	5	6	___	___
36. Teachers critique each other's teaching.	1	2	3	4	5	6	___	___
37. Dialogue allows for in-depth discussion of issues that are pertinent to the education of children.	1	2	3	4	5	6	___	___
38. Decisions are made on the basis of school goals.	1	2	3	4	5	6	___	___
39. The principal utilizes resource persons from the district to help teachers.	1	2	3	4	5	6	___	___
40. The principal builds the status of his staff.	1	2	3	4	5	6	___	___
41. Issues and programs discussed by the staff can be suggested by the students.	1	2	3	4	5	6	___	___

IN MY SCHOOL, THIS OCCURS:

	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion	
							yes	no
42. Teachers attend courses at colleges and universities.	1	2	3	4	5	6	___	___
43. The principal shows that he appreciates his staff.	1	2	3	4	5	6	___	___
44. Responsibilities for carrying out actions are assumed by many different people on the staff.	1	2	3	4	5	6	___	___
45. Meetings are such that persons can engage in an open and frank discussion of issues.	1	2	3	4	5	6	___	___
46. Decisions are carried out with enthusiasm and good will.	1	2	3	4	5	6	___	___
47. The principal communicates effectively with teachers.	1	2	3	4	5	6	___	___
48. Actions are carried out with a high degree of organization and efficiency.	1	2	3	4	5	6	___	___
49. When appropriate, the advice of district personnel is sought before a decision is made.	1	2	3	4	5	6	___	___
50. Teachers experiment with new materials.	1	2	3	4	5	6	___	___
51. The principal encourages the staff to visit other classrooms.	1	2	3	4	5	6	___	___
52. The principal has the respect and good will of the teachers.	1	2	3	4	5	6	___	___
53. Before a decision is made, the implications of alternative actions are thoroughly explored.	1	2	3	4	5	6	___	___
54. There is a high degree of commitment on the part of people responsible for putting decisions into action.	1	2	3	4	5	6	___	___
55. Group decisions are reached by voting.	1	2	3	4	5	6	___	___
56. The principal respects the opinions and beliefs of teachers.	1	2	3	4	5	6	___	___
57. Appropriate actions are taken based on the decisions made.	1	2	3	4	5	6	___	___

IN MY SCHOOL, THIS OCCURS:	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion	
							yes	no
58. Meetings are such that there is an interaction of teachers.	1	2	3	4	5	6	___	___
59. The principal communicates effectively with the community.	1	2	3	4	5	6	___	___
60. Persons read what scholars and informed practitioners have written on the subject and bring relevant ideas from their reading into the dialogue.	1	2	3	4	5	6	___	___
61. The principal provides fair and equitable treatment for all.	1	2	3	4	5	6	___	___
62. Teachers respect the opinions and beliefs of students.	1	2	3	4	5	6	___	___
63. The principal promotes openness in his staff.	1	2	3	4	5	6	___	___
64. Teachers evaluate their teaching in terms of achieving school goals.	1	2	3	4	5	6	___	___
65. After an action has been taken, it is evaluated.	1	2	3	4	5	6	___	___
66. Meetings can be called by both teachers and principal.	1	2	3	4	5	6	___	___
67. The principal attends conferences relative to his professional growth.	1	2	3	4	5	6	___	___
68. Teachers respect the opinions and beliefs of other teachers.	1	2	3	4	5	6	___	___

Culver, C.M. and Hoban, G.J. The Power to Change. New York: McGraw-Hill Book Co., 1973, p.p. 293-297.

APPENDIX FOUR

BIOGRAPHICAL INFORMATION SHEET

ACCOMPANYING THE SCHOOL PRACTICES INVENTORY INSTRUMENT

SCHOOL PRACTICES INVENTORYBIOGRAPHICAL INFORMATION

Please place a check mark beside the appropriate category.

1. Age: a) under 25 _____
 b) 26 _____ 35 _____
 c) 36 _____ 45 _____
 d) 46 _____ 55 _____
 e) 56 _____ 65 _____
2. Sex: a) male _____
 b) female _____
3. Highest level of education: a) some college/university _____
 b) bachelor's degree _____
 c) master's degree _____
 d) other _____
4. Years of teaching experience: a) first year teaching _____
 b) 1 _____ 5 _____
 c) 6 _____ 10 _____
 d) 11 _____ 15 _____
 e) 16 _____ 20 _____
 f) 21 _____ 25 _____
 g) 26 or more _____

FOR PRINCIPALS ONLY:

5. Years of administrative experience: a) first year _____
 b) 1 _____ 5 _____
 c) 6 _____ 10 _____
 d) 11 _____ 15 _____
 e) 16 _____ 20 _____
 f) 21 _____ 25 _____
 g) 26 or more _____
6. Years at this school _____

APPENDIX FIVE

LETTER TO SCHOOLS OUTLINING STUDY ACTIVITIES

EXPLORING THE USE OF THE SCHOOL PRACTICES INVENTORY IN A PROCESS OF SELF-EVALUATION WITH ELEMENTARY SCHOOL STAFFS.

The project is designed to explore the use of some materials and techniques developed by Dr. John Goodlad and a team of researchers from I/D/E/A. Between 1966 and 1971, the group worked with a League of eighteen southern California elementary schools. The major focus for the study was the question of what happens when a school staff tries to cope more effectively with the problems inherent in schools. They were interested in studying the process of change; the process of renewal and how it related to certain characteristics of staff interaction and organizational climate in the schools.

Through the course of the five year study, Dr. Goodlad's group and the staffs of the eighteen schools worked together to discover both ways of assessing and describing the staff characteristics that seemed to effect the change process. They also devised some ways of altering a school's procedures that appear to improve a school's chances of successfully achieving change goals.

One of the techniques devised in the I/D/E/A study is the Inventory of questions used to assess school practices. When it is used in a process of self-evaluation, discussion and feedback, it will give a school staff the opportunity to look more closely at what it is doing. The Inventory examines how the staff goes about dealing with day-to-day planning and operating of the school, focusing on the processes of DIALOGUE, DECISION-MAKING, TAKING ACTION, GIVING LEADERSHIP, TEACHER INVOLVEMENT, and EVALUATION. The information provided by an analysis of staff responses to the Inventory items can be used by the staff to further discussion and planning. It can form the basis for growth and renewal of staff and school procedures.

APPENDIX SIX

INTERVIEW PROTOCOL USED WITH STUDY PARTICIPANTS

INTERVIEWS ON THE SCHOOL PRACTICES INVENTORY

1. The statements on the Inventory describe 68 practices. They relate to 6 areas of staff operation and interaction: DIALOGUE, DECISION-MAKING, ACTION, MEETINGS, PRINCIPAL'S ROLE, and TEACHER'S ROLE.
 - a) Do they describe things that are important in your school?
 - b) Are they related to other efforts you are making in this school?
 - c) Were people able to answer candidly, in your opinion?
 - d) Are there any important areas of practices that are left out?
2. The self-evaluation process included using the Inventory, receiving the Feedback Report, discussing the results, deciding upon how to use the information, and redoing the Inventory after a 3-4 month period.
 - a) In your perception, could the process be used by a staff on its own as a self-evaluation process?
 - b) What was the effect, if any, of having outside resource persons involved in the process during this field-trial?
3. The self-evaluation process was presented at your school by means of a letter, and through a presentation at a staff meeting. Your participation was invited.
 - a) When you first heard about it, what did you expect it would be like?
 - b) When you heard it called a "self-evaluation" did that concern you?

4. The feedback sessions were designed to provide information from the Inventory for use by the school staff. They consisted of a meeting at which a written report was presented and copies of the analysis made available for all staff members. A discussion of the results followed.

- a) Was the feedback session useful?

- b) Would you say it was open or closed, in your opinion?

- c) Were people able to participate in the discussion?

5. When the feedback report had been presented, and discussion followed, were there any resulting actions, or actions occurring about the same time that were affected by the feedback, or other aspects of the self-evaluation process?

- a) Actions?

- b) Related actions?

6. Comments on the process, or on the involvement of your school in the project?

DATE _____

CASE # _____

PERSON INTERVIEWED _____

APPENDIX SEVEN
FEEDBACK REPORTS
EXAMPLES OF TWO KINDS OF
MATERIALS USED AT FEEDBACK MEETINGS

DIRECTIONS:

- a) Read each item carefully; it describes a school practice.
- b) Think about the practice described as it occurs in your school.
- c) Decide whether the practice described in the item occurs never, seldom, sometimes, frequently, usually or always in your school.
- d) Draw a circle around one of the numbers following the item to show the answer you selected.
- e) Check one of the two categories ('yes' or 'no') to indicate if you feel that the practices described, as it now exists in your school, needs discussion.

Wide range of opinion 50% or fewer responses in "usually" & "always" Differing staff- principal responses. L=lower, H=higher rating	IN MY SCHOOL THIS OCCURS:	no response	I feel it needs discussion						No response			
			never	seldom	sometimes	frequently	usually	always		yes	no	
			1	2	3	4	5	6				
X		1. Discussions include contributions by most of the members present.	1	0	3	<u>3</u>	2	8	2	4	14	1
	X L	2. Staff meetings are generally reserved for matters concerned with curriculum, instruction and school organization--not administrivia.	3	0	0	<u>1</u>	1	10	4	1	17	1
		3. Decisions are clearly communicated to all persons who are affected by the decision.	0	0	0	3	4	<u>9</u>	3	5	13	1
X		4. Meetings are on time.	1	0	1	1	2	<u>12</u>	2	1	17	1
	X	5. The staff engages in discussions aimed at defining school goals.	0	0	0	2	<u>8</u>	5	4	3	15	1
		6. When a decision is made action is taken to implement it.	0	0	0	1	0	<u>9</u>	9	1	17	1
		7. Teachers make instructional decisions.	0	0	0	1	0	5	<u>13</u>	1	17	1
		8. The principal has the respect and good will of the students.	0	0	0	0	0	<u>4</u>	15	0	18	1
		9. Persons examine and/or experiment with several approaches before making a decision.	0	0	0	0	9	<u>9</u>	1	2	16	1
X	X	10. Teachers visit other schools.	0	0	0	<u>9</u>	3	2	5	1	16	2
	X	11. Teachers read professional educational material.	3	0	0	4	<u>5</u>	5	2	2	14	3

Wide range of opinion	50% or fewer responses in "usually" & "always"	Differing staff-principal responses	L=lower, H=higher rating	IN MY SCHOOL THIS OCCURS:	no response	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion		No response
												yes	no	
X				12. Anyone who is interested is encouraged to take the responsibility for implementing decisions.	2	0	2	1	3	4	<u>7</u>	3	15	1
X	X	X	H	13. Teachers periodically visit other classrooms in the school.	1	1	7	7	<u>2</u>	1	0	6	12	1
				14. The principal respects the teachers.	0	0	0	0	0	<u>4</u>	15	1	17	1
				15. Meetings are such that members listen to each other.	1	0	0	0	0	7	<u>10</u>	1	17	1
X				16. Teachers can arrange to have their teaching critiqued by other teachers.	4	2	3	1	1	<u>3</u>	5	5	11	3
X	X			17. Each meeting is followed by a written memorandum that summarizes the proceedings of the meeting.	3	8	<u>3</u>	4	0	0	1	2	15	2
				18. The principal knows his staff well.	0	0	0	0	0	<u>8</u>	11	0	18	1
		X		19. Teachers attend conferences relative to their professional growth.	0	0	0	5	5	<u>4</u>	5	1	17	1
X				20. Many persons assume the leadership positions during group discussions depending upon the function to be performed.	1	0	1	3	4	<u>6</u>	4	1	16	2
				21. Both principal and teachers participate in making decisions which affect the school.	0	0	0	1	1	<u>6</u>	11	2	16	1
				22. Meetings have an agenda composed of items that any member of the staff can suggest.	1	1	0	1	1	<u>2</u>	13	0	17	2
X	X	X		23. Teachers try to evaluate the extent to which school goals have been realized.	0	0	1	5	4	<u>6</u>	3	4	14	1
				24. Issues and programs discussed by the staff are suggested by both teachers and principal.	1	0	0	2	0	<u>9</u>	7	2	15	2

Wide range of opinion 50% or fewer responses in "usually" & "always"		Differing staff- principal responses L=lower, H=higher rating	IN MY SCHOOL, THIS OCCURS:		no response					I feel it needs discussion		No response		
			no response	never	seldom	sometimes	frequently	usually	always	yes	no			
				25. Dialogue is appropriate to the problem confronted, for example, brainstorming when seeking new and imaginative ideas and task orientation when attempting to solve a particular problem.	1	0	0	0	2	<u>12</u>	4	0	16	3
		X H		26. Persons become familiar with the experiences of other schools before making a decision.	2	0	0	8	5	<u>3</u>	1	1	14	3
X				27. The principal encourages others to provide leadership.	1	0	1	1	6	8	<u>2</u>	1	16	2
X				28. Meetings involve only persons who need to be involved.	1	1	1	2	1	10	<u>3</u>	1	16	2
				29. The principal encourages and assists the staff in developing goals for the school.	1	0	0	1	0	5	<u>12</u>	1	16	2
				30. Action can be modified to handle unanticipated situations.	2	0	0	0	2	<u>13</u>	2	2	14	3
X	X	X H		31. Issues and programs discussed by the staff are suggested by parents.	4	0	3	8	2	1	<u>1</u>	3	12	4
				32. The principal communicates effectively with students.	0	0	0	0	0	9	<u>10</u>	2	15	2
				33. Teachers work to implement the goals of the school.	1	0	0	0	3	7	<u>8</u>	2	15	2
				34. Group decisions are reached by consensus.	0	0	0	1	2	8	<u>8</u>	2	15	2
				35. Dialogue has a purpose.	1	0	0	1	0	9	<u>8</u>	1	15	3
X	X			36. Teachers critique each other's teaching.	1	2	1	<u>4</u>	1	0	0	4	12	3
				37. Dialogue allows for in-depth discussion of issues that are pertinent to the education of children.	2	0	0	2	5	<u>5</u>	5	4	13	2
				38. Decisions are made on the basis of school goals.	1	0	0	0	5	<u>10</u>	3	2	15	2

Wide range of opinion 50% or fewer responses in "usually" & "always" Differing staff- principal responses L=lower, H=higher rating				IN MY SCHOOL, THIS OCCURS:										
				no response	never	seldom	sometimes	frequently	usually	always	I feel it needs discussion		No response	
					yes	no			yes	no				
X	X			39. The principal utilizes resource persons from the district to help teachers.	2	1	0	6	3	<u>3</u>	4	4	12	3
				40. The principal builds the status of his staff.	1	0	0	0	0	7	<u>1</u>	2	15	2
X	X	X	H	41. Issues and programs discussed by the staff are suggested by the students.	3	1	2	6	4	0	<u>3</u>	0	14	5
	X			42. Teachers attend courses at colleges and universities.	3	0	0	3	6	<u>5</u>	2	0	15	4
				43. The principal shows that he appreciates his staff.	0	0	0	1	0	<u>12</u>	6	1	16	2
				44. Responsibilities for carrying out actions are assumed by many different people on the staff.	0	0	0	2	3	6	<u>8</u>	1	16	2
				45. Meetings are such that persons can engage in an open and frank discussion of issues.	1	0	0	0	3	8	<u>7</u>	0	16	3
				46. Decisions are carried out with enthusiasm and good will.	0	0	0	0	2	13	<u>4</u>	0	17	2
				47. The principal communicates effectively with teachers.	0	0	0	0	0	6	<u>13</u>	3	14	2
				48. Actions are carried out with a high degree of organization and efficiency.	1	0	0	0	2	<u>11</u>	5	1	16	2
				49. When appropriate, the advice of district personnel is sought before a decision is made.	2	0	0	3	1	<u>5</u>	8	0	15	4
				50. Teachers experiment with new materials.	0	0	0	1	7	<u>5</u>	6	2	15	2
X	X	X	H	51. The principal encourages the staff to visit other classrooms.	3	0	1	5	4	<u>3</u>	3	6	10	3
				52. The principal has the respect and good will of the teachers.	0	0	0	0	0	<u>7</u>	12	1	16	2

Wide range of opinion 50% or fewer responses in "usually" & "always"	Differing staff- principal responses L=lower, H=higher rating	IN MY SCHOOL, THIS OCCURS:	no response					I feel it needs discussion		No response		
			no response	never	seldom	sometimes	frequently	usually	always		yes	no
		53. Before a decision is made, the implications of alternative actions are thoroughly explored.	0	0	0	1	5	<u>9</u>	4	3	14	2
		54. There is a high degree of commitment on the part of people responsible for putting decisions into action.	0	0	0	0	0	11	<u>8</u>	1	16	2
		55. Group decisions are reached by voting.	2	0	0	1	3	<u>9</u>	4	1	15	3
		56. The principal respects the opinions and beliefs of teachers.	0	0	0	0	0	10	<u>9</u>	1	16	2
		57. Appropriate actions are taken based on the decisions made.	0	0	0	0	0	13	<u>6</u>	2	15	2
X		58. Meetings are such that there is an interaction of teachers.	1	0	1	1	3	<u>11</u>	2	2	15	2
		59. The principal communicates effectively with the community.	2	0	0	0	1	<u>8</u>	8	3	14	2
X	X	60. Persons read what scholars and informed practitioners have written on the subject and bring relevant ideas from their reading into the dialogue.	2	0	2	<u>9</u>	4	2	0	2	13	4
		61. The principal provides fair and equitable treatment for all.	0	0	0	0	0	<u>9</u>	10	2	15	2
		62. Teachers respect the opinions and beliefs of students.	0	0	0	1	3	<u>11</u>	4	2	15	2
		63. The principal promotes openness in his staff.	1	0	0	0	2	<u>9</u>	7	2	15	2
		64. Teachers evaluate their teaching in terms of achieving school goals.	3	0	0	3	3	<u>7</u>	3	5	10	4
	X	65. After an action has been taken, it is evaluated.	1	0	0	5	5	<u>4</u>	4	7	9	3
X		66. Meetings can be called by both teachers and principal.	1	1	2	2	2	<u>3</u>	8	1	16	2
		67. The principal attends conferences relative to his professional growth.	2	0	0	3	2	<u>7</u>	5	1	15	3
		68. Teachers respect the opinions and beliefs of other teachers.	0	0	0	1	2	<u>11</u>	5	1	16	2

SCHOOL B INVENTORY OF SCHOOL PRACTICES
 FEEDBACK REPORT
 APRIL 7, 1976

So that the staff can see to what extent there is agreement among them relative to each item, frequencies of each response (1-6) have been entered on a blank form of the Inventory. The response category selected by the principal has been underlined so that any difference in response patterns may be examined.

1. Items with a wide range of opinion.

These are the items where some people responded in 5 or 6 of the categories indicating a divergence of perceptions among staff members about a particular procedure.

least agreement: decision, action, dialogue, principal.
 strongest agreement: meetings, teachers.

Items related to Dialogue:	20,25,31,37,41,60	(6/9)
Decision:	3,9,26,34,46,49,55	(7/9)
Action:	6,30,44,48,57,65	(6/9)
Meetings:	2,4,17,28	(4/9)
Principal:	18,27,29,32,40,43,47,51,59,61,63	(11/17)
Teachers:	5,10,13,16,23,64,68	(7/15)

2. Items with 50% or more of the staff responding in the lower categories.

These are the items where half or more of the staff responded in categories 1-3. This pattern indicates that many staff members see the practices described in the items below as occurring less frequently than others that they rated.

Items related to Dialogue:	25,31,41,60	
Decision:	3,26,34,46,49	
Action:	6,48,53,54,57,65	
Meetings:	2,4,28	(3/9)
Principal:	39,40,51,52	(4/17)
Teachers:	10,11,13,16,23,36,42,64	(7/15)

Lowest scales are: action, teachers, decision.
 Strongest scales are: principal, meetings

3. Items where staff/principal responses differ.

These are the items on which the staff's and principal's ratings varied by 2 or more response categories. This likely indicates a divergence in perceptions about the degree to which these practices occur in the school. The principal's response category is underlined on the frequency report.

Items: 8,12,15,16,17,18,22,23,29,30,32,35,45,47,52,62,66

With which types of practices is this pattern occurring?

Are any of these practices important in your school?

Are these practices also ones which were given lower ratings by many people on staff?

Was there divergence among the ratings on any of these items?

4. Items with 50% or more of the staff responding in the highest categories.

These are the items were half or more of the staff felt that the practice described in the Inventory item was occurring 'frequently' or 'always'.

Items: 5,7,8,9,12,14,15,17,18,19,21,24,27,29,30,32,33,35,38,43,44,
45,47,52,55,56,58,61,62,63,66,68.

What kinds of practices are indicated by the above items?

Are these practices that you feel are important for your school?

Are any of these positively rated practices related to other practices in the inventory that did not get such a high rating?

5. Items with more than 1/3 of the staff indicating a need for discussion.

Items related to Dialogue: 31,37,60

Decision: 3,38,46

Action: 6,48,53,54,57,65

Meetings: 2

Principal: 39

Teachers: 5,16,23,33,36,64

Scales showing most satisfaction: Principal, meetings.

Scales showing least satisfaction: action, teachers.

APPENDIX EIGHT

STAFF MEETING AGENDA FROM SCHOOL A

SELF-EVALUATION PROCESS - A PROPOSAL

1. Constant pressure to innovate and change Education being studied as a change process taking place within the school organization. (not from outside pressure)
2. How, then, does a school know whether it should make changes? - what changes? How to effect changes? i.e. How does it become self-renewing?
3. Project - To develop and try out a self-evaluation process.
4. The criteria for the process:
 - (a) multi-dimensional:
 - 1) dialogue (between principal and staff)
 - 2) decision making (involvement)
 - 3) action - changes resulting from 1 & 2.
 - (b) emphasize staff involvement
 - (c) facilitate growth and renewal
5. Assumptions:

Self-evaluation in context of program evaluation

 - (a) includes anticipated and unanticipated results
 - (b) people-centered - involves all personnel (engineer, custodians, secretary, staff assistant, C.S. Coordinator, supervision aide)
6. Procedures:

"The most specific search of all will be done to identify strategies and procedures that could be used by a school staff to assess their interaction and the organizational climate related to the change process."

A "VARIANCE ANALYSIS"

- Some discrepancies between
 - (a) what presently exists
 - (b) what we think should exist
- To help us in reviewing our school philosophy and in developing a self-evaluation process

Area of Variance	What is	What should be
Goals and Objectives (to include intellectual, social and physical)		
Materials, Equipment		
Activities		
Evaluation		

APPENDIX NINE

VALUES SCHOOLS

An example of the controversy surrounding the introduction of this concept is to be found in a newspaper report from about the time of the project. Several school districts in the lower mainland area of British Columbia had been considering the establishment of a value school to provide an alternative for parents desiring that type of program. Langley had designated a school a fundamental school. However, the parents who were opposed to the value school idea objected to having their children, who were already attending the designated school, move to another facility to make room for the alternative program. A similar experiment in Surrey had caused a "great deal of controversy".¹

1. Vancouver Sun. "Vote censured in school row", article from "A Reporters View", Vancouver Sun, Saturday, March 27, 1976, p. 53.

APPENDIX TEN
FAMILY LIFE PROGRAM

NOTE REGARDING FAMILY LIFE PROGRAM AT SCHOOL B

The Family Life program was an issue identified by the staff members at School B during initial interviews. It related to some shifts in School District priorities and goals that were affecting the curriculum in the Social Studies. Staff attributed the shift to pressure from portions of district public opinion concerned about the inclusion of sex education as a part of Family Life Programs.

Staff members expressed concern about the effect on the program in their school that the Board directive was having. The staff had developed a program to meet student needs in their school. The feeling that the directive prevented the school from meeting student needs in this area was widely expressed by teachers to the interviewer during visits to the school.

FOOTNOTES

FOOTNOTES

<u>Chapter</u>	<u>Note</u>	
One	1	For a discussion of decision oriented and conclusion oriented research, see Chapter three, p. 74.
Three	1	A description of C.E.P.S. is to be found in Chapter one, p. 8.
	2	The handbook referred to is associated with the C.E.P.S. development described on p. 8 of Chapter one of this thesis.
	3	The study was being done during the second semester of the university year. The final stages would coincide with the end of school term activities.
	4	For a copy of the document entitled "Anticipated Involvement of Project Schools" See Appendix 1, p. 201.
	5	The school district uses the "community school" term to denote schools in which the community and school use of the facility are more closely linked than in regular schools through planning for community activities, shared use of gymnasias for recreation, and participation by community members in school activities.
	6	A more detailed description of the D.D.A.E. process can be found in Chapter one.
	7	See Appendix 2 for a report on the pilot study of the Criteria Instrument in a Calgary School.
	8	See Appendix 3 for a complete copy of the revised instrument.
	9	See Appendix 4 for a copy of the Biographical information sheet.
	10	See Appendix 5 for a copy of the letter sent to schools which included the proposed plan for the activities.
	11	See Appendix 6 for a copy of the Interview Protocol on the School Practices Inventory used with case study participants.
	12	See Appendix 7 for an example of the format used for feedback reports.

<u>Chapter</u>	<u>Note</u>
Four	1 See Chapter one, p. 2 for a discussion of the term Renewal.
	2 The condition resulted in some teachers working in isolated classrooms and some working together in open-area teams which gave rise to comments such as "We need to find out what the others out there are doing".
	3 See Appendix 9 for additional material relating to this concept.
	4 See Appendix 10 for material related to this issue.
	5 See Appendix 4 for a copy of the Biographic Information section of the School Practices Inventory.
	6 See Chapter three, p. 86 for a description of the selection process.
	7 See Chapter three, p. 94 for a description of the organization used for gathering ethnographic data.
	8 See Appendix 8 for a copy of the staff meeting agenda with a summary of both the Study Proposal and the Variance Analysis project which were being planned in School A.
	9 This request was made during the initial interview and was not mentioned again until the final Key Informant interviews, when the principal reiterated his feeling that items on "the principal" should not be included as they disrupted the rapport between teachers and administrators.
	10 Further detail on contextual factors affecting School A noted in the section of Chapter four headed "Contextual Factors". This was a community school and the staff used a half day per week as a planning time while students attended recreational activities.
	11 See an earlier section of this chapter on Contextual factors affecting the study.
	12 See Appendix 7 for a copy of the feedback report prepared for School A after the pretest.
	13 Teacher interview School C.
	14 See Appendix 6 for a copy of the Interview Protocol.
	15 A more detailed analysis of each item on the Inventory may be found in the discussion related to Research Question 4.

<u>Chapter</u>	<u>Note</u>	
Four	16	A copy of print material sent to schools as an initial information communication is to be found in Appendix 5.
	17	Comments noted during the Key Informant interviews at School C.
	18	Key Informant interviews at School C.
	19	Key Informant interviews at School B.
	20	For items suggested, see Chapter four, the section dealing with Research Question Four.
	21	See Chapter two, pp. 64-67 for a description of the I.D.E.A. study.
	22	See p. 90 in Chapter three for a description of the instrument and the modifications made to it, also see Appendix 3.
	23	Critical value for $N = 19$ at .05 level is .458.
	24	Item #45: Meetings are such that persons can engage in open and frank discussion of issues.
	25	See section in Chapter four dealing with Research Question three, pp. 149-164.
	26	For a more detailed account of the development of the instrument, see pp. 91-92 Chapter Three.
	27	Interview notes, taken February 12, 1976, at School C.
	28	Reports of contact person at School C between March 18 and June 11, 1976.
29	Observation notes taken during initial staff meeting, February 17, 1976.	
Five	1	The C.E.P.S. development is described in Chapter one, p. 8
	2	The "decision-oriented" research is contrasted to "conclusion-oriented" research in a section of Chapter three, pp. 74-76.

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