

DOCUMENT RESUME

ED 076 697

TM 002 706

AUTHOR Feitler, Fred C.
TITLE The Profile of a School and Measurement of a
Multi-School Organization Change Program.
PUB DATE 73
NOTE 24p.; Presented at the annual meeting of American
Educational Research Association (New Orleans,
Louisiana, February 25-March 1, 1973)
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Decision Making; *Educational Change; Horizontal
Organization; Open Education; *Organizational Change;
Program Descriptions; Program Evaluation; *School
Organization; Tables (Data); Teacher Administ or
Relationship; *Teacher Participation
IDENTIFIERS Profile of A School

ABSTRACT

Modern organization theory and research from business and industry predicts that schools which change toward the Likert participative group organizations will increase productivity. This paper reports interventions of a one-year organization development program carried out with 12 schools and the change results measured by the Profile of a School. Pre- and post-Profile means are compared, with total means showing significant change in the desired direction. Both the Profile, as a means of measuring organizational change, and the O.D. strategy employed have direct implications for further research and application to educational change programs. (Author)

FORM 8510

PRINTED IN U S A

ED 076697

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

THE PROFILE OF A SCHOOL

AND MEASUREMENT OF A MULTI-SCHOOL ORGANIZATION

CHANGE PROGRAM¹

Fred C. Feitler

Southern Tier Regional Office for Educational Planning
1408 Lake Street
Elmira, New York

TM 002 306

¹Prepared for presentation at the 1973 Convention of the American Educational Research Association, New Orleans, Louisiana

THE PROFILE OF A SCHOOL AND MEASUREMENT
OF A MULTI-SCHOOL ORGANIZATION CHANGE
PROGRAM

Fred C. Feitler
Southern Tier Regional Office for Educational Planning
Elmira, New York

Background:

During the past decade, and especially now, public education has come under attack for failing to provide relevant education for the future.¹

In the past society has expected schools to maintain the status quo for a relatively static systems of institutions, organizations and groups. Increasingly, however, change is demanding that our schools provide education that is more relevant now and for the future. Increasing rates of change effect the basic fiber of the learning process itself and reflect drastic changes brought about through the impact of technology, changing social patterns, and a fluxing value system.²

Student learnings cannot assume fixed roles, organizations, and communities. Jung suggests that students today and especially so tomorrow must learn not what roles exist, but what roles are, how they change, and how to adjust to their changing. Rather than acquiring fixed bodies of knowledge, students must learn that knowledge will continue to change and must be acquired continuously. As much of what is learned becomes antiquated, students must learn to become continuous learners over a lifetime. Furthermore, Jung points out that the schools cannot leave it to chance that students be prepared to shift from a static to a dynamic society.³

More specifically, current changes in the basic approach to education such as personalized learning, independent study, open education, and the emphasis upon teacher and pupil competency as a measure of success have

placed new stresses on already over-taxed organizations. The school, the building block for education, must provide an environment where teachers can change their patterns of operating to meet the rapidly shifting needs of students and society. Such changes require that teachers and administrators become more than disseminators of information; they must also become problem identifiers, problem analyzers, resource utilizers, problem solvers, and instituters of process learning.

Theory:

The above statement of the conditions and demands currently placed upon schools suggests that the traditional model of educational organizations may be inadequate to provide an environment for learning for the future and (not the past) for a continuously changing society. The question that must be asked and acted upon, is "What kind of organization and organizational processes can be provided which permit and encourage teachers to develop and respond to needs now and for the future?"

Modern organization theory and research from organization development in business and industry suggests that organizations which change in the direction described by Likert as being participative group in management are more productive and provide greater employee satisfactions than organizations which are more authoritarian in management and operation. Likert's participative group organization is characterized as being collaborative and inter-dependent, with overlap between horizontal hierarchies and decision making occurring as close to point of implementation as possible.⁴ Despite the lack of generally agreed upon criteria of what constitutes productivity in the schools, the Likert model, substantiated by theory and research describing social psychological variables in or-

ganizations, is useful in developing and implementing an organization change strategy for schools. The operationalization of writers such as Katz and Kahn,⁵ Argyris,⁶ McGregor,⁷ and others provides a specific basis for interventions in schools.

As schools become more open, as teachers are more satisfied with the school as a place to work, as collaboration and participative decision-making occur, as teachers develop personally and interpersonally, as schools become more self-renewing, they become capable of initiating, experimenting, and risking behaviors which can begin to provide a proactive learning environment in contrast to one that is bound by tradition and expectations of the past. In the belief that the research and theory relating to organizational productivity and employee satisfaction emanating from the private sector is correct, an organization development project was initiated to promote change and self-renewal in a sample of schools in the Southern Tier Region of Upstate New York. These schools became known as the Consortium of Schools.

THE CONSORTIUM OF SCHOOLS⁸

Strategy:

Initially, explanatory meetings were held for schools expressing interest in change and innovation, at which Consortium concepts and the goals of organization development were explained.⁹ These goals were:

1. To assist local school systems in diagnosing their existing ability to manage a productive process of planned change.
2. To develop strategies for improving the system's capacity for self-renewal.
3. To improve procedures and structures for the management of educational change.
4. To mobilize a large resource base for the planning and implementation of activities supporting the local school's progress toward self-renewal through cooperative effort.

Principals and teachers attending these meetings were invited to send a team of five members, including the principal, to a two-day introductory workshop. The purpose of this experience was to give a clearer picture of what involvement would entail and also to begin the process of skill training. Of the sixteen schools attending this workshop, twelve opted to commit both human and financial resources to the Consortium project.

The strategy called for intensive training of a change-agent team of five members, including the principal, which would serve as a training and facilitation team in its home school. The multi-school focus was seen as a means to provide training economically and also to begin a mutual support and resource sharing system between and within schools.

Training: 10

Initially a five day workshop was held during the summer of 1970 for the change-agent teams. The goals were:

1. To provide instruction and experiences which would help individuals from each school to develop into a cohesive team.
2. To acquire interpersonal, group leadership, and planning/problem solving skills.
3. To help teams focus on change strategies which would involve other school staff.
4. To form a Consortium Council to assume responsibility for Consortium-wide activities and management.

The five-day program was divided into three basic areas of training. The first day and one-half focused on team building and group leader-member skills. Interpersonal skills of sharing, being open, and distinguishing between thoughts and feelings were included. The middle portion of the week focused upon skills needed for planning/problem solving and the basic notions of organization development. The concepts of organizational climate, organizational problem identification, and methods of viewing

organizational behavior were experienced. The last segment of this training focused on development of a strategy to induce change back in the school. Teams developed plans and tested these with other teams. The notion of alternative strategies was introduced, and finally the concept of a Consortium was discussed and resources identified which could be utilized by member schools. The Consortium Council was formed and consisted of one member from each of the schools.

Evaluation of the training event indicated that team members perceived that the training had provided useful and extensive learnings and that their team decision-making and problem solving abilities had increased.

In November, a one day training program was provided to reinforce skills, to share accomplishments, to identify areas of needs, and to admit to the difficulties of performing as an internal change-agent team. During this three month period of time the external consultants met with teams to provide at-elbow support and to provide design input where such was needed and requested.

During January of 1971 the consultants did a diagnosis of each school and prepared a series of one day workshop/training sessions for individual school teams.

The Consortium Council:

The Council met approximately once a month during the year to develop a self-renewing and sustaining Council for the improvement of education.

This function was defined to involve:

1. Developing a system for interschool communication
2. Development of more effective process skills
3. Sharing and evaluation of ideas and innovations
4. Becoming more self-operative and independent of outside help

Specific roles evolved and included: (1) sharing ideas between schools, (2) helping member schools with change projects, (3) providing a leadership body for the Consortium, (4) increasing the resources of the Consortium; (5) testing possible change strategies, (6) serving as a clearing house for ideas and resources.

At Council meetings teams gave reports of progress and problems. The Council encouraged teams to initiate and follow through with their planning and with activities that involved their total faculties. The processing which occurred at meetings of the Council provided support and communication for all participating schools.

Documentarians:

As part of the overall evaluation design, there was a need to document the behavioral, attitudinal, and perceptual changes occurring in the schools. The concept of a participant observer within each building evolved into the notion of the Documentarian. A training day was held for team members who volunteered to serve as documentarians. The role and function of the documentarian was explained and teachers helped to develop and test a form which could be administered at any meeting held within the school. The Documentarian form picked up data on decision-making processes, problem solving processes, the nature of interpersonal communication, and the quality of interpersonal communication exhibited. Documentarians reported that the use of the form improved their process observation skills markedly and that the data collected served as useful survey feedback for groups of faculty, in addition to providing data about how skills were being used, which would have been difficult to collect in other, more traditional, ways.

Research/Evaluation:

An evaluation and research design was developed to measure the effects of the interventions and training. Specifically, organizational processes and shifts in organizational behavior were measured by the Profile of a School. These results will be presented later. A survey of teacher practices, skills used, and changes in perception were collected from team members (those directly involved in the Consortium training) and from a random sample of non-team members. Student perceptions of the school and classroom practices were also collected. The documentarian data mentioned earlier were also a part of the measurement design. Anecdotal incidents were also noted.

General Results:

While it is difficult, if not impossible, to establish cause and effect relationships between the training/interventions and changes which have occurred, the summative effects of the program are now apparent. In one district a large scale training program in affective education training has been instituted. The initiator of this program was a teacher in a Consortium school. Several of the Consortium schools are now initiating open space, open education concepts which they attribute to training which they received from the Consortium experience. Learning centers are present in several of the Consortium schools. There has been communication between schools regarding innovation and training; there has been visitation between school faculties and sharing of costs of outside consultants. While these may not seem terribly significant, they have occurred in schools not known for this degree of openness nor for their innovativeness. In one of the schools, the advisor to the class play has begun rehearsals with training for the cast which is markedly

similar to training she received from the Consortium. Teachers report that they have used some of the training with students with success.

The Profile of a School

The Profile of a School is a thirty item questionnaire developed from a fifty-one item, parallel form used in business and industry¹¹ and a thirty-two item school form developed by Jane and Rensis Likert. The school form is administered to teachers and principals and can be used to measure past and present perceptions of organizational behavior or present and ideal behaviors, depending upon the data that is desired. Factor analysis of the Profile instrument indicated that it measures and behaviorally describes a central construct, defined as the organizational environment. This environment is a measure of the perceptions of the interpersonal and group processes present in the school organization. Five discrete factors were identified:¹²

Superior-Oriented Dimension - Factor 1 reflects the nature of the interpersonal environment derived from the behavior of the principal. Factor 1 was called "Superior Oriented" processes or the Superior-Oriented dimension, since it includes elements of both leadership and supervisory processes.

Task-Cooperation Dimension - Factor 2 describes the quality and amount of cooperation operating in the school, particularly as it relates to tasks and goals. This cluster or factor was called "Task-Cooperation" processes or the Task-Cooperation dimension.

Communication-Decision-Making Dimension - Factor 3 describes the communication processes and the quality of decision-making in the school. This factor was named the "Communication-Decision-Making" processes or the Communication-Decision-Making dimension.

Socio-Emotional Dimension - Factor 4 focuses on the friendliness and support present in the school. This cluster was called the "Socio-Emotional" processes or the Socio-Emotional dimension.

Involvement-Motivation Dimension - Factor 5 concentrates on the effect of involvement in setting goals and decision-making on the motivation of teachers. This cluster was called "Involvement-Motivational" processes or the Involvement-Motivation dimension.

Using Likert's management model as a reference, the five dimensions fit with a management continuum from System 1, authoritative, to System 4, participative group. The Profile has been used extensively in educational research and evaluation, by doctoral students, as measure of organization change, and as a diagnostic tool.

Design:

Because the interventions and training focused upon interpersonal and group skills and their application to school organizations, the Profile of a School was used as a measure of the degree of change in organizational processes. The instrument was administered in May, 1971, with respondents asked to describe their perceptions of the organization now and in October, 1970. Experience with the industrial form by Likert, indicates that perceptions of the past tend to be accurate. All members of the change agent team, including the principal, responded to the form, as did a random sample of teachers who were classified as non-team from each school. The use of non-team members was seen as partial control for bias which might have been induced into those who had participated in the training. All responses were anonymous.

Results:

Analysis of data focused on two areas: (1) changes in individual schools and (2) changes in the Consortium as a whole. Figure 1 shows the total Profile mean scores for the twelve schools. Eleven of the twelve schools moved in the desired direction, toward the participative group behavior end of the management continuum.

TOTAL MEAN PROFILE SCORE

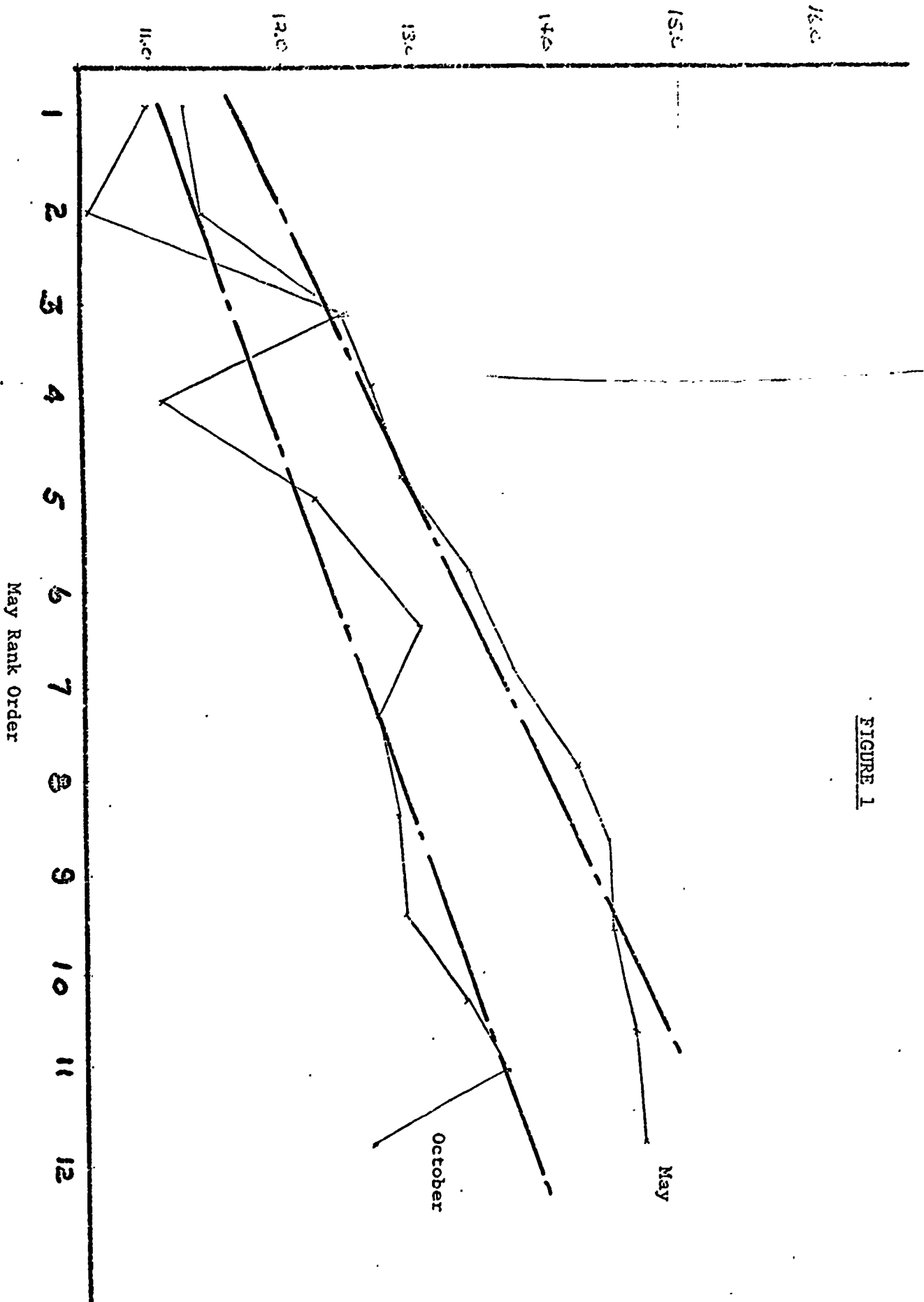


FIGURE 1

TABLE 1
Comparison of Item Means, by Team and Non-Team,
for October 1970, and May 1971

ITEM NO.	ITEM MEAN				ITEM NO.	ITEM MEAN			
	October 1970		May 1971			October 1970		May 1971	
	TEAM	Non-TEAM	TEAM	NON-TEAM		TEAM	NON-TEAM	TEAM	NON-TEAM
1	16.	15.9	16.4	16.7	16	12.7	13.5	12.6	15.3
2	16.7	14.4	16.9	16.	17	12.1	13.6	12.0	14.3
3	15.1	12.3	16.1	15.2	18	9.0	13.9	11.1	14.8
4	16.6	15.5	18.0	17.3	19	10.9	13.0	14.0	15.5
5	11.1	10.1	12.4	11.5	20	11.7	12.5	14.9	14.2
6	14.0	13.3	14.9	14.6	21	10.4	15.6	14.1	16.1
7	15.3	13.0	15.7	14.6	22	10.0	12.4	13.1	14.3
8	12.7	14.9	14.3	16.1	23	11.0	12.3	12.6	13.1
9	14.9	13.4	15.7	14.8	24	11.0	13.6	13.0	14.5
10	13.6	13.3	14.6	13.4	25	15.6	15.5	16.8	16.3
11	12.0	13.8	13.4	15.4	26	12.7	15.8	13.5	16.0
12	11.0	12.3	13.6	13.6	27	12.1	11.8	12.5	13.6
13	11.0	12.3	12.9	14.5	28	14.0	10.0	15.0	13.2
14	10.1	9.1	12.7	10.9	29	14.6	12.5	15.6	12.6
15	12.6	13.6	14.7	14.9	30	9.9	11.3	11.0	13.1

TEAM N = 7

NON-TEAM N = 11

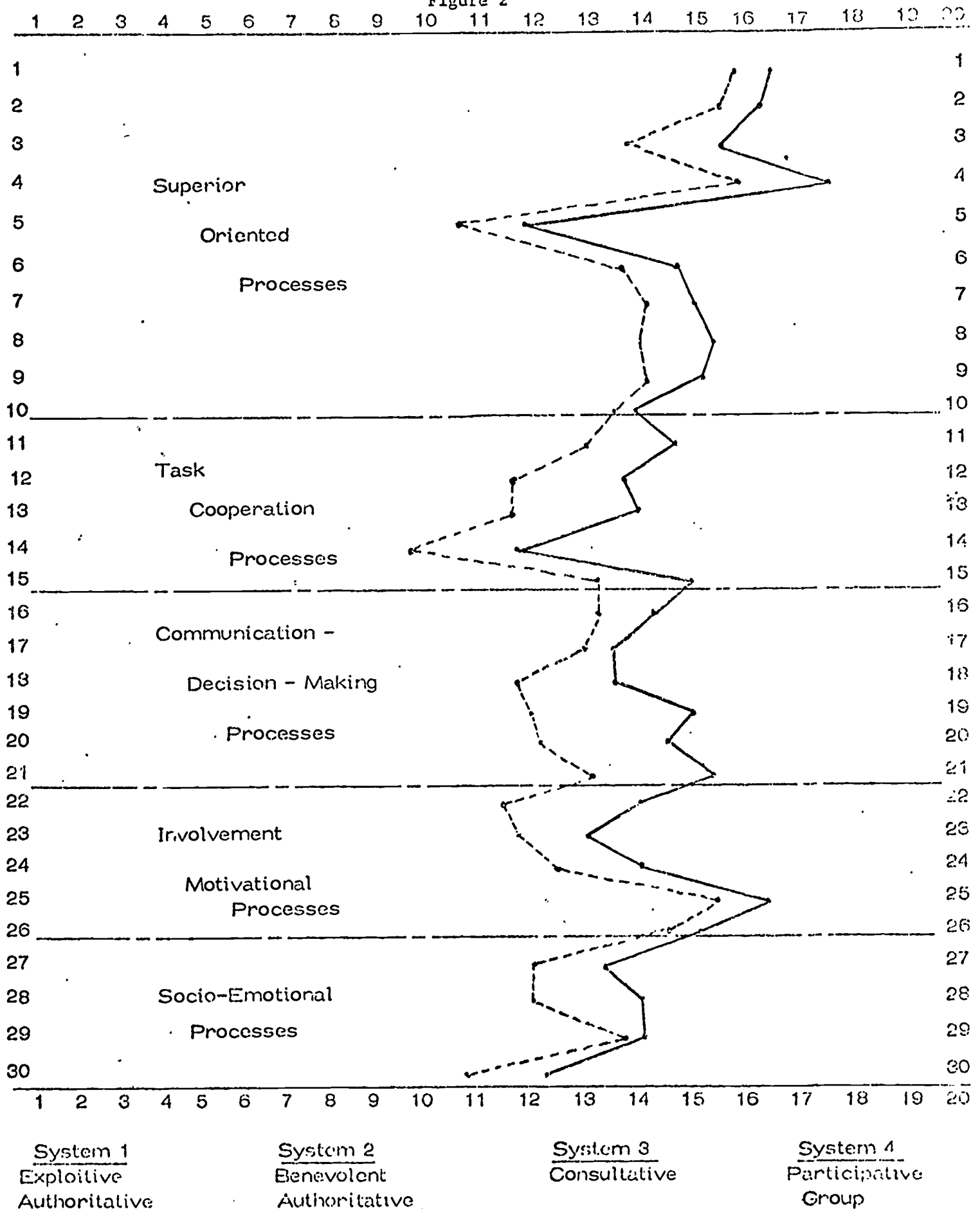
TABLE 2

Comparison of Factor Means, by Team and Non-Team,
for October 1970, and May 1971

FACTOR DESCRIPTION	FACTOR MEANS			
	OCTOBER 1970		MAY 1971	
	TEAM	NON-TEAM	TEAM	NON-TEAM
I Superior Oriented Processes	14.6	13.6	15.5	15.0
II Task Cooperation Processes	11.3	12.2	13.5	13.9
III Communication-Decision-Making Processes	11.1	13.7	13.1	15.0
IV Involvement Motivational Processes	11.8	14.0	14.0	14.9
V Socio-Emotional Processes	13.6	11.4	14.4	13.2

TEAM N = 7
NON-TEAM N = 11

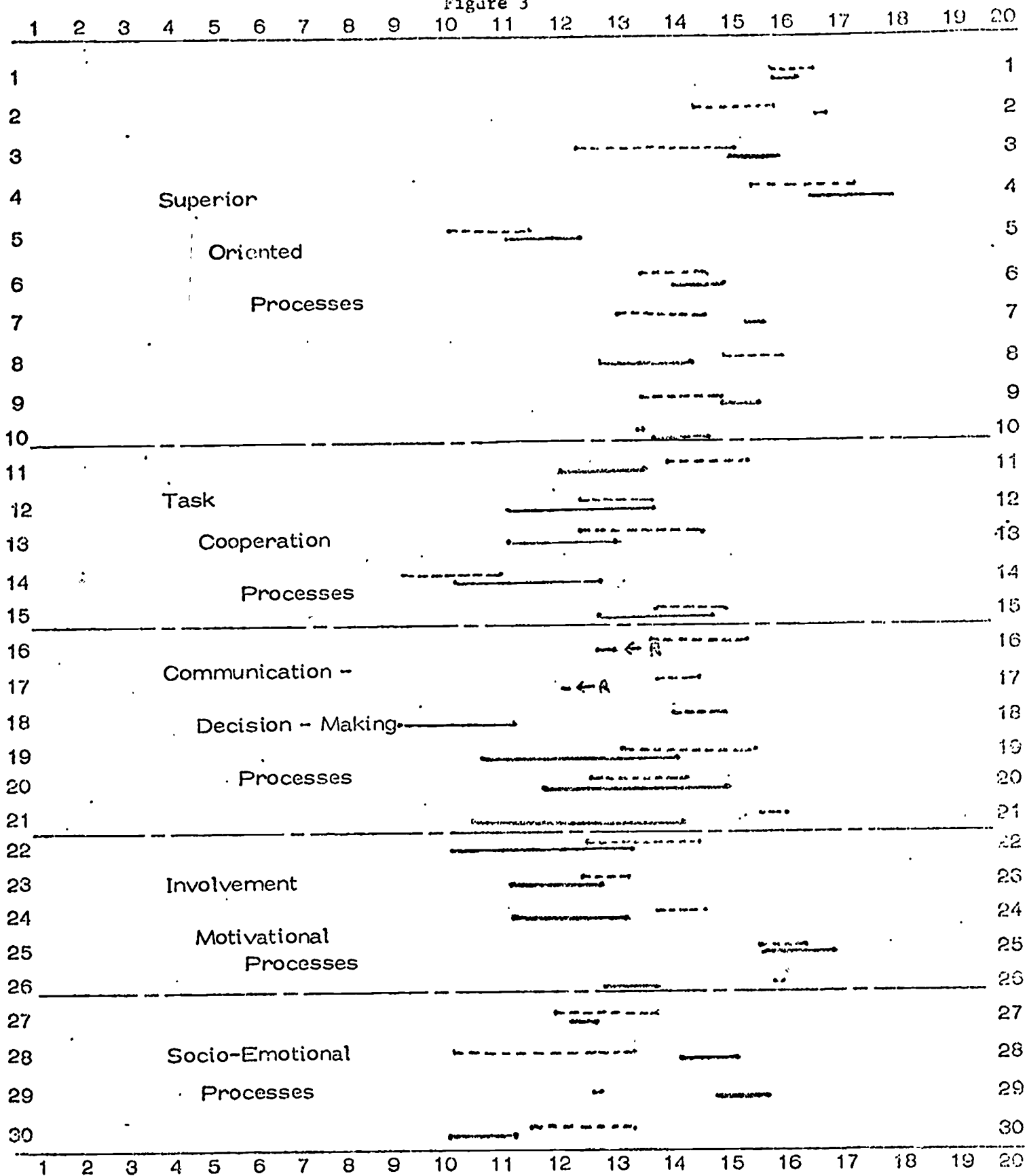
Figure 2



N = 18

————— = TOTAL ELEMENTARY FACULTY MAY 1971
 - - - - - = TOTAL ELEMENTARY FACULTY OCTOBER 1970

Figure 3



System 1
Exploitive
Authoritative

System 2
Benevolent
Authoritative

System 3
Consultative

System 4
Participative
Group

TEAM N = 7

NON-TEAM N = 11

————— = TEAM

----- = NON-TEAM

R = REGRESSION

Figure 1 is ordered according to rank from low to high on the May, 1971, perceptions. The slope of the regression line for the May perceptions contrasted with the October slope is steeper, although not statistically different. Despite this lack of statistical significance, it is interesting to note the implication that can be drawn from the divergence; that is, that the more a school is in the direction of the participative group organization when it begins organization development the more it is likely to change.

Figure 2 is an example of an actual school Profile. The solid line on the left of the Profile, linking the May, 1971, means is clearly in the direction of the System 4, participative group organization. This particular school fell in the middle third of schools in relation to amount of change. The data from which this Profile was constructed is given in Table 1. To the practitioner, be he teacher or administrator, the graphic representation of the data, clustered according to organizational processes, has been useful as feedback.

Figure 3 graphically shows the data in Table 2 broken down by team and non-team. The perceptual differences between team and non-team are clearly delineated and pose some interesting theoretical and research questions. This graphic representation of data from Table 2 has been the focus for discussion among faculty and served as a basis upon which to propose further staff development training.

Discussion:

The data from Figure 1 supports the theoretical position that as schools approach the participative group configuration of organizational behaviors, they increase their capability to change. In earlier reported research, the behavior of the principal was shown to be significantly correlated to the environment of the organization.¹³ This information

could be useful in two ways. If one is to decide to embark on an organization development project such as that described in this paper, it would be advisable to look at the organizational environment of the school being considered, as well as the leader behavior of the principal involved, as a pre-assessment of the probability of the training having an effect. A second implication that can be drawn from research and development is that if we desire to produce schools with the capability to change in the direction of the participative group organization, there should be additional attention given to the preparation of administrators for leadership positions which is congruent with behaviors found to correlate highly with the participative group organization.

The discrepancies shown in Figure 3, between team and non-team members, is interesting and should be the basis for further research in the area of organization development and change. Although both team and non-team persons perceived a shift in environment, why did the non-team members perceive the shift differently from the team members? One possible explanation is that team members, because of the training and involvement with organizational issues are more acutely aware of and critical of the organizational environment in which they work. A second possible explanation is that non-team members are less disposed to be critical of their schools. Still another reason might be that the two groups because of differential exposure to O.D. are responding from different personal data bases. Whatever the real issue is, lack of shared perceptual differences tend to be sources of conflict and mistrust between individuals in an organization and should be examined together, as a part of a survey feedback process in the school.

Use of the Profile:

1. As a research tool--The Profile of a School has been used in several studies as a basis for the study of organization theory. Some specific cases will be discussed in a later section. The validity and utility of the organizational processes identified and their correlation with other variables such as leadership and personal traits of individuals has been a means of developing new knowledge and testing theory.

2. As a diagnostic instrument--The Profile has been used to measure the environment of schools. This data can be used as baseline information and as a basis for organization development intervention and training.

3. To provide survey feedback data--The Profile was used extensively in this project in this manner. Teachers and administrators can use the data about themselves to analyze, plan, and implement plans for organization improvement and renewal.

4. As a training tool--The Profile can be used directly as a source of discussion among teachers and administrators; as a basis for planning; as a diagnostic tool; and to focus on "how we are now" in contrast to "how we would like to be."

5. For formative and summative evaluation of organization development--The latter three uses of the Profile are examples of how the instrument can be incorporated into an on-going evaluation design. Of special import is the use of data by practitioners in their own development. Too often, in the writer's experience, data is collected only after the fact, and even then is interpretable only by educational researchers.

Significance, Implications and Further Research:

Two primary outcomes are apparent: (1) The Profile of a School is a viable means for measuring organizational change in schools, and (2) the organization development design--using specific training with change--agent teams of school personnel--is effective in producing organizational change in schools. In addition, the use of the Profile as an integral part of a formative evaluation design has been found to be helpful to the project. The use of data in this manner is seen as vital to decision-making and to satisfy the increasing demands for accountability both from within and from without school systems.

While the use of the Profile as a measure of organizational change is significant to evaluators and researchers, the import of the O.D. design to school practitioners is potentially of greater utility. Increasingly schools and the publics they serve are demanding changes in organization, the content of what is being taught, and the methods used in the learning process. Changes in organizational processes will likely confront and be requisite considerations for leaders attempting to design and implement needed changes in the schools. This study indicates that change can occur in a planned and desired direction in several schools simultaneously, with reasonable outlays of resources and time and with positive outcomes.

Research alluded to earlier indicates that the principal is the key determiner of variance in environment in a school building.¹⁴ If such is assumed, there is need to develop and research means which alter the behavior of principals responsible for implementing change. Both our pre-service and in-service training programs should include research and training which better reflects research findings.

More specifically, it would be valuable to know how and why principal behavior changes with training such as that described in this paper. A further breakdown of presage variables among teachers, which relate to their acceptance of training and change in behavior, would also serve to help better understand the nature of change in schools. Likewise, the changes which teachers undergo as the result of training is needed. Our experience suggests that teachers who have been involved with training, such as that described, are more open, work better with others, are better problem-solvers, feel better about the school as a place to work, and communicate both thoughts and feelings to a greater degree. These subjective observations should be verified and related to the specific training interventions that have occurred.

Research Using the Profile of a School:

Byrnes examined the relationships among perceived supervisory style of department heads, school participativeness, departmental participativeness, and teacher satisfaction in seven Canadian high schools. In addition to the Profile, Byrnes used the Minnesota Satisfaction Questionnaire to measure teacher satisfaction and Teacher Perceptions of the Department Head, taken from Blumberg and Amidon, to measure supervisory behavioral style.

Byrnes found that more participative departments have higher job satisfaction than less participative groups and that participativeness for departments was not perceived to be the same as for the school as a whole. He also found that both departmental and total school participativeness correlate positively and significantly with general job satisfaction.¹⁵

Throop examined differences between principal and teacher perception of organizational characteristics and the influence of this discrepancy upon teacher satisfaction. Fifteen schools participated in the study and responded to the Profile of a School, the Blumberg and Amidon, Teacher Perceptions of Supervisor Behavior, and Smith, et.al., Job Description Index.

Throop found that

. . . principals perceive the organizational characteristics of their school differently than their teachers. This inquiry revealed a tendency for principals to perceive their school organizations as exhibiting more participatory characteristics than the teachers of these schools.

The research indicates that when a teacher perceives the principal as eliciting an indirect supervisory style, characterized as a supportive relationship, there is a decrease in principal-teacher perceptual difference and an increase in teacher job satisfaction. The reverse of this phenomenon occurs when a teacher perceives the principal as eliciting a direct supervisory style, characterized as an evaluative relationship. In this instance, there is an increase in principal-teacher perceptual difference and a decrease in teacher job satisfaction.¹⁶

Wiener conducted a study to examine relationships between organizational characteristics of twelve elementary schools which were divided equally into two groups classified as either innovative or non-innovative. Besides the Profile, Wiener used the Teacher Perception of Principal Behavior and a self developed School Activities Survey.

Although the mean Profile scores for innovative schools was higher than for those classified as non-innovative, these differences were not significant. Of importance to other related research is the fact that Wiener also found no significant difference in perceptions of principal behavior, which may account for the non-significance in the Profile means; this may have resulted from the nature of the sample used in this study.¹⁷

Bernhardt studied the relationships between teacher attitudes toward militancy and their perceptions of organizational characteristics. He used Ostrander's Collective Assertion Scale as a measure of attitude toward militancy and the Profile of a School.

Bernhardt found several areas in which there were significant relationships.

Statistically significant negative relationships were found between individual teachers' CAS scores and their Real Dimension scores for all five Profile factors. For the Ideal Dimension of the Profile, individual teachers' scores for two factors, Communication-Decision-Making and Involvement-Motivation, were found to be significantly related to teachers' CAS scores. When the magnitude of differences between teachers' Real and Ideal factor scores were compared with teachers' CAS scores, significant positive relationships were found between the CAS scores and each of the Profile factors except Socio-Emotional Processes.

Hypotheses were also developed relative to faculties' collective militancy attitudes and the faculties' collective perceptions of organizational characteristics. Statistically significant negative relationships were found between faculties' mean CAS scores and their Real Dimension mean Profile factor scores for Communication-Decision-Making and Involvement Motivation. The magnitude of differences between faculties' Real and Ideal mean Profile factor scores for these same two factors, Communication-Decision Making and mean CAS scores.

Another set of hypotheses concerned relationships between faculties' collective militancy attitudes and their schools' position on the organizational profile continua. The mean CAS scores of school faculties in the bottom 25% of schools ranked on the basis of their mean Real Dimension scores for Communication-Decision Making and Involvement-Motivation, were significantly greater than the mean CAS scores of faculties in the top 25% of the schools. In addition, the mean CAS scores of faculties in the top 25% of schools ranked on the basis of the magnitude of differences between Real and Ideal mean Profile factor scores for these same two factors were significantly greater than the mean CAS scores of faculties in the bottom 25% of the schools.¹⁸

FOOTNOTES

1. Charles E. Silberman, Crisis in the Classroom. New York: Random House, 1970, as one example.
2. Herman Kahn and Anthony J. Wiener, The Year 2000. Toronto: MacMillan, 1967.
3. Charles C. Jung, "Program 100: Developing Instructional Systems to Improve Teacher Competencies," Educational Technology, Sept., 1972, p. 53.
4. Resis Likert, The Human Organization: Its Management and Value. New York: McGraw Hill, 1967.
5. Daniel Katz and Robert L. Kahn, The Social Psychology of Organizations. New York: John Wiley, 1966.
6. Chris Argyris, Integrating the Individual and the Organization. New York: John Wiley, 1964.
7. Douglas McGregor, The Human Side of Enterprise. New York: McGraw Hill, 1960.
8. A more detailed description of interventions can be found in: Fred C. Feitler and Lawrence L. Lippitt, "A Multi-District Organizational Development Effort," Educational Technology. Oct., 1972, pp. 34-38.
9. See, for example: Richard A. Schmuck and Matthew B. Miles, Organization Development in Schools. Palo Alto: National Press Books, 1971.
10. A detailed "Report on Consortium Workshop," (Mimeographed) can be obtained from the author. It contains a description of the specific training provided to the school change-agent teams.
11. Rensis Likert, New Patterns of Management. New York: McGraw Hill, 1961.
12. Fred C. Feitler, "A Study of Relationships Between Principal Leadership Styles and Organizational Characteristics of Elementary Schools." Unpublished doctoral dissertation, Syracuse University, 1970.
13. Fred C. Feitler, "A Study of Principal Leader Behavior and Contrasting Organizational Environments." A paper presented at the 1972 Convention of the American Educational Research Association, Chicago, Illinois, 14 pp., Mimeographed.

14. "Leadership in Public Education Study." Washington, D.C.: Academy for Educational Development, Inc., 1972, p. 14.
15. Joseph L. Byrnes, "A Study of Certain Relationships Among Perceived Supervisory Style, Participativeness, and Teacher Job Satisfaction." Unpublished doctoral dissertation, Syracuse University, 1971.
16. Robert K. Throop, "An Explanatory Survey of Teacher Job Satisfaction: A Path Analysis." Unpublished doctoral dissertation, Syracuse University, 1971 (Abstract).
17. William K. Wiener, "Selected Perceptions and Compatibilities of Personnel in Innovative and Non-Innovative Schools." Unpublished doctoral dissertation, Syracuse University, 1971.
18. Regis G. Bernhardt, "A Study of the Relationships Between Teachers' Attitudes Toward Militancy and Their Perceptions of Selected Organizational Characteristics of Their Schools." Unpublished doctoral dissertation, Syracuse University, 1971.