

DOCUMENT RESUME

ED 296 433

EA 019 991

**AUTHOR** Runkel, Philip J.; Schmuck, Richard A.  
**TITLE** An Account of Studies of Organizational Development in Schools.  
**INSTITUTION** Oregon Univ., Eugene. Div. of Educational Policy and Management.; University Council for Educational Administration.  
**PUB DATE** Oct 87  
**NOTE** 100p.; Produced by the UCEA Center on Organizational Development in Schools.  
**PUB TYPE** Information Analyses (070) -- Reports - Evaluative/Feasibility (142)  
**EDRS PRICE** MF01/PC04 Plus Postage.  
**DESCRIPTORS** \*Educational Assessment; Educational Improvement; \*Educational Research; Elementary Secondary Education; \*Organizational Development; \*Outcomes of Education; \*Specialists

**ABSTRACT**

Most organizational development (OD) projects in schools are never reported in the literature. This paper discusses benefits, outcomes, and success factors disclosed by the first large-scale quantitative survey of OD in schools conducted by Fullan, Miles, and Taylor in 1978. The paper also explores other relevant studies published through early 1983. First, four research and evaluation studies on cadres of organizational specialists (in "Keele"--a fictitious town--Washington; Eugene, Oregon; Buffalo, New York; and New South Wales, Australia) are discussed, along with more recent efforts in Colorado, Florida, Idaho, and California. Next, the paper reviews 13 large-scale research studies, including the Cooperative Project for Educational Development (1965), a high school renewal project (1979), an Oregon organizational training project (1970), and an Oregon innovative elementary schools project (1970). A dozen other studies are briefly discussed. Last, the chief conclusions from OD research in schools are summarized. Entry and start-up success depends on adequate staff orientation time, staff consent, readiness to risk change, support from the top, and an active staff "variety pool." During transition, OD projects have little chance of success if efforts are focused on improving individuals as individuals. OD's success is more likely when connected with an educational improvement program stressing tasks, not personal growth. Outcomes vary depending on intent and can increase trust, improve communication, and help facilitate stressful organization changes. Included are 89 references. (MLH)

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

**AN ACCOUNT OF STUDIES OF  
ORGANIZATIONAL DEVELOPMENT IN SCHOOLS**

**Philip J. Runkel and Richard A. Schmuck  
Educational Policy and Management  
University of Oregon**

**Produced by  
UCEA Center on Organizational Development  
University of Oregon  
Eugene, Oregon 97403**

**October, 1987**

## Contents

The state of the art	1
Cadres	6
Keele	6
Eugene	15
Buffalo	20
New South Wales	25
Other cadres	28
Large-scale research	29
The beginning	29
Cooperative project for educational development	30
High-school renewal	33
Organizational training	37
Innovative elementary schools	41
A district OD unit	45
Principal as consultant	47
Urban parochial schools	47
Bottom up	54
Parents and educators	55
A structural task	57
School and classroom	60
Redesigning the management system	62
Survey and problem solving	63
Brief descriptions of other studies	64
Twenty-eight principals	64
A district-wide effort	64
A new high school	64
Southern tier	65
Five years	65
Two schools	66
A state vocational agency	66
Raising readiness	66
Upward bound	67
A vocational technical school	67
Management style	68
Inner-city schools	68
And some briefer notes	69
Review of findings	71
Entry and start-up	71
Transition	74
Outcomes	80
References	82

## RESEARCH ON ORGANIZATIONAL DEVELOPMENT IN SCHOOLS

Most projects of organizational development in schools are never reported in the literature, even in the fugitive literature. We describe or mention below all the OD projects of which we have been able to find reports, but we are certain that many more have been carried out. One should not conclude that all the unreported projects were unsuccessful. School people write little for publication, even about their successes. They do, however, talk about their successes in visits to other districts and at conferences, as we will note again later.

Because a great deal of OD work in schools would otherwise have gone unheralded, we are forever grateful to Fullan, Miles, and Taylor, who not only reviewed published reports, but also found and reported much unpublished work. We turn first to their study.

### The State of the Art

Fullan, Miles, and Taylor (1978), funded by the National Institute of Education, produced the first large-scale quantitative survey of OD in schools. Their study assesses the state of knowledge about educational OD and the extent of the use of OD in school districts in the United States and Canada. Their report comprises five volumes under the general title: Organization Development in Schools: The State of the Art. The first volume is a summary. The second reviews the published

reviews of OD. The third tells about locating consultants who had worked in schools, about locating school districts where OD projects were under way, and about the outcomes of those projects. The fourth presents three case studies of school districts. The fifth offers recommendations for policy, research, and practice in school districts, intermediate units, universities, and state, provincial, and federal government agencies.

Fullan, Miles, and Taylor report that almost no systematic evaluation had been carried out in the districts where they discovered OD work. Their study, therefore, brings us information that otherwise would have remained hidden.

Perhaps the most striking discovery of Fullan, Miles, and Taylor was that a great deal more OD was going on in school districts than many of us had expected. They located 308 consultants who had been doing extensive OD with schools in the United States and Canada during the previous five years. That number is about twice the number located in 1971 by Schmuck and Miles (1971). Fullan, Miles, and Taylor located 76 school districts where OD had gone on for at least 18 months in the period since 1964. Surprisingly, more than 50 percent of the consultants working in those projects were insiders with little or no formal training in OD and few if any links to experts in OD.

About half the districts had district-level coordinators, a steering committee for school improvement, and released time available to support the OD. Only very rarely did the districts have cadres of the sort we described in chapter 11 of our Handbook (Schmuck and Runkel, 1985), and only very rarely did they have building-level coordinators of the sort used by the New York High-School Renewal project, to be described below.

The most favorable outcomes ("high impact") of OD appeared when the OD work was carried out to support instructional innovations such as team teaching, individualization, or alternative schools. Fullan, Miles, and Taylor (1978, Vol. III, p. 24) say:

When asked about the pace of educational change efforts occurring concurrently with the OD program, 61 percent (of the school districts) said it was faster than usual, 30 percent about the same, and only 9 percent said it was slower. We asked if the OD effort contributed to this. The findings were quite clear: 63 percent said the OD program had directly caused a "few" (30 percent) or "many" (33 percent) other change efforts, and no respondent said OD had slowed down or blocked other change efforts.

Many districts reported some unwanted effects such as resistance or increased work load, but those annoyances usually did not cause termination of the projects. Two-thirds of the districts thought that OD should "definitely" be used more widely in schools. Persons from a majority of the 76 districts had attended conferences where they told how OD had helped their districts. Persons from a third had visited other districts to explain their work, had sent out reports, or had written

articles. Three quarters of the districts predicted that OD would become institutionalized in their districts.

When asked what benefits (impact) their districts had expected and received from their projects, twenty percent answered "improved communication," ten percent "decision making," eight percent "commitment to change." Respondents gave similar answers when they were asked what benefits they had not expected. The exception was a "spin-off or extension to new participants" (16 percent).

As it turned out, the projects had a variety of focuses: personnel development, desegregation, curriculum change, accountability, MBO-PPBS, comprehensive school improvement, and "classical OD"--the kind of work we describe in our Handbook. Fullan, Miles, and Taylor (1978, Vol. III, p. 42) listed the percentages of projects in each category that scored moderately high to high on impact. Except for two projects on desegregation, one of which scored moderately high and the other high, the category with the highest percentage scoring moderately high to high on impact was classical OD, with 66 percent. The lowest was personnel development, with 29 percent. "On balance," Fullan, Miles, and Taylor (p. 43) say, "it seems fair to conclude that the 'classical OD' approach is most likely to show positive outcomes of all three types. . . ."--the outcomes, that is, of impact, attitude, and institutionalization.

We think that finding fits with theory about role-sending. To the extent that personnel development is conceived as occurring within the individual, the support from other members for new behavior in the sub-system will be neglected. That is, role-senders will not get the help they need in learning to show approval for the individual's new behavior and disapproval for the old. Classical OD, on the other hand, gives attention constantly to practicing the necessary new norms within the subsystem.

Fullan, Miles, and Taylor found success (indicated by impact, favorable attitudes, or institutionalization) to be more likely with (1) support from top management, (2) emphasis on task, (3) sustained consultation from trained consultants inside the district, (4) early planning for an internal steering committee, (5) close partnership between inside and outside consultants, and (6) seeing OD as a continuing way of life among other things. Finally, Fullan, Miles, and Taylor (1980, p. 176) wrote: "OD programs . . . can reasonably be expected to improve organizational climate and functioning, increase instructional innovations, and improve student outcomes. Dollar costs are often less than one-half of one percent of total budget. . . ."

Fullan, Miles, and Taylor's (1978, Vol. IV) case studies generally confirmed the findings of their questionnaire research on districts, particularly the support required from top management to get OD initiated, the need for a task emphasis, the importance of sustained consultation from members of the

district, the low money requirement, and the high time costs. Other important findings also emerged: (1) OD is easier to launch when the district is not trembling under strong stress, (2) success is more likely when there is a close partnership between the top line manager and a strong, sophisticated outside consultant, and (3) institutionalization can take as long as five years in a district of moderate size.

In the rest of this paper, we describe some studies mentioned by Fullan, Miles, and Taylor, and we describe many studies that have appeared since they wrote. We culled the literature through the first part of 1983.

### Cadres

We turn next to research and evaluation on cadres of organizational specialists. We describe here the four on which the most research has been carried out.

### Keele

When we began the Keele project in 1968, we agreed with the superintendent and his cabinet on four goals:

1. To develop clear communication networks up and down and laterally.
2. To develop new ways of solving problems through creative use of new roles in groups.
3. To involve more people at all levels in decision making.

4. To develop procedures for searching for innovative practices both within and outside the school system.

We collected information by questionnaire in January of 1968 and in the springs of 1968, 1970, and 1972. We also made records of numerous events as we went along. In 1972, we turned to analyzing the data. We had done little effective training in secondary schools, and their numbers were too few anyway for reliable comparisons with untrained secondary schools. But seven elementary schools in Keale had received varying amounts of OD from us, from the cadre, or from both. We had data to compare outcomes in those schools with eight untrained elementary schools in Keele and with some in two neighboring districts.

Most of the data on the Keele project were reported by Runkel, Wyant, Bell, and Runkel (1980), in which chapter 6 is based on Wyant's (1974) dissertation. Runkel (1975) and Runkel and Bell (1976) gave preliminary data. In very condensed form, here are some results taken from the summary chapter of Runkel, Wyant, Bell, and Runkel.

Elementary schools with OD showed higher averages than schools without OD in 1969, 1970, and 1972 on the skills of (1) continuing to communicate under emotion, (2) openness-to-information--the ability of a school staff to elicit, offer, and circulate information in the school--and (3) responsiveness to requests from other teachers. Furthermore, there was some evidence that the OD schools maintained those three skills longer than the non-OD schools.

OD schools showed higher averages than non-OD schools in 1970 and 1972 on the skills of (1) awareness of functioning communication channels, (2) communicating with interdependent others when choosing teaching methods, (3) decision making by groups of teachers concerning curriculum and student conduct, and (4) reaching out to colleagues in decision making.

A far greater proportion of the OD elementary schools succeeded (to our criterion) in bringing about team teaching than non-OD schools. But whether or not schools succeeded in bringing about team teaching or some similar collaborative innovation, the OD schools dealt with that sort of innovation with greater dispatch than non-OD schools--either getting the innovation into working shape or jettisoning it more rapidly.

The criterion we used for "success" in establishing team teaching was not a very strong one, but when we looked at data from 23 schools in the three districts that had made some effort to put team teaching into place, we found that six out of seven of the schools with OD attained it, but only three out of 16 schools without OD did so.

Greater amounts of OD showed greater favorable effects. Among elementary schools with collaborative structure (chiefly team teaching), the schools with greater amounts of OD maintained about the same level from 1970 to 1972 in the skill of communicating during emotion (while the average of untrained schools on that skill declined) and increased their scores on in the processes of meetings and on skill in conducting

effective meetings (while the averages of untrained schools declined). Too little OD however, seemed to depress the scores of schools on those three skills. The change from loss to profit seemed to occur for communicating during emotion at about 16 hours of OD and at about 24 hours for processes in meetings and effectiveness in meetings.

We also found that schools with greater amounts of OD generally showed the highest scores on the skills of awareness of functioning communication channels, communicating with interdependent others, decision making by teachers in groups, and reaching out to colleagues in decision making. Those with the least OD, in contrast, often showed very low scores on those four skills. The data on effects of OD were encouraging, especially considering that the amounts of OD given ranged from as little as six hours in one school in 1968-69 to a maximum of 46 hours in another by 1972.

The signal success of the project was the cadre of organizational specialists, to whom we gave initial training in the summer of 1969. Seven elementary schools in Keele requested the cadre's services in 1969-70, and the cadre gave OD to all of them in August of 1970. Later, the cadre provided OD to other elementary and secondary schools in the district and to administrative groups. They aided in one way or another two schools in other districts, teachers' and principals' groups, PTAs, League of Women Voters, social agencies, and so on. They also taught several in-service courses in communication skills.

The Keele cadre was a unique organizational innovation, and a first try. Nevertheless, the Keele cadre weathered difficulties, year after year, that have scuttled many other organizational innovations. It survived the departure of the outside consultants. It survived the replacement of its coordinators and the annual turnover of other personnel in its ranks. It survived, for several years, the departure of the first superintendent and his replacement by a person dubious about the value of the cadre to the district. It survived, for several years, with little or no financial support.

The Keele cadre did better than we did in delivering OD consultation. Once a team from the Keele cadre had made entry into a school, its average stay was longer than ours and its effects often better. There were three schools in Keele that were happy to see us depart. But every one of those three at some later time invited the cadre to give them consultation. Finally, we point out that the larger amounts of OD that brought the stronger results came much more from the cadre than from us. Runkel, Wyant, Bell, and Runkel (1980, p. 138) said "When, in this book, the effects of OD training have stood strong and proud, there also has stood the Keele cadre of organizational specialists."

Macbeth (1971) conducted a study of the effects of the initial training of the cadre on its members. Personality factors were not related to training outcomes directly, but did influence the way a trainee participated in the laboratory. The

nature of involvement and participation in the laboratory was the best predictor of learning from training. Contrary to prediction, the amount learned during training was not related to success in the field as a specialist; organizational factors mediated between laboratory learning and effectiveness in the field. Success in actual OD consultation was shown to depend on the participant's initial desire to join the program, his or her security in the district, and his or her perceived power to evoke change in district groups.

Bigelow (1971), during the Keele project, devised a way of tracing some effects of OD consultation into classrooms. He reasoned that the interpersonal and group skills we taught to the teachers during OD training could--if the teachers in turn conveyed some of the norms to their students--bring about changes in the interaction between the teachers and their students. Because of their position, teachers have strong influence on their students--they are able to demonstrate and encourage new norms in the classroom and to reward those who adopt the new norms.

Bigelow studied the interaction of teachers and students in some classrooms of a junior high school in which we gave 21 hours of OD consultation. The OD sometimes involved the whole staff and sometimes not. For comparison, Bigelow also collected data in another junior high school in Keele.

Bigelow randomly selected 14 teachers in each school (about one-third of the staff in each case) to be studied. He placed tape recorders in the classrooms of the 28 teachers, and the teachers activated them for six 20-minute recording sessions at designated times before the OD in early December and for six similar sessions in late March after the last of the OD had been completed. Thirteen teachers in each school returned completely usable tapes, and the analysis used those 26 tapes.

The tapes were brought back to our office and were coded by trained coders according to Flanders's (1964, 1969) method of interaction analysis. The identity of the schools and the teachers was hidden from the coders. Every three seconds, the coder tallied the kind of statement being made.

Flanders's first four categories are types of "teacher talk" that exert indirect influence. When the teacher accepts feelings, praises or encourages, accepts or uses ideas of students, or asks questions to elicit contributions from students, the teacher is indirectly influencing students to take a strong part in the life of the classroom. Flanders calls that behavior "integrative."

The next three categories of teacher talk are types of direct influence. When the teacher lectures, gives directions or commands, criticizes students' behavior, or justifies the teacher's own authority, the teacher is directly taking control into his or her own hands. Flanders calls that behavior "dominative." Flanders's studies indicate that most teachers use

dominative behavior about two-thirds of the time, but that students developed more desirable skills and attitudes in integrative classrooms.

Bigelow calculated the ratio of integrative to dominative behavior by dividing the tallies of indirect influence by the tallies of direct influence. Our theory predicted that OD would cause I/D ratios to rise. That was indeed the case, as we see in Table 1.

Table 1. Means and ranges of Integrative/Dominative ratios among teachers in a trained and in an untrained junior high school.

Group of teachers	Mean before training	Mean change	Mean after training	Range of changes
Trained	.45	+.11	.56	+.08 to +.13
Untrained	.45	.00	.45	-.02 to +.02

The ratios of the teachers who were involved in OD rose, but the ratios of non-OD teachers, on the average, stayed as they had been. The strength of the difference between the two groups is easy to see when we look at the ranges of the changes. The non-OD teacher who made the greatest change in the favorable direction changed her ratio by only +.02, while the OD teacher who made the least change achieved a change of +.08. In other words, no non-OD teacher changed as much as even the least-changing OD teacher. That degree of separation between groups is

very unusual in research on human behavior. The outcome clearly indicated Bigelow's prediction and his choice of indicators.

Bigelow also predicted that OD would cause teachers to establish norms that would enable students to feel free to initiate more communication in the classroom. He checked that prediction by counting the tallies of Flanders's category 9: student-initiated talk. Indeed, the student-initiated talk increased significantly in the classrooms of the OD teachers, but remained about the same in the classrooms of the non-OD teachers.

Langmeyer (1968) also did a substudy. He compared the performance of three kinds of groups on two exercises typical of those used in OD. In the "peg task," group members had to find a pattern hidden in a rectangular array, using group discussion to make maximum use of the information they discovered as they went along. In the "card task," the group had to find a unique card in a deck by exchanging information fully and accurately. Both were cooperative exercises.

Three types of groups carried out both exercises: (1) teachers who were regular members of faculties in the Keele project, (2) college students who had worked together for a college term, and (3) college students who were strangers. Langmeyer called the first two "established" groups and the last "ad hoc." Among other things, Langmeyer found (1) that all groups were more satisfied when they were well organized and shared the decision making more fully, (2) that the teachers and the ad hoc group were more satisfied when their production scores

were high, and (3) on the peg task, that the teachers and the ad hoc group were more satisfied with their production scores and their method when dominance in the group was low.

In another substudy, Saturen (1972) investigated conditions that might signal the readiness of a school to profit from OD. He examined data from schools in Keele and in Eugene. His results confirmed earlier findings that OD helped school faculties to improve skills connected with adaptability, but other patterns of relations among his variables were hard to interpret.

#### Eugene

Four evaluations have been made of the work of the Eugene cadre. The first was done by Bell and Burr (1976). It surveyed the knowledge of district personnel about the cadre, their attitudes toward the cadre, and their experience with it. Forty-four percent or 895 of the questionnaires were returned. Of those, 195 respondents said they had never heard of the cadre and did not fill out the rest of the questionnaire. The remaining 700 respondents, who completed the questionnaires, turned out to represent very faithfully the proportions of positions, teaching levels, and sexes in the district.

Over nine questions concerning knowledge about the cadre, an average of 67 percent of the respondents gave correct answers, 18 percent gave incorrect answers, and 15 percent said they didn't know. Ten attitude items asked for ratings according to the respondent's agreement or disagreement. They included items such

as "The cadre's methods and procedures offer new insights and new ways of viewing old problems to the district" and "I am willing to recommend the training and consultation offered by the cadre to others." Over the ten items, an average of 54 percent of the respondents gave favorable responses, 30 percent gave neutral responses, and 16 percent gave unfavorable responses. On an item about the competence of cadre members, 66 percent gave favorable responses. One item asked about "cadre members who are in my school." Taking only those schools in which there were indeed cadre members on the staff, the favorable responses were 60 percent. By schools, the range of favorable responses ran from a low of 23 percent in a high school to 94 percent in an elementary school.

In the second evaluation, Bell (1977) compared the organizational process of elementary schools that had received different amounts of OD from the cadre. Bell wrote and pilot-tested a 33-item questionnaire to measure the quality of organizational processes. A factor analysis uncovered five clusters of items: effectiveness in problem solving, emotional cohesiveness, constructive use of staff resources, collaborative interaction, and school-wide communication. The questionnaire was then administered to teachers and principals of the 32 elementary schools in Eugene. Bell's results fell into a nicely coherent pattern, though his low rate of questionnaire return makes us wish someone would do another similar study.

Bell's results were: (1) Those schools that had received the highest amounts of consultative assistance showed the highest scores on effectiveness in problem solving, emotional cohesiveness, and school-wide communication, (2) the cadre's consultations helped schools with initially low scores on constructive use of staff resources and collaboration to get better. (3) The cadre's consultations helped schools already high on the five factors to maintain high scores, while scores fell among previously high-scoring schools that had received no consultative help. (4) Cadre help was especially useful to schools going through structural changes involving increased complexity such as team teaching and interdisciplinary curricula. Schools that made such modifications without consultative assistance from the cadre typically ran into more serious morale problems such as were reflected by a declining score on emotional cohesiveness. Those findings fit nicely with those from Keele.

The third evaluation, unpublished, was done in 1978 by Mary Frances Callan, then coordinator of the cadre. At the close of nine consultations, clients were asked to evaluate the cadre's work in six categories, using ten-point scales with "1" indicating a low evaluation and "10" indicating a high evaluation. The results were: (1) a mean of 8.2 on "How close did these sessions come to achieving their purpose?" (2) A mean of 8.2 on "How well did you like the format of the sessions?" (3) A mean of 8.8 on "How well did you think the cadre members presented the material?" (4) A mean of 8.3 on "How interesting

to you were the sessions' topics?" (5) A mean of 8.2 on "Will the information presented be useful to you in your job?" and (6) a mean of 8.2 on "In general, how valuable were these sessions?" Standard deviations ranged from 1.5 to 2.0. Clients were also asked what they liked most about working with the cadre and what they liked least. Two responses predominated: clients like most "the style of work used by cadre members," and they liked least what they considered insufficient time for the consultation.

The fourth evaluation came about when Callan and Kentta (1979) were asked by the district to assess the "cadre's image" among district staff. They wrote and tested an eleven-item knowledge questionnaire and a ten-item attitude questionnaire. Ninety-four percent of the professionals in the Eugene district answered both.

In answering the eleven true-false knowledge items, two percent of the respondents skipped all of them, and 16 percent answered "don't know" to all of them. That left 82 percent of respondents who answered "true" or "false." Following are the percentages of respondents who gave correct answers to the items. (In these figures, 100 percent of the respondents would include those who skipped the items or answered "don't know." That is, those giving answers of "true" and "false" total only to 82 percent.) (1) 63 percent correctly answered "false" to "cadre is administrators and management specialists working with the State Department in coordinating district-wide organization." (2) 70 percent correctly answered "false" to "cadre gathers information

and makes suggestions to the Eugene Education Association regarding negotiations and bargaining with the School Board."

(3) 52 percent correctly answered "false" to "Cadre's primary function is to resolve personal problems that arise for members of the district's staff." (4) 75 percent correctly answered "true" to "Cadre provides help with organizational problems and offers training in organizational development." (5) 46 percent correctly answered "false" to "Cadre supplies a specific sequence of readings and lectures that enable teachers to be more effective instructors." (6) 79 percent correctly answered "true" to "Cadre will train groups in the skills of problem solving, communication, decision making, and holding productive meetings." (7) 53 percent correctly answered "false" to "Cadre is from the district and the University of Oregon; it offers sensitivity training and encounter groups." (8) 58 percent correctly answered "false" to "If individual teachers are having problems developing curriculum for their classrooms, the cadre is a good source of direct help. (9) 56 percent correctly answered "true" to "Any employee of the district can become a member of the cadre." (10) 61 percent correctly answered "true" to "Cadre members are district personnel who, in addition to their regular assignments, volunteer consulting services for which they are not paid." (11) 52 percent correctly answered "true" to "The cadre will work with students, teachers, administrators, classified employees, and parents either individually or in groups."

In general, the results indicate that the majority of district personnel were knowledgeable about the cadre's purposes and methods.

On every one of the ten attitude items, the favorable ratings exceeded the unfavorable by percentages ranging from 7 to 59. The most favorable ratios were given on items asking about the competence and skill of cadre members. The least favorable ratings (but still preponderately favorable) were given on items dealing with the value and utility of OD for school or district. In sum, Callan and Kentta concluded that staff members in Eugene felt good about the cadre's efforts. They pointed out that accurate knowledge was associated with a favorable attitude toward the cadre: the correlation was .45. Also correlated with both knowledge and attitude was the number of hours spent with the cadre. The picture that emerged was that with direct experience with the cadre, the Eugene personnel learned about what OD is and how it works and developed good feelings about OD and about the competence and skill of cadre members.

Phelps and Arends (1973) joined members of the Eugene cadre to resolve a conflict between parents and members of a school staff. We describe that project later in the section headed "Parents and Educators."

### Buffalo

Some years ago, the Buffalo (New York) Public School District was presented with a court order to desegregate its schools. Having already encountered difficulties in

desegregating its schools, and being aware of the difficulties Louisville, Boston, and other cities had encountered, the leaders of the Buffalo district knew that a "supportive institutional environment" would be necessary.

In 1977, as a result, the Buffalo district established the school Improvement Resource Team (SIRT). It was modeled on the Eugene cadre, but it took on a shape of its own suitable to its locality and its mission. In particular, under the pressure of the desegregation order, SIRT could not observe the rule of waiting for invitations from schools. Milstein and Laforanara (1980) say:

. . . in urban environments, . . . invitations are not readily forthcoming. . . . Schools needing help are usually identified by central office administrators. . . . Efforts are [then] made to (1) explain how SIRT functions, (2) clarify . . . the issues at the school, and (3) obtain faculty-wide commitment. . . . SIRT's experience is that the involvement of entire school faculties is not practical, since interventions usually take place after school or at week-end sessions. SIRT's response . . . has been to rely on volunteers who are vitally interested in the issues involved. As a result, SIRT sessions typically draw from a minimum of four or five teachers up to a maximum of about 25 percent of a faculty.

The operation of SIRT, its embedding in the district structure, its stresses in bringing itself to active and competent performance, and other matters have been reported by Milstein (1978), Milstein (1979), and Milstein and Laforanara (1980). Following are descriptions of some of the projects of SIRT underway in 1980, condensed from Milstein and Laforanara (1980).

Student Relations Committee. SRC contained about 50 students from three academic high schools undergoing the greatest extent of desegregation. The students, their teacher-advisors, and a SIRT sub-team met monthly for all-day sessions to develop skill and deal with issues such as discipline, student morale, teacher-student relations, school spirit, and class-cutting. SRC began in 1978; it replenished its ranks several times. In each of the three SRC schools, members maintained Events Calendars to keep students informed about school activities. Each SRC group met regularly with school administrators to discuss strategies for school improvement. Action committees dealt with issues and concerns unique to each school. For example, one SRC group formed an action committee to curb "hall walking" and false fire alarms.

High Schools. After the first workshops with high schools in 1977, SIRT discovered it would have to rely on volunteering at a time when the teachers' union was urging its members to resist volunteering for any projects. Nevertheless, as many as 25 percent of a school's teachers volunteered to attend after-school meetings. At one school confronted with severe disciplinary problems, teachers at first focused their efforts on "hall sweeps" in which groups of staff members walked the hall to get students back into class and to remove those who were from other schools or were dropouts "just visiting." The result was an immediate improvement in discipline and a more favorable perception of SIRT activities by other staff members. The

school's administrators became actively involved, volunteers doubled in number, and the group expanded its work to non-disciplinary matters.

A second high school also initially focused on discipline, but developed another strategy. Volunteers at this school developed a schedule card to be carried by all students. The "Omega Card" provided a long-term solution to student identification, hall-walking, and class-cutting. Other high school principals were contemplating similar methods.

This second high school was the city's newest. Under court order, it was slated to be closed as a secondary school and to be reopened as an elementary school. Before the court order was handed down, SIRT had been helping the school's faculty to develop activities to strengthen school traditions and to clarify special resource needs so that proposals could be written for grants-in-aid. After the court order, SIRT turned its efforts to helping the school faculty to buoy up its sagging morale and minimize the impact of the pending closing on the educational programs. As a result of those efforts and the subsequent intercession of a board member, the school underwent a gradual phase-out instead of the abrupt one-year closing originally prescribed.

Elementary schools. SIRT's work with elementary schools began in response to requests from schools that had one or more faculty who were members of SIRT. In one school, the staff asked for process help in refining their individualized mathematics

program. The staff, meeting weekly for a semester, succeeded in developing a school-wide resource file for math materials, an individualized diagnostic test, and a procedure for assessing student progress in mathematics. A second school was faced with absorbing a junior high-school staff. Teachers and ancillary staff met for a semester to develop new policies, disciplinary procedures, and report card procedures. The group was also successful in obtaining a small grant to develop a basic skills task-force in the school.

During the spring of 1980, SIRT was called upon to help three elementary schools slated for closing. SIRT trained school-based liaison teams to help the schools close in orderly fashion.

Non-school interventions. SIRT helped a city-wide citizens' advisory council to establish goals and assess needs related to desegregation. Two projects were conducted with groups established by the Board of Education to monitor and recommend policy for schools in their areas. SIRT conducted several sessions with them to identify and resolve problems.

SIRT had not one coordinator, but two. Together, they oversaw SIRT's budget and kept tabs on the consultations. Other leadership activities were distributed throughout the members. At monthly meetings, the roles of convener, group process helpers, and observers were rotated. Every consultation had its own leader. SIRT-wide functions such as overall evaluation and public relations were delegated to members.

At first, SIRT was assigned for administrative purposes to a central-office administrator in charge of school integration. He did not find much time for SIRT, and several important items of information failed to get to the right place in the hierarchy. Later, another central-office administrator was assigned who had been a participant in one of SIRT's early interventions; he attended SIRT's meetings, observed interventions, and participated in budgetary decisions. That person served as an effective link to the central office.

After desegregation had been satisfactorily achieved, federal funds were withdrawn, and the district ceased to provide funds for released time or for training new members. The cadre no longer meets as a formal organization. Milstein says, however, that the Associate Superintendent for Instruction continued to call on ex-members of the cadre for help with organizational problems. Until he left to join the University of New Mexico, Milstein consulted often with the district on problems of stress, and ex-members often helped with that consultation, too.

#### New South Wales

In 1976, the Director of Services in the New South Wales (Australia) Department of Education circulated a paper to his staff. It proposed that the Division of Services establish teams of consultants for school improvement. William Cameron, an officer of the Division, proposed to train a team of school heads

to act as consultants and change agents to a number of schools. In early 1977, Cameron met with the Director of the Macquarie North Region (a fictitious name), and they agreed to mount a project with the following characteristics (this list is abridged from Cameron, 1982):

1. Cameron would train a team of consultants. The team would assist faculties of schools to attain goals they would choose.
2. The consultants would be school heads.
3. The consultants would be released from their regular jobs for one-half day per week to carry out consultation in other schools.
4. The consultants would work in pairs, each pair to be assigned to one client school during the project.
5. The decision to participate in the project would be made by the school faculties.
6. The schools in the project would not receive any additional resources.
7. The project would run for about two years.

Cameron also obtained the support of the New South Wales Teachers' Federation for the project.

Cameron and the Director of Macquarie North selected three "experimental" schools in which pairs from the consulting team would intervene: Raworth Primary with 30 faculty, Blue Gum Primary with 32, and Redleaf High with 75. They selected four comparison schools: Mountview Primary with 30 faculty, Highfield

Primary with 25, Ridgeway Primary with 17, and Parklands High with 70. The faculty of each experimental school participated in a weekend retreat for training in problem solving: Raworth in early November 1977, Blue Gum later in November, and Redleaf in early December.

The active problem-solving phase of the project ran from November of 1977 to August of 1979. Temporary problem-solving groups were formed in each of the experimental schools. They were intended to place emphasis on task (rather than process), to use peer pressure to keep themselves on task, to represent interest groups in the school, and to be a link with the rest of the school. During the active problem-solving phase, the consultants demonstrated their competence as helpers and showed that they could be trusted by the faculties.

Each school formed three problem-solving groups, each group to undertake a particular task. The problem-solving groups at the schools carried out a variety of activities that involved all staff members, but particularly problem-solving group members, in gathering information, making decisions, and taking action. Activities included: surveys, inventories, displays, purchasing resources, developing curriculum, role-plays, mounting in-service courses, developing teaching aids, negotiating roles, and evaluating outcomes. Overall, a great deal of energy was expended by school staffs in planning and development in addition to their normal teaching duties.

Cameron intended, as the time for withdrawal of the consultants approached, for the consultants and their schools to find teachers or others who would serve as internal consultants, gradually taking over the helping role from the outside consultants. Little of that happened. In 1980, Cameron visited Redleaf and discovered that "nothing more had happened at the school with regard to collaborative problem solving." Principals at Raworth and Blue Gum, however, did continue to call the Division of Services for materials to aid staff development, both reported that collaborative activities were continuing, Raworth's principal held another weekend retreat, and Blue Gum's principal asked Cameron for an after-school refresher course in problem solving. As late as March 1981, the two principals reported serving each other as consultants.

Cameron (1982) also collected questionnaire data on satisfaction. The results showed that though staff in the OD schools had some reservations, the majority of the staff felt that the change efforts had brought about improvements in knowledge, skill, and attitude connected with teaching and with professional relationships and in organizing and using school resources.

#### Other Cadres

Some other peer cadres have appeared, but we have only a little information about them. A cadre began in Boulder Valley, Colorado, in 1974, in Polk County, Florida, about 1977, in North

San Mateo County, California, in 1977, in Cupertino, California, in 1978, in Jefferson County, Colorado, in 1980, in Boise, Idaho, in 1980, and in Redwood City, California, in 1982.

### Large-Scale Research

We turn now to more OD projects for which outcomes have been reported at some length. Most of the projects in this section were originally conceived as long-term work. Some were very large, and most were larger than the average OD project is. One, the New York High School Renewal Project, is still active at this writing. The kinds of data reported vary.

### The Beginning

OD began in schools with the work of Matthew Miles and colleagues in the early 1960s. They began the three-year Project on Organizational Development in Schools at Teachers College, Columbia University, in 1963. They carried out data feedback, problem-solving workshops, and team training through process consultation in two districts, one near New York and the other near Pittsburgh. The work is reported by Miles and others (1966), Benedict and others (1967), McElvaney and Miles (1969), and Miles and others (1969).

McElvaney and Miles (1969) compared schools where the principals were highly satisfied with the interventions with schools where the principals' satisfaction was low. Teachers showed higher morale, showed more favorable feelings toward the district, and rated the climates of their schools more favorably in the schools with satisfied principals than in the schools with

dissatisfied principals. Six months after the intervention, teachers in the schools with the relatively satisfied principals showed improvements on five scales concerning self-behavior and group-behavior, and the ratings they gave of themselves and their schools at posttest were higher than those given by teachers in schools with dissatisfied principals.

In interviews, the dominant response of administrators was to report improvements in interpersonal processes and working relationships. For example, "the assistant supervising principal and the high school principal had entered the survey feedback meeting literally not speaking to each other." At the end of the OD, the two men were again talking to each other reasonably. All the administrators agreed that group processes had improved.

#### Cooperative Project for Educational Development (COPEd)

In 1965, a group of researchers began a large-scale study, labeled COPEd, of OD in schools. The project was organized as a consortium of researchers and specialists drawn from Boston University, Lesley College, Teachers College (Columbia University), Yeshiva University, Newark State College, University of Wisconsin, University of Chicago, and the University of Michigan. Work in 23 school districts was planned, and pretest data were collected in all of them.

Unfortunately, COPEd's funding was terminated during the first year of active intervention, and the project did not produce any studies of the effects of OD. The pretest data were

analyzed, however, and the analysis supported the position that school and district innovativeness was enhanced by leadership-sharing and personal support from the principal, the adequacy of problem solving in faculty meetings, the perception of rewards available for creativity, the degree of trust among colleagues, and the amount of initiation by teachers of innovative proposals. Those findings are reported in the first volume of COPED's final report to the U.S. Office of Education (1970). The second volume reports 11 case studies of the beginning stages of the interventions, providing a thorough account of the way the outside consultants collaborated with the insiders.

The team at the University of Wisconsin found other funding and carried forward interventions in three school districts. They collected further data in those three districts and five others. Goodson and Hagstrom (1971) reported about 17 percent of the professional staff members in the three districts attended an average of 3.2 laboratory training sessions. When asked, "How valuable do you think these laboratory training sessions have been to your district?" an average of 60 percent said they were of some value or of great value, 35 percent said they were of a little value or no value, and five percent said they were more harmful than valuable.

Goodson and Hagstrom (1971, p. 171) report some experience of participants that foreshadow the experiences of participants in many later OD projects:

A specialist who had worked with personnel in several schools asked to participate in the training because, she said, "During the year I noted that suddenly a teacher would become more easy to work with, listen more, and be willing to try out my suggestions. Then one day I discovered all the teachers who had changed had been going to the training sessions." A teacher reported that training had improved her teaching. One of her children had even told her that the class enjoyed school more, "because now you treat us more like people." Another team member found a particular structured exercise carried out at one of the laboratories very helpful to him in understanding others. Two years later when another laboratory session was being planned in the same district one of his teammates suggested that the exercise be used again. Turning to the member who had originally found the exercise valuable she remarked, "You remember that exercise--the one that changed your whole life!"

Despite the favorable reactions of individual participants to the training, the hoped-for changes did not occur. The study by Goodson and Hagstrom showed that even when carefully selected, trained, and supported by skilled outside consultants, change-agent teams in schools can have difficulty. None of the teams in the three districts was able to mount an effective change program. All change projects began with promise, but they were unable to overcome such obstacles as a succession of key administrators, lack of enthusiastic support from administrators, and high turnover among teachers.

An offshoot of the COPED project was a study by Manno (1969). Manno found that an intervention consisting of programmed exercises presented in six sessions of one-and-a-half hours each did not succeed in changing norms about innovativeness. Other reports on the COPED work are those of Luke and Mial (1971) and Watson (1967).

### High School Renewal

Bassin, Gross, and Jordan (1979) developed a special OD design for strengthening urban high schools. Their project in New York City differed from all others. First, it was the largest OD effort in inner city schools anywhere in the world; in 1979 there were 31 participating schools, all of them large. Second, it was the largest effort to apply OD to secondary schools. And third, it was the longest OD effort in inner city schools, having been in operation since 1969.

Bassin, Gross, and Jordan described their "renewal model" as one using participatory systematic planning and problem solving. It called for members of the school--including the students--to select problems, analyze them, and develop solutions to them. The stages were start-up, diagnosis, planning, and implementation. It worked as follows.

After exploratory conferences with the principal and other key staff members, a decision about the school's readiness for participation would be made by the outside OD consultant. Start-up officially began when the consultant met with the principal and other staff to choose the subsystems of the school that should commence the renewal process.

Next the principal, a few staff members, and the consultant worked together to design procedures for selecting an internal renewal coordinator. The coordinator initiated, energized, and managed the project (see Porterfield and Porterfield, 1979, for details). The first task of the coordinator was to enlist the

aid of a voluntary committee drawn from the school and its surrounding community. The start-up process was completed when the consultant, the coordinator, the principal, and the committee designed the details of the remaining stages of renewal, specifying who would do what and when.

In diagnosis, the committee decided upon what data to collect and then carried out an extensive survey. Several methods were used to collect both opinion data and base-line or quantitative data. The most common methods were questionnaires, group brainstorming, interviews, and observation.

Planning produced ideas and programs to solve priority problems. First, potential participants in innovative programs were invited to collaborate with the committee in the planning. Second, "research and development" was carried out to examine effective practices being tried elsewhere. Third, a plan was created that included carefully phrased objectives, an accountability scheme, and a specific schedule listing tasks and people. Fourth, a formative evaluation procedure was established. And fifth, administrative approval was sought to assure that the project was consonant with the goals of the school and to enlist the administrators' support for implementation.

Implementation put the plans into action. Resistance often arose --not surprising in urban schools. Resistance was often due to political problems in the school, but just as frequently to poor management. For example, renewal committees often found

fault with the principal for what they perceived as a lack of support. Principals, on the other hand, often viewed the committees as another pressure group that must be balanced against many others. Those perceptions sometimes led to hostilities that obliged the consultant to act as a third-party facilitator.

From the article by Bassin, Gross, and Jordan (1979), p. 78-79), we quote below four brief descriptions of work carried out within schools as a result of the Renewal project. Each "case example" is followed by a brief description of "benefits overall"--that is, benefits in the 31 high schools as a group. The article from which we quote also describes constraints met.

School-wide Renewal . . . Case example. One renewal committee had been operating at a modest level of accomplishment for a year and a half and then put considerable effort into organizing a planning weekend involving fifteen staff and fifteen students. One dramatic result was a school-wide reading campaign with rewards, including status, for reading books, and coordinated effort at incorporating reading instruction in the content area subjects; hundreds of students were positively affected within the first few months.

Benefits overall. (a) Most schools demonstrated that a new structural vehicle for participative planning had been institutionalized. (b) All staffs reported the discovery of previous untapped talents within the school and its surrounding community. (c) Most staffs reported more open communication among all segments of the school-community.

Student Renewal . . . Case example. In a school where renewal had not been effective with a staff committee, a student renewal committee was organized as a class as an attempt to intervene in another subsystem of the school. During the first semester of operation the class of twenty students, grades nine through twelve included, implemented a variety of projects including the following: An opinion survey of all students in the school, a designation of school spirit as the renewal priority, a "Respect Yourself" rally and assembly involving all students in the school, a student-faculty rap session focusing on communications and involving all the faculty, . . . and a monthly newsletter

reporting on renewal news. In their Evaluation Report to the principal, the renewal students expressed pride in their accomplishments and appreciation in having learned "leadership skills which we can carry with us throughout life."

Benefits overall. (a) Students, in general, were highly interested in improving their schools. (b) In a few schools the success of students motivated a hitherto demoralized faculty. For example, in one school the students initiated a course evaluation project for which 80 percent of the faculty volunteered. (c) Students often worked faster than faculty since they experienced fewer time constraints.

Departmental Renewal . . . Case example. A former renewal coordinator had become the chairman of the English Department. . . . Involving all of the faculty in her department, the chairperson was able to organize a project which developed new curricula standards and objectives for the first time in fifteen years. The outcome has been a far-reaching modernization of the entire English Department's curriculum so that it better fits the needs of the underachieving student, so common in their school.

Benefits overall. (a) Improvements were shown to occur in both the process and task aspects of department functioning in the majority of schools. (b) Some process improvements included: (1) improved leadership performance of chairman through feedback from staff, (2) improved departmental meetings, and (3) increased use of other departments as resources. (c) The improvements in task accomplishment focuses on the effective execution of curriculum change.

Administrative Team Renewal . . . Case example. . . . the administrative team of this school designated three areas of work for improvement and then developed action plans for each: . . . revising security procedures to reduce class cutting and vandalism; streamlining meetings to increase the effectiveness of decision-making; and creating new supervisory procedures to provide increased support to teachers in the classroom. In their own evaluation of the first year, the team found significant progress made in each target area.

Benefits overall. (a) Speedy actions to improve school-wide processes were frequently facilitated by working with the top administration. (b) The functioning of administrative teams was improved in terms of their meetings, decision-making, planning and implementation.

Finally, Bassin, Gross, and Jordan (1979, p. 81) explained the institutionalization of their work:

The renewal process has become institutionalized in three related domains. In one-third of the individual renewal schools the renewal process is in operation within two or more subsystems and is supported externally by only occasional visits from the renewal consultants. . . . the external support systems continue to provide ongoing support. The external catalyst, the Economic Development Council of New York City, continues--indefinitely--to provide that support financially, expertly, and psychologically. While EDC continues to be involved in renewal, the board of education increasingly has assumed the financial burden of renewal in spite of severe city-wide budget cuts in recent years. The board pays the salaries of four of six renewal consultants, whereas two years ago they paid for none. The board also provides a research and development budget to each participating school. Increasingly, the central office superintendents are becoming advocates of renewal as well.

For a description of what life was like for one of the outside consultants, see Gross (1980).

#### Organizational Training

In the initial project of our own program on organizational development in schools at the University of Oregon, we set out to test whether comprehensive training could strengthen the problem-solving capacity of a junior high school near Portland, Oregon. The narrative and outcome data are given by Schmuck and Runkel (1970). The project at Highland Park Junior High School was the first in which an entire faculty was trained in process skills together. Indeed, we included the head secretary, head custodian, and head cook. We and our assistants devoted the equivalent of about 13 days to the training: a block of six days in August 1967 and then the equivalent of seven days scattered through the 1967-68 school year. Our goals for the training were to enable the school faculty (1) to state aloud in their own meetings some difficulties in the communication among themselves,

(2) to apply a systematic procedure for solving problems to improving communication, (3) to transfer the lessons learned while improving communication to relationships between teacher and student and to classroom instruction, and (4) to establish a continuing program of activities for improving communication.

The first two days in August were devoted to training in face-to-face communication and to exercises that simulated organizational processes. On the third day, during practice in decision making, the faculty selected three problems to receive special effort during the year:

1. Insufficient role clarity, especially in the roles of principal, vice-principal, counselors, and area coordinators.
2. Failure to draw upon staff resources, especially between academic areas, but also within them.
3. Low involvement and participation of staff at meetings of committees, areas, and the full faculty.

The faculty spent the last three days following a systematic problem solving procedure that led to concrete plans of action and simulated trials of early steps.

In early fall 1967, we interviewed all faculty and observed several committees and subject-area groups. The second workshop with the entire staff took up one and one-half days in December. The third workshop, also one and one-half days long, occurred in February. We administered questionnaires in August 1967, December 1967, and May 1968.

As the year went by, several changes in organization process or structure occurred that would have been surprising in previous years. The following are among those reported by Schmuck and Runkel (1970).

The Principal's Advisory Committee increased in influence; it became a representative senate with decision making powers.

A group of innovative teachers, mostly area coordinators, had been making proposals to improve educational outcomes: changes in schedules, in teachers' assignments, and the like. But they had been envied and misunderstood, their proposals resisted. By the end of the year of intervention, resentment toward them had decreased, their attraction had increased, and the group doubled in size.

The school created a new job: vice principal for curriculum. Among other duties specified for the job were acting as consultant on interpersonal relations for task groups, acting as liaison between groups, transmitting proposals for curricular development from the school to the district office, and acting as liaison with other junior high schools concerning curriculum. The superintendent asked the new vice-principal to maintain a log of his activities and write a job description. With that accomplished, the school board granted funds for similar positions in other junior high schools. The first curricular vice-principal was asked to aid the other new vice-principals in learning the role.

Several times during the year, faculty meetings were initiated by persons other than the principal, a clear break with tradition. The meetings attracted strong participation by faculty.

The faculty showed evidence of putting high value on the skills to be learned from OD training. In essays on outcomes of the training, nineteen teachers spontaneously mentioned applying techniques learned in the organizational training to their relations with students in their classrooms.

The faculty initiated a request for another OD workshop to be held in the following year and set goals for it. They mounted the workshop without our help. The principal attended an NTL educators' laboratory. Six other faculty attended a group-process laboratory in the summer, paying their own way.

Finally, only two teachers resigned at the end of the year, a rate of only three percent, while the rates in other junior high schools in the district ranged from 10 to 16 percent.

By means of questionnaires, outcomes at Highland Park were compared with six junior high schools in the New York City area and with four near Seattle, none of which had been trained in OD. On a questionnaire about the principal, Highland Park changed in the favorable direction on 19 items of the questionnaire and in the unfavorable direction on none. Among the six schools in the New York area, the highest number of items showing favorable change was only nine, and the highest number showing unfavorable change was 12.

On a questionnaire about staff meetings, Highland Park changed in the favorable direction on 21 items and in the unfavorable direction on two. Among the schools near Seattle, the highest number of items showing favorable change was only six, and the highest number showing unfavorable change was eight.

On a questionnaire item about innovations, Highland Park reported nine innovations in December of 1967 of a sort we judged instrumental in achieving new forms of organization, and 16 in May of 1968. During that period, in January of 1968, the school near Seattle reporting the most innovations of that sort reported only three. Highland Park also reported 21 instances in December of 1967 of new methods of problem solving or new organizational structure, and 17 instances in May of 1968. None of the schools near Seattle reported more than one innovation of that sort.

The report by Schmuck and Runkel (1970) was summarized by Schmuck, Runkel, and Langmeyer (1969). A follow-up study of Highland Park was carried out by Simons (1974).

#### Innovative Elementary Schools

In 1970, we launched a project to test whether OD could help six elementary schools in Eugene and Springfield, Oregon to install and maintain teaching teams; the project is fully described by Schmuck, Murray, Smith, Schwartz, and M. Runkel (1975). Actually, the schools wanted to install team teaching with "multiunit" structure, which requires an "instructional improvement committee" containing the principal and the team leaders.

The design comprised two schools in which the entire faculty received a week of initial OD and then follow-up consultation from us (called "OD" schools), four schools in which only a representative group of about five persons (including the principal) received the week of initial group training, with the entire school receiving follow-up consultation from the representative group with our help (called "GD" Schools, for "group development"), and two schools that received the same salary increments for team leaders the other schools received, but were given summer workshops with a content different from that we gave to the OD and GD schools (the "control" schools). The initial week's workshop occurred in August in 1970, and follow-up consultation ran through the school year.

We administered questionnaires to all the schools in the springtimes of 1970, 1971, and 1972. Data were also collected via documents produced by the leaders of the teaching teams, by direct observation, and finally by systematic interviews done in the late fall of 1972.

Two of the GD schools encountered severe difficulties in trying to organize themselves into teams and into multiunit structure. Furthermore, both principals displayed increasing ambivalence toward the project as the months went by. One of those GD schools dropped out of the project in December and the other in February.

A year after the consultation ended, we interviewed principals and leaders of teaching teams at the OD schools and

the two remaining GD schools. We asked them 15 questions that constituted criteria for full attainment of team teaching and multiunit structure. Of those 15 questions, one OD school scored at 95 percent of full attainment, and the other scored at 60 percent. One of the GD schools scored at 82 percent and the other at 78 percent.

The two control schools had been among those that had applied to us to be part of the project. When we did not select them, both schools sought OD consultation from others. The principal in one school attended an intensive OD workshop in 1971 and used a substantial amount of outside OD consultation in 1971-72. Evidences of structural changes, team teaching, and instructional changes were obvious at that school in 1972-73. The other control school also used some OD consultation in 1971-72, but only a small amount. No evidence of team teaching or multiunit structure appeared at that school.

At both the OD schools, the percentages of faculty agreeing on educational goals rose from 1970 through 1971 and 1972. That rise might be taken to imply that the two schools should have shown comparable increases on indicators of the sort of collaborative relations necessary to achieve and maintain team teaching and multiunit structure. That, however, was not the case. The case studies of the two schools showed that one school gave primary attention during 1970-71 to building new interpersonal norms, and then moved successfully into the new structure in 1971-72. The other school pressed hard to get the

structure in place during the first year, 1970-71. In the first school, many indicators of interpersonal dynamics from the questionnaires fell in 1971, but then leaped upward in 1972. In the second school, the same indicators fell (or sometimes rose, but only slightly) in 1971 and then fell still further in 1972. That pattern appeared, for example, in answers to "How satisfied are you with your personal relationships with fellow teachers?" "How satisfied are you with your personal relationships with administrators in the school?" "How satisfied are you with the extent to which your efforts and achievements are recognized by others?" and "How much influence do you feel teachers as a group have on how your school is run?" Those results seemed to argue that thorough work on interpersonal norms and processes should come before new structure.

On questionnaire items like those just quoted, the two GD schools that stayed in the project made small to large increases in 1971 and 1972. The two schools that dropped out of the project showed precipitous drops on most items from 1970 to 1971. The two control schools showed few changes on the items.

We concluded that three of the six experimental schools moved fully into multiunit structure or very close to it, and a fourth made significant progress toward the goal. Considering the number of failures of such strong organizational changes reported in the literature, and considering our own experience in Keele that only three of 16 schools attempting team teaching without OD training succeeded in attaining the structure, we

though: three and a half out of six was a good score. Furthermore, the two schools that dropped the effort did so decisively after a few months. That, too, agreed with the experience in Keele, where there was evidence that OD training helped schools that dropped an innovation to renounce it firmly, not to go on toying with it.

The report by Schmuck, Murray, Smith, Schwartz, and M. Runkel (1975) incorporates the dissertations of Nelson (1971), Smith (1972), Murray (1973), and Starling (1973).

#### A District OD Unit

From about 1970 to 1974, the York County (now Region) School Board, located near Toronto, Ontario, contained an Organization Development Unit. Duffin, Falusi, and Lawrence (1972) have told about some of the work of the OD Unit. They say (p. 34):

The York County Board was formed . . . from a collection of smaller boards. The result was an "organization" which had all the classic behaviors and attitudes of any large-scale merger: mutual suspicion, cries for autonomy, generalized hostility to the head office, competition for resources, and a collection of principals who were clustered in groups that were somewhat isolated from each other and from the total system.

In this situation, the basic problem was, "How can we create an organic entity out of this collection of discrepancies?" After careful consideration, the Board decided to employ an Organization Development strategy which would strive to change the atmosphere or "culture" of the organization so that there could be a better use of the resources of the organization, particularly the human resources. The Board decided to use part of its professional development budget for this project. . . .

The most active period of work of the OD Unit began at a large-scale team-building conference initiated by principals in

August of 1970. The conference began with a confrontation meeting in which the Director (a title corresponding to "superintendent" in the U.S.) made known his support of OD methods. Subsequent quarterly meetings of about a day in length were held. The OD Unit also made available the Morton Organization Development Laboratory for all top administrators, both business and academic, all principals and vice-principals, master teachers, attendance counselors, psychologists, and a few teachers. Fifteen of 18 trustees of the Board also attended part or all of a Morton OD Laboratory.

In general, say Duffin, Falusi, and Lawrence (p. 35), the OD work had four overall results:

1. the development of a York County identity
2. the development of a relatively distortion-free vertical channel of communication for planning and decision making,
3. more effective planning, problem solving, and conflict resolution, and
4. job enrichment

Duffin, Falusi, and Lawrence tell about a great many enviable outcomes. We limit ourselves here to the following (pp. 62-63):

There is more resolution of conflict now by members who share the conflict rather than kicking the problem upstairs. For example, two neighboring high school principals met recently and resolved their conflicts over budget resources. The meeting was initiated by them, the conflicts were resolved by them, it was done quickly and amicably, and it saved the area a substantial amount of money . . . .

The Administrative Committee . . . have cut the number of items on their weekly agenda from well over thirty to no more than five. They have reduced the length of their meetings without increasing their frequency, the climate of the meetings is now much more relaxed, and much more gets done. . . .

At the area level, before teachers were allotted to individual schools, . . . the principals were able to divide the available number of teachers in the way that made the most sense to the whole area. They also perceived that it made good sense to leave a reserve to be used at the discretion of the superintendents so that unforeseen circumstances could be dealt with other than by crying for additional resources from the Board or by upsetting the planned structure in other schools. . . .

The discovery that certain textbook titles were being reordered in one school while another school was taking the book out of service or had a surplus for some other reason led to the question of . . . the possible saving inherent in rebinding . . . and in the consolidating of extra copies. . . . Before September 1971, approximately 46,000 books that were usable, or usable if rebound, were picked up and delivered. . . . This is the sort of development where one might well expect a falling-off. On the contrary, . . . in 1972, we have [53,369] usable books to be distributed and . . . to be rebound. . . . Here we have a clear example of what can happen when people collaborate in terms of needs and resources in an atmosphere of trust.

Croft (1971) also reported on the work in York County. He described the case of a caretaker who participated in the planning for his work instead of merely submitting requisitions, with the result that a substantial sum of money was saved because of the "quality and quantity of data which the caretaker had."

In 1974, a teachers' strike erupted in York County. The teachers were against anything the Director was for, including the OD Unit. The Board disbanded the Unit.

#### Principal as Consultant

Flynn (1971) stepped out of his job as a principal of a high school for one year and acted as OD consultant to his own school.

Training began in 1970-71. In late August, Flynn conducted four hours of training for teachers in communication skills and problem solving. He conducted another session of half a day in late September and another in October. Between these meetings and throughout the year, Flynn acted as process consultant in many problem-solving groups and sessions.

In October, the faculty formed themselves into several task-groups to work on problems they had chosen in previous meetings. Also in October, the faculty authorized the establishment of an Interim Decision-Making Body to aid the acting principal in his work. The members were the acting principal and one member from each of the task groups. The agenda of the Body were circulated in advance of meetings, and staff members were invited to attend and speak whenever they wished.

The first meeting with students, 23 of them, occurred in late October. At regular meetings thereafter, Flynn led the students in exercises on communication and problem solving. In late November, the meetings began dealing with concerns the students had about the school. The students chose to focus on improving the feeling of "unit and togetherness" in the school. Teachers joined the group in January.

By the end of the year, data showed that (a) the staff members had generally improved their communication, (b) participation in group meetings and initiations of influence had increased, (c) the school had developed more sophisticated methods of making decisions, (d) most faculty members had viewed

Flynn as consultant rather than as principal, and (e) Flynn had succeeded in acting effectively as a consultant.

### Urban Parochial Schools

In the summer of 1972, the Associate Superintendent of Curriculum for the schools of the Archdiocese of Chicago (Catholic) initiated a program in organizational renewal, and asked help from the College of Education at the University of Illinois at Chicago. A task force was formed of three members of the school system's central office and two faculty from the university. The project has been reported by Keys and Kreisman (1978), Keys (1979), and Keys and Bartunek (1979).

The method of selecting schools for Project START was usually long and thorough. It went through five steps: (1) informational meeting, (2) discussions at individual schools, (3) decision retreat, (4) climate survey and feedback, and (5) task force selection of schools.

The three-day decision retreat was held at the end of January, 1973. Each school sent a four-person team that included the principal. Activities focused on interpersonal and group skills, organizational skills, and the nature of the project. School teams gave one another feedback on interpersonal and group processes such as awareness of feelings and openness of communication. Each team used a management diagnosis chart to appraise its school as an organization.

The school teams worked together to develop their own negotiable criteria for selection into the project. Their list included:

1. continuity of staff,
2. urgency or readiness of the school to participate in the project,
3. willingness to change, to give time and energy to an organizational renewal effort,
4. selection of a cross-section of the schools.

The task force members presented their non-negotiable selection criteria:

1. nine schools, at least one of which must be a high school,
2. faculty consensus for joining,
3. participation in a league with other project schools
4. eventual participation by the whole school-community, including both teachers and parents,
5. school appreciation of outside resources such as consultants,
6. participation in the evaluation of the project.

The task force members held an all-day meeting in late March of 1973 to select the nine schools to participate in the project. They struggled with the issues of readiness and urgency. Should preference be given to a school that might be more ready renewal because it had demonstrated the strength and skill necessary for self-examination and change, or to a school under

community pressure that urgently needed help even if it lacked many of the competencies necessary for self-renewal? The task force decided in favor of readiness. By the end of the day, the task force had selected eight elementary schools and one high school to participate in the project.

Following the selection of schools, teams from each school participated in two workshops lasting a total of five days in the spring of 1973. Each school sent a team of as many as eight members, including the principal.

The purpose of the workshops was to increase the level of the interpersonal, group, and organizational skills of the school teams. The teams were then to serve as trainers in their own schools to communicate the major goals of the organizational renewal project and to teach renewal skills to their colleagues. After that training, the entire faculty was to work together in school renewal. That is, the role of the teams as trainers was a temporary one.

The task force and school principals assessed the training needs of teachers in the summer of 1973, following the workshops. Three goals were set for the in-service training program in 1973-74: (1) to encourage open communication in project schools; (2) to increase the planning skills of faculty members; and (3) to develop school programs for improving the quality of education. To meet those goals, the coordinating council offered an in-service course in which interpersonal and organizational skills

would be used to examine innovative educational approaches and their usefulness in project schools.

In late 1974, the needs of the different schools became more divergent as each school worked to implement its own goals. To accommodate the schools' diverse needs and yet provide an opportunity for schools to act as resources to one another, the council proposed that each school work with one or two other schools with similar interests. Each cluster of schools met for a full day of in-service training concerning issues of shared interest such as curriculum change and the needs of the poor.

To ascertain impact, a multi-method evaluation was conducted by researchers. The nine project schools and eleven comparison schools participated. Data were collected using questionnaires, interviews, and observations of faculty meetings. The major findings from data collected in the spring of 1974 were as follows:

1. Faculty in participating schools reported and demonstrated greater interpersonal competence in planning decision making, and problem solving than faculty in comparison schools.

2. Project faculty were most likely to endorse norms of openness and involvement in interpersonal relationships than were comparison faculty.

3. Project faculties were more likely to develop common goals than were comparison faculties.

4. Students in project schools were more likely to perceive a favorable classroom climate than were students in comparison schools.

5. After one year, new teachers in project schools were equal to or superior to experienced teachers in the reported use of interpersonal skills and in the development of common goals.

The project was maintained and extended during 1974-75. The schools progressed with their plans for changes in educational programs, and project schools reported more educational innovations than the comparison schools. Nevertheless, project activities were severely curtailed in 1974-75 because of a lack of funds and the diverging interests of participating schools. Following are some of the events after 1974.

After 1974, both the high school and an elementary school with an ambivalent faculty withdrew from the project. A third school left the project because of difficulties with the local pastor. In 1976, however, five of the six other schools reported that they continued to use organizational diagnosis and collaborative problem-solving methods to develop, implement, and evaluate annual plans for school improvement. Several of the schools introduced new curricula in mathematics and reading. One school developed a school steering committee to decentralize decision making. Its staff reported that faculty turnover had been practically nonexistent for two years, a circumstance they attributed, in part, to its decentralized decision making. In a time of limited economic resources, the Archdiocese board hired a

full-time renewal specialist to work with project schools and with principals throughout the system.

#### Bottom Up

Alderfer and Brown (1975) worked with freshman students in a four-year OD project in a private high school for boys. At the beginning, both faculty and students reported extremely high levels of competitiveness and intolerance of differences. By the time they graduated, students had generally become "cynical and apathetic."

The results of a diagnostic questionnaire were fed back to faculty and students in a series of meetings. Faculty generally were not ready to believe the reports of pervasive sarcasm and of throwing freshman students into a pond. Older students corroborated the reports, but didn't think anything could be done about it. The freshmen, however, talked readily about the effects of the sarcasm and the hazing, and they were ready to think about change.

In 1970, administrators appointed two faculty members as part-time internal change agents. They began work with the sophomores. Another round of questionnaires in 1971 showed strong differences between 1969 and 1971. Sarcasm had decreased significantly in all classes, with the largest decreases among students who were juniors and seniors in 1971. Pond-throwing also decreased, with the largest decreases among sophomores and juniors. The 1971 juniors had been the targets of the internal

change agents, and the 1971 sophomores were the beneficiaries. The freshmen of 1969, when they became seniors, proposed major changes in the structure of the school. The changes were adopted by the faculty and administrators shortly afterward.

Brown (1976) points out that

the institutional cycle of the school is such that those at the bottom of the student influence hierarchy rise to its pinnacle in the course of four years. Thus the freshmen of 1969 were the primary socializing agents of new freshmen the following years.

### Parents and Educators

During 1971-72, Thomas Elementary School (fictitious name) in Eugene, Oregon found itself beleaguered. About 90 parents attended informal neighborhood meetings in the fall of 1971 to discuss concerns they had with their school. They formed a group called the Parents' Advisory Committee.

Richard Schmuck, Jane Phelps, and Richard Arends from the University of Oregon joined a team from the Eugene cadre of organizational specialists to help the school and the parents resolve their conflicts. The project is reported by Phelps and Arends (1973).

The cadre team and the University consultants worked out a design that had as its overall theme a confrontation between parents and teachers. Within the basic theme of confrontation were elements of training, data-feedback, and process-observation-and-feedback. The macro-design included six states:

1. Form and meet with a Steering Committee comprised of some teachers and a few parents to explain the macrodesign and get approval to proceed.

2. Give demonstrations of OD to the staff and to all interested parents so they can understand its goals and procedures.

3. Train parents and staff separately in the skills of interpersonal communication and group problem solving, and help each group choose top-priority concerns. Collect data on impressions of intergroup climate and influence.

4. Bring the two groups together and feed back data on climate, concerns, and influence. Help the groups clarify intergroup communication and agree upon top-priority mutual concerns.

5. Form problem-solving groups of parents and teachers to design proposals to solve important mutual problems.

6. Bring all problem-solving groups together to share their proposals and to make decisions and plans for implementation.

The six stages began with stage 1 in November of 1971, and ended with stage 6 in June of 1972.

Three kinds of outcome were documented. The first had to do with implementation of proposals designed by the parent-staff problem-solving groups. Within a year, there were: (1) a new parent organization that brought parents into decision making about curriculum and staffing, (2) new forms of written communication from school to home, (3) improvement to the

building and grounds, (4) parties for welcoming new and foreign families to the community and school, (5) many parent volunteers in classrooms and the library; and (6) an artist-in-residence program.

A second kind of outcome had to do with improvements in the interaction between staff and parents and in interactions among staff members. After the OD, parents reported that they had better impressions of the school, that they could now get the information they wanted, and that they thought their ideas were welcomed by the staff. When asked about changes they saw in the school, more than two-thirds of the parents singled out the atmosphere as being very different.

The third kind of outcome concerned changes in perceived and attributed influence. Parents perceived an increase in their own influence after OD and did so without attributing less influence to the staff. Staff members, by contrast, did not think they had gained or lost influence, but attributed more influence to parents. To both parents and the staff, the PTA in its new structure was the vehicle through which the total amount of influence available to be shared had been increased.

#### A Structural Task

Duncan, Mohrman, Mohrman, Cooke, and Zaltman (1977) reported a project in a small city in the mid-west. They called their strategy a "structural task approach." The general goal of the project was to increase organizational capacity for problem solving. The district contained 17 elementary schools, three

junior high schools, and two senior high schools. Ten of the schools volunteered for OD; the other 12 served as comparison schools. After an entry period of nine months, full of difficulties, active work in the project began in December of 1974.

Outside consultants conducted the OD. Principals of the ten experimental schools received two days of training in December 1974. The superintendent and his staff received one day of training in January 1975. (There were three superintendents during the course of the project.) In February, pretest questionnaires were administered, principals of the 12 comparison schools received one day of training, and program leaders received three days. The duties of the program leaders were to feed back questionnaire results to faculty and to facilitate the later problem-solving sessions. Program leaders were elected by the faculty of each school. Also in February, program monitors received one day of training. Their duties were to provide process consultation to the program leaders and the problem-solving groups and to fill out various reporting forms for the project.

Between February and March, a data-feedback session was held at each school, and problem solving began at the experimental schools. Teachers were given released time for three two-hour sessions during which the program leaders and program monitors facilitated the problem solving. No released time was provided for later problem-solving sessions; their occurrence was

considered one of the outcomes of the project. Interviews for formative evaluation were conducted in June.

In October of 1975, five new program leaders and monitors were given two days of training. They were joined on the third day by the program leaders and monitors who were continuing from the previous year. In this second session of training, greater attention was given to group processes, handling of conflict, and clarification of program roles. Questionnaires were administered again in February of 1976, and data from them were handed back to faculties in March and April.

Results from the administration of questionnaires before and after the OD showed numerous improvements. Teachers in the experimental schools reported significantly more clear-cut procedures and significantly increased variety in their jobs. Neither was true in the comparison schools. In the experimental schools but not in the comparison schools, teachers reported that they were significantly more capable of defining problems to be worked on, finding solutions, communicating the solutions to those affected, obtaining sanctions for solutions, finding acceptance for solutions, putting the solutions into effect, and merging the solutions into existing rules and procedures.

After OD, teachers in the experimental schools said that significantly more resources and more attention were being given to developing highly qualified staff to implementing an integrated instructional program, to producing a supportive school environment, to evaluating school programs to improve

them, to being responsive to the community and to communicating to the public. In the comparison schools, teachers reported a significant increase only in implementing an integrated instructional program.

Teachers in the experimental schools, but not in the comparison schools, were significantly more satisfied with their work itself and with their working conditions. Despite their active participation in the project, teachers in the experimental schools, after OD, felt no increase in job overload.

Teachers in the experimental schools, but not in the comparison schools, perceived significantly less role ambiguity. They felt significantly better about administrative practices, about procedures used to evaluate teachers, and about the quality of meetings. Finally, teachers in the experimental schools chose and worked actively on 38 particular problems through which to improve their schools.

Further reports on the project are those of Mohrman, Mohrman, Cooke, and Duncan (1977) and Mohrman, Cooke, and Mohrman (1978).

#### School and Classroom

Scheinfeld (1979) along with six colleagues, acted as outside consultants to two elementary schools in Chicago for three years beginning in 1974. A procedure developed during the project in which, a planning facilitator helped the school review its problems and aspirations. The planning facilitator was aided by a community organizer, who helped members of existing parents'

groups to do the same. Those two, together with the principal, then brought together the teachers and parents to choose goals for the project. The planning facilitator, who was an OD consultant, assisted with further planning and provided process consultation during the ensuing work. He also coordinated the efforts of the other members of the team of seven outside consultants. The team conducted periodic formative evaluations.

By the end of the work with the first school, Scheinfeld (1979, p. 117) say,

12 out of 30 teachers . . . had developed to the point where it seemed likely that they would keep on developing in the team's absence. The majority of these teachers were evolving their classrooms in multi-faceted ways (space, curriculum, organization, individual self-expression for both children and teachers, and learning partnerships between teachers and children).

Scheinfeld (p. 117) says that the second school, Crosby,

Our estimation is that the Crosby teachers made as much progress in their classrooms in four months, one day per week, as the Appleton teachers made in the first year and a half, four days per week. By the end of the four-month period we had established working relationships with virtually all of the 21 Crosby teachers, including a core of teachers who became ready to work on major developments in their classrooms.

Amarel, House, Langmeyer, Lortie, Mayer, McLean, and Sealey (1979) evaluated Scheinfeld's project and concluded that "the voluntaristic, psychological approach of the Team to changing the culture of the school was ineffective against the traditional work structure" and that "the ultimate result was that more change occurred in the Team's ideas of how innovations are best introduced than in the school itself" (pp. 25-26).

### Redesigning the Management System

Jamieson (1976) reported a project undertaken with six junior high schools in southern California in which consultants aided schools in changing their management patterns. Alterations, planned and agreed upon in advance, were made in the jobs of principals, assistant principals (APs), counselors, and departmental chairpersons. Most of the actual facilitation of the change was done by APs from other schools who had been participants in an earlier project similar to this one. They became consultants to the four experimental schools in this study. The AP-consultants, however, did receive training from the outside consultants in two three-hour workshops before OD and in two "clinics" conducted during OD.

In interviews, APs in the experimental schools did indeed report broadened responsibilities and realigned duties, including a drop in time devoted to disciplinary matters.

One questionnaire item asked, "How do you feel about this school's level of innovativeness in new jobs or duties?" Counselors in the experimental schools increased their feeling of innovativeness significantly, while respondents in the control schools decreased significantly. Another item asked, "How do you feel about this school's level of innovativeness in organizational structure?" Though only one experimental school showed a significant favorable change on that item, the control schools dropped significantly.

Other variables were assessed by clusters of questionnaire items. Goal clarity, role clarity, and participation in decision making all increased significantly in the experimental schools, not in the control schools. On ease of achieving joint effort between persons in different roles, questionnaire results showed improvements in the experimental schools on all possible pairwise comparisons among principals, APs, counselors, departmental chairpersons, and teachers, with the most significant improvements occurring between counselors and teachers and between counselors and departmental chairpersons.

#### Survey and Problem Solving

Cooke and Coughlan (1979) carried out a project with elementary schools that incorporated an unusually sophisticated experimental design. Seven schools received the "full treatment": a strategy that Cook and Coughlan called "survey-feedback--problem-solving--collective decision." Three schools received survey-feedback only, seven were a pretest-posttest control group, and seven were a posttest-only control group.

Interviews and questionnaires gave evidence that after the several sorts of consultations, collective decision making in the full-treatment schools was significantly more pervasive than in the survey-feedback schools or in the pretest-posttest schools. But the posttest-only schools were doing about as well as the full-treatment schools. That is difficult to interpret.

### Brief Description of Other Studies

#### Twenty-eight Principals

Thomas (1969) described a five-day training laboratory attended by 28 elementary principals. Questionnaires from 204 teachers gave data concerning changes in organizational climate, executive leadership, tact, and collaborative decision making. Principals in the experimental group changed more favorably than those in a control group on many variables. Thomas concluded that the laboratory succeeded in changing the behavior of the principals in the intended directions.

#### A District-wide Effort

Doll, Love, and Levine (1973) told the story of the massive OD program that began in Louisville in 1969--"a brave new world of educational innovation." Many things went awry, though in 1973 administrators were still hopeful that gains had been made and that lessons had been learned. In 1975, Louisville still had a small office of organizational development, but it was not very active. Doll, Love, and Levine in 1973 concluded (p. 532):

The format for training and organizational development should be closely interwoven with the regular academic schedule. Plans for bringing about change falter when resources . . . are not provided in sufficient quantity. . . . Planning and evaluation procedures emphasizing formative evaluation, behavioral objectives, criterion-referenced testing . . . have not as yet been shown to have great utility . . . other than their obvious role in helping call attention to blatant problems in the schools.

#### A New High School

Keutzer, Fosmire, Diller, and Smith (1971) gave an account of start-up training for the staff of a new high school. In

comparison with a control school, the experimental staff increased in predicted candor, acceptance of overt conflict, and students' perceptions of favorable conditions in the school such as whether teachers made the students feel like children. Impressions from direct observation supported the questionnaire data. The authors also described some unfavorable concomitants. See also Fosmire, Keutzer, and Diller (1971).

### Southern Tier

Feitler and Lippitt (1972) described a change project in 14 schools called the "Consortium of Schools." The Southern Tier Office for Educational Planning (in New York State) began the work in the spring of 1970. Its purpose was to provide OD to a number of schools in five counties. The schools chose for themselves the kinds of organizational and program changes with which they would receive help. After training in planning, interpersonal skills, and leadership skills for small groups, the schools began to make progress toward goals they had chosen for themselves.

### Five Years

Lehman (1972) described a five-year program of curricular and organizational change at Dr. Martin Luther King Elementary School in Syracuse, New York. Consultants in OD from Syracuse University helped during the first three years. Lehman describes very briefly some favorable outcomes.

### Two Schools

Langmeyer, Lansky, and Reddy (1973) described the organizational training offered two schools to make communication patterns more functional and to aid with change strategies. Their assessment at the end of a year and a half seemed to show improvement in communication skills and more efficient meetings, but participants expressed disappointment that more problems had not been solved.

### A State Vocational Education Agency

A study reported by Ely (1975) tested the effectiveness of OD to improve organizational adaptability in a state vocational education agency. Comparisons of problem solving in groups after one and two years showed significant improvements in (a) problem-solving procedures, (b) making use of the "variety pool," (c) responsiveness among participants, and (d) using formative evaluations. The data also showed conscious use of face-to-face communication skills.

Two years after OD, group problem solving and procedures for goal setting had become "established routine" among second-level managers in the agency and had reached to some third-level managers and to some teachers.

### Raising Readiness

Saturen (1976) reported OD activities since 1969 in Adams County, Colorado: courses to introduce OD theory and method, workshops on curriculum, surveys of local needs, aid to teachers in designing their own workshops, in-service training in

classroom processes, and team building. Saturen looked upon all those activities as ways of developing readiness for more extended OD projects. By mid-1977, more than 60 percent of district employees had received OD training, and 20 employees of the district were competent to offer OD consultation.

Saturen attributed the success of his team of four consultants in spreading OD activities through the Adams County district to (1) inside-outside collaboration, (2) entering the system at several levels, (3) building communication and coordination, (4) providing tangible rewards, and (5) planning systematically.

#### Upward Bound

Torbert (1976) told about his two years of work with high-school students as director of an Upward Bound program. The school, he said,

was trying to transform itself into a real community of inquiry (p. ix).

Within two years I was to experience the immense satisfaction of sharing in a collaborative community that was demonstrably generating new kinds of learning and new degrees of success for our students and staff. And I was also to experience the immense distress of conflict beyond-my-ability-at-that-time to resolve. . . (p. xii).

A new director changed the mode of work--toward the worse, in Torbert's opinion.

#### A Vocational Technical School

Hatley and Tull (1978) reported an OD project to help teachers invent ways of solving their own problems of classroom organization. Three groups were assessed: (1) seven teachers

who volunteered for the OD workshop and participated in it, (2) two teachers who volunteered but did not participate, and (3) two teachers who did not volunteer and did not participate. The training group received five days of classical OD training. Ratings by students were used for assessment.

Students of teachers in the trained group perceived their teachers as increasing in effectiveness; those in the control group did not. Similar outcomes were found for ratings on regard, empathy, unconditional regard, and congruence.

#### Management Style

Cohen and Gadon (1978) were asked by the superintendent of a school system in New England to help him bring about a more participative style of leadership in the district. They began work in 1971, using largely the methods of survey-and-data-feedback and problem-solving workshops. A new management committee and some task groups were formed. By the end of two years, Cohen and Gadon (p. 68) concluded that ". . . the changes made in the management organization seemed firmly entrenched."

#### Inner-City Schools

Francisco (1979) described the four methods of consultation used by a team of consultants in Oakland, California in 1976-77: survey-and data-feedback, training, process consultation, and confrontation. He gave several examples of the use of each, and concluded (p. 93) that ". . . training was the most powerful of the four modes of gaining ground on our overarching purpose: helping schools to build a capacity for solving their own

problems." For more on the project of which the Oakland work was a part, see Bell (1979).

#### And Some Briefer Notes

This section contains brief descriptions of projects that showed small effects, or showed no effects, or in the reports of which we could discern little information concerning effects.

Croft (1970) reported work with a school in Ontario. He concluded that spending time on goal-setting and monitoring progress is less important than developing organizational adaptability.

Poole (1971) reported an intervention in a junior high school carried out by a consulting team from the Community Psychology Institute at the University of Cincinnati. He concluded that the OD team succeeded in introducing skills of communication and problem solving into the daily activities of the school, but that the faculty used the skills more at the interpersonal level than at the organizational level.

Gentry and Watkins (1974) told about using OD to help a previously all-black elementary school convert to mixed black and white during 1970-71. The consultation had some intended effects in the short run, but the authors concluded that one year was not sufficient time to stabilize new organizational patterns.

Derr (1971) studied the operation of the Boston School Department, its bureaucratic structure, the conflicts in it, and the difficulties of carrying out OD work there. The OD work was

not successful. Derr has drawn upon his experience in Derr (1972a, 1972b) and in later articles.

Corprew and Davis (1975) reported an OD project for improving instruction in a university. As intervention methods, the project used "nominal grouping" and brainstorming. Corprew and Davis say the project was successful, but we were unable to find clear evidence in their article.

McMillan (1975) reported the outcomes for a "Clinic for Learning" in a junior high school in which he was a teacher. The project was a "sorry failure." McMillan gave some reasons.

Coad, Miskel, and van Meter (1976) reported work with four inner-city schools. The project began with a two-week workshop in August and included four day-long sessions during the school year. On almost every measure of outcome, the control group scored higher than the trained group. On measures showing declines, the trained group declined more than the control group.

South (1976) recounted four years of OD activity in Monroe County, Florida. He gave no data on outcomes, but offered guidelines for successful work.

Burr (1977) described the events in preparation for the retirement of the principal of an elementary school. The Eugene Cadre of organizational specialists was not successful in helping the school to prepare for the transition from one principal to another.

Davison and Longhofer (1977) described the problems occasioned by integration via busing in a junior high school.

Working with the principal, an outside consultant began the project with a ten-day OD workshop. The intent was to develop participative management. Davison and Longhofer's article reports no evaluation of results, but offers some recommendations.

### Review of Findings

The chief conclusions that can be drawn from research on OD in schools are as follows.

#### Entry and Start-Up

It is very important to allow adequate time to portray to clients what OD is like and how it works. A few months at the very least are necessary for a moderately large school staff to develop an understanding of what the OD work will be like.

OD is more likely to have beneficial effects when the staff's decision to move into the project is public (among participants) and virtually consensual. Though it is not necessary for every staff member to be unreservedly in favor of the project, it is important to hold public discussion and to persuade those who are lukewarm to reserve judgment until the OD project has taken its initial steps. It does little harm for administrators to require attendance at the introductory meetings; school people are inured to that. Once the consultants begin to ask participants to do more than listen and vote, however, it is important to make clear the limits of what is required and what is voluntary.

Success in carrying the OD work forward is strongly influenced by the readiness of the clients to risk change. Readiness is greatest in schools or districts where early planning is done jointly with an internal steering committee, where there is close partnership between internal and external consultants, where there is some agreement on particular educational goals to pursue, where the feeling of stress is low to moderate and participants do not have a history of one failed innovation after another, where participants feel at least some desire for collaborative work, where participants value candid communication, and where there is support from the top.

Almost every study mentions the importance of support from the top. For success of almost any sort, administrators should take a stance toward the project that is at least neutral and permissive. It is much better if they support the project outspokenly and actively. If principals, in particular, falter in their support or vacillate in exhibiting the new norms, staff members will also be likely to vacillate and falter.

Large-scale projects with heavy funding from outside sources are not likely to become institutionalized.

Even without outside funding, the money from inside the district necessary for OD work, even large-scale OD work, is typically less than one-half of one percent of the district's budget.

OD can expect special difficulties in inner-city schools suffering from high stresses such as low budgets, strife between

teachers and administrators, pressures from community groups, ethnic conflicts, and so on (see chapter 2 of Runkel, Schmuck, Arends, and Francisco, 1979, for more on stresses). And with or without special stresses, OD work is especially difficult when there is high turnover in staff, and even more so when there is high turnover among administrators. In those cases, extra effort should be put into raising readiness. Burr (1977) told about a failure of a school faculty to bring a new principal into the same collaborative relationship they had enjoyed with the old. Saturen (1976) described some activities that can raise readiness.

OD is more likely to have beneficial effects if the "variety pool" is active. That is, when a school staff is trying to find new ways through old problems, they are more likely to commit themselves to a solution if it is built from their own ideas. They must, therefore, encourage one another to come forth with their ideas, and they must be ready to take one another's ideas seriously, even when they seem strange or shocking at first hearing. That kind of openness often stirs emotions, but a school can make more productive use of OD if it can go on working collaboratively despite the anxiety aroused by the new ideas. In sum, when faculties are able to generate and to circulate relevant information, and when they are able to communicate about relevant matters even while anxious, then they are better able to work collaboratively.

The record of cadres of organizational specialists shows that members of schools and districts can become effective internal consultants with little training--typically two or three weeks of initial training with follow-up help for perhaps 30 hours during actual consultations. Indeed, Fullan, Miles, and Taylor (1978, Vol. I, p. 8) said that the internal consultants in OD programs in 76 school districts had had little or no formal or informal training in OD. But they also found (Vol. III, p. 51) that training insiders made a difference. Programs with well trained inside consultants had higher impact, more favorable attitudes, and better institutionalization. Above all, they concluded (Vol. III, p. 52), ". . . the role of external change agents should be directed at providing support and transferring knowledge, materials, skills, etc., to key insiders." That, of course, is how a cadre is built.

Cadre members are more likely to become successful inside consultants when they have a strong desire to join the cadre, when they have job security in the district, and when they perceive themselves as influential with colleagues.

### Transition

Projects in organizational change have little chance of success if efforts are focused on improving individuals as individuals. Fullan, Miles, and Taylor (1978, Vol. III, p. 42) found that projects of personnel development had lower results in impact and attitude than any other type. Indeed, we do not think such efforts match the definition of OD that Fullan, Miles, and

Taylor (1978, Vol. I, p. 14) themselves give. We ourselves believe in the efficacy of carrying out OD with intact groups--with subsystems. We have become so convinced on the point that we judge we would be behaving unethically to give training to arbitrary individuals in a target school or even in a "control" school. That is not to say, however, that OD consultants must always work with existing subsystems and never with individuals. Sometimes new subsystems must be created, and sometimes it is useful to provide special coaching to individuals to improve their functioning in the intact group.

OD is likely to move through its stages with more support from participants, meeting less impatience, suffering fewer drop-outs, giving rise to more favorable attitudes, and achieving better institutionalization, when it is connected with a program of educational improvement of some sort. Success (impact, attitude, or institutionalization) is more likely when the word has a task emphasis, (not solely personal growth or learning group dynamics), when there is sustained consultation from inside, when participants view OD methods as a permanent, continuing part of their organizational life, and when participants expect to spend several years in the transition stage.

The time it takes to achieve benefits varies with the kind of benefit. Counting from the end of the entry period and the beginning of actual consultative work, some outcomes--moving new committees into activity, forming task forces among students,

publishing a new kind of newsletter, and the like--can occur within a few weeks, as we saw in the case of the New York High School Renewal program. Other outcomes--such as bringing team teaching or multiunit structure into full operation throughout a school, changing the leadership style of a principal from authoritarian to participative, or establishing a cadre of organization specialists--take longer. In general, less time is needed for changes affecting few people and requiring little change in norms, and more time is needed for changes affecting many people and requiring strong change in norms.

For major changes affecting an entire faculty and requiring old norms to be given up, members of a school can expect to find themselves acting according to the new norms after perhaps a year of effort during which they spend, let us say, 160 hours in actual practice, with 40 to 80 hours concentrated in an August workshop and the rest spread over the school year. Miles, Fullan, and Taylor say that two years is a reasonable time before clear impact should be expected and that firm institutionalization requires perhaps five years. Though we think a summer workshop has the advantages of concentrating attention on issues and of getting a lot of training over with at the onset, actual practice in allocating hours varies greatly, as the projects we have described in this chapter demonstrate.

Too little time can be spent in OD training. If training in open and accurate communication stops after about 24 hours, openness and collaboration are likely to fall to lower levels

than before. After that point, and especially with larger amounts of training, communicative skills that support collaboration are likely to show continued improvement.

OD requires participants to spend more time in meetings than usual during the transition period. Under "Large-Scale Research," we described a project that we labeled "Innovative Elementary Schools." In that project, Smith (1972) collected data on time spent in meetings in two schools. She found (p. 109) that in the school that was unsuccessful in bringing about team teaching, the faculty spent about two and one-quarter hours per week in meetings both before and after the intervention. In the successful school, however, faculty spent three and three-quarter hours per week before the intervention and five and one-half hours afterward.

OD is more likely to help a school change its norms, roles, structures, and procedures when the steps of transition are chosen by staff members themselves to meet particular problems that have emerged through staff discussions, in contrast to problems chosen by outside experts to follow a preconceived intervention sequence composed without a diagnosis of the school's special circumstances.

Participants who spend a year or more with OD are likely to develop increased tolerance for disagreements and value conflicts. Moreover, a school staff that deals purposely and confrontively with conflict during transition is more likely to

approach a sustainable problem-solving capacity than one that suppresses conflict.

On one point, authors of reports on OD projects differ a great deal. Some emphasize the idea that collaboration--concerted joint work--requires norms of the OD sort that are weak or nonexistent in most schools, and therefore that the new norms for collaboration must be taught and practiced before serious change can be undertaken successfully. Others emphasize the idea that school people are busy and often overloaded already, and therefore that they must get some benefits plain to see before very long or they will give up. Our view is that both emphases are correct.

The resolution to the apparent paradox comes in examining what school people (or people in any organization) consider to be benefits. To make that clear we return to the social motives of achievement, power, and affiliation.

Participants in an OD project will feel a sense of achievement if they find that they are "getting things done," whatever those things may be--agreeing on a goal, appointing a task force, putting up encouraging posters in the hallway, making a clear decision in a meeting, getting clearer communication from colleagues, making a plan with another teacher whose work clearly affects one's own, beginning a course on leadership with students, and so on. Some things can be done, or at least set in motion, almost at the outset. It is important to be on the alert for any action that can be started early and to nurture it.

One of the first benefits typical of OD projects is improved meetings. Meetings can be made more productive and enjoyable, in most schools, with little or no training, but mainly through process consultation and example. Not only are staff members relieved of a great deal of frustration, but a good ground for later work is laid, since much later work depends on effective meetings.

Participants will feel a sense of power if they find that they are making decisions about their work that they did not feel permitted to make before. One of the first services an OD consultant typically renders is to help participants to select problems important to them, examine possible solutions, and initiate action without waiting for an administrator to do those things. If the project clearly has the support of the administrators, participants will begin early to feel that they have a control over their own lives they did not have before.

Participants will feel a sense of affiliation and affection if they find that others are behaving in a caring fashion. Given some minimal readiness, participants can find early evidence that others care about them when communication skills begin to change--when they find that others want to understand what they say and how they are feeling about it, that others care about whether they are committed to further work, that others want to elicit their abilities, and so on. Those discoveries, too, can come early, after only a little process consultation.

In any case, with or without early benefits, neither consultants nor participants can rest on early laurels. Establishing a committee must be followed up by helping the committee to do good work. A course on leadership for students must be followed up by finding occasions for the students to exert leadership. And so on. Perhaps the simplest way to sum up the question of whether process or task should come first is to remind ourselves of one of the indispensable rules of successful OD work: Keep At It. Be alert to set in motion any content task for which participants seem reasonably ready, and be equally alert to seize any moment when participants seem ready for new action.

#### Outcomes

OD can increase or improve trust, interpersonal harmony, the quantity and distribution of communication, accuracy of communication, and awareness of functioning communication channels. Commitment to change, cohesiveness and solidarity, morale, goal setting, and goal clarity. Clarifying roles and resolving conflicts. Planning, decision making and productivity in meetings. Collaboration in work, coordination among jobs, variety within jobs, mutual helpfulness, drawing out personal resources, selection of fruitful problems to be worked on, finding feasible solutions, marshaling joint effort toward solutions. And monitoring progress.

OD can have spin-off effects to people, staff and students, who do not directly receive training or consultation.

Some managers think that if a new structure is put in place that requires more open and accurate communication, then merely working under that structure will cause people to learn how to communicate that way. The evidence in regard to team teachings says that is wrong. In schools where team teaching is instituted by fiat, communication becomes more open and direct for a few months but then falls back to where it was at the beginning. With OD, the level of communication rises and then continues at the higher level longer than it does in non-OD schools.

OD can facilitate large-scale or stressful organizational changes: new curricula, team teaching, reduction in force, desegregation. Schools with even a small increment in OD skills can, when they find innovations unsuitable, drop them with more dispatch and finality than schools with ordinary skills.

OD can facilitate new organizational subsystems and new structural arrangements to meet special needs. Examples are school renewal committees, a committee with delegated decision-making power in a junior high school, a similar "decision-making body" in a secondary school, a way of reorganizing the initial weeks of first grade to cope with individual differences among entering youngsters, collaborative teaching arrangements, a specially tailored learning center for an elementary school, a school-within-a-school, and new subgroups within a PTA to improve the speed and accuracy of information flow between staff and parents.

Finally, the cadre of organizational specialists promises a way of institutionalizing OD in school districts. The oldest cadre is now 16 years of age. Fullan, Miles, and Taylor, in the Review of Educational Research (1980), p. 151), say:

Prospects for longer term institutionalization (e.g., after the first 2 years of activity) can be traced to the previous two phases. If active involvement of administrators, use of district funds (as opposed to total reliance on external funds), interaction of OD with educational issues of concern to teachers and administrators, and development of internal consultant capabilities at the coordination and school levels have not been the foci of the entry and transition phases, it is unlikely that the program will survive beyond the first 2 years or so. If it does survive, institutionalization will be achieved when OD becomes a standard part of the district budget, run largely by internal staff who continue to train others, and when it permeates the system as an indistinguishable part of organizational life.

#### REFERENCES

- Aldefer, Clayton, P. and L. Dave Brown (1975). Learning from changing: Organizational diagnosis and development. Beverly Hills, CA: Sate.
- Amarel, Marianne, Ernest House, Daniel Langmeyer, Dan Lortie, Rochelle Mayer, Leslie McLean, and Leonard Sealey (1979). Reform, response, and renegotiation: Transitions in a school change project. New York: Ford Foundation.

Bassin, Marc, Thomas Gross, and Patricia Jordan (1979).

Developing renewal processes in urban high schools. Theory Into Practice, 18(2), 73-81. An article with similar content is M. Bassin and T. Gross. Turning on big city schools: Pragmatic, participatory, problem solving. In M. M. Milstein (Ed.), Schools, conflict, and change. New York: Teachers College Press, 1980; pp. 114-131.

Bell, Warren E. (1977). Impact of organization development interventions conducted by an internal cadre of specialists on the organizational processes in elementary schools. Doctoral dissertation, University of Oregon.

Bell, Warren E. (1979). Obstacles to urban school renewal. Theory Into Practice, 18(2), 64-72.

Bell, Warren E. and Ann M. Burr (1976). The Eugene cadre: An internal group of OD specialists--their impact on a school district. Eugene, Oregon: Center for Educational Policy and Management. (mimeo)

Benedict, B.A., P.H. Calder, D.M. Calahan, H.A. Hornstein, and M.B. Miles (1967). The clinical experimental method of assessing organizational change efforts. Journal of Applied Behavioral Science, 3, 327-380.

Bigelow, Ronald C. (1971). Changing classroom interaction through organization development. In R.A. Schmuck and M.B. Miles (Eds.), Organization development in schools. Palo Alto, CA: National Press Books (Now Mayfield Publishing), pp. 71-85.

- Brown, L. Dave (1976). Organizational change from the bottom up. Education and the Urban Society, 8(2), 159-171.
- Burr, Ann M. (1977). The process of a principal's retirement and its effect on a school community. Doctoral dissertation, University of Oregon.
- Callan, Mary F. and William P. Kentta (1979). A backward glance over traveled roads: An evaluation of the Eugene Cadre. Eugene, OR: Eugene School District 4J. (mimeo)
- Cameron, William G. (1982). The in-service school development project: A case study in consultancy for planned change. Doctoral dissertation, University of New England (Australia).
- Coad, R.A., C. Miskel, and E. van Meter (1976). The effects of an organization development program on satisfaction, group process, climate, leadership, and student achievement. Paper read at meeting of the American Educational Research Association, San Francisco.
- Cohen, A. and H. Gadon (1978). Changing the management culture in a public school system. Journal of Applied Behavioral Science, 14(1), 61-78.
- Cooke, Robert A. and Robert J. Coughlan (1979). Developing collective decision-making and problem-solving structures in schools. Group and Organizational Studies, 4(1), 71-92.

- Cooperative Project for Educational Development (1970). Final report on the COPED data analysis project. (3 vols.) Washington, D.C.: U.S. Office of Education. (Project No. 8-0069.)
- Corprew, James C. and Herbert J. Davis (1975). An organizational development (OD) effort to improve instruction at a university, with suggestions for successful implementation. Educational Technology, 15(9), 41-44.
- Croft, John C. (1970). Organizational development for Thornlea: A communication package and some results. Journal of Applied Behavioral Science, 6, 93-106.
- Croft, John C. (1971). Organization development and the planning interface. Toronto, Ontario, Canada: Ontario Institute for Studies in Education. (mimeo)
- Davison, Ronald G. and Paul D. Longhofer (1977). Organizational development training: A case study. Educational Consideration, 5(1), 8-13.
- Derr, C. Brooklyn (1970). Organization development in one large urban school system. Education and Urban Society, 2, 403-419.
- Derr, C. Brooklyn (1971). An organizational analysis of the Boston School Department. Doctoral dissertation, School of Education, Harvard University.
- Derr C. Brooklyn (1972a). Conflict resolution in organizations: Views from the field of educational administration. Public Administration Review, 32(5), 495-501.

- Derr, C. Brooklyn (1972b). Surfacing and managing organizational power. OD PRactitioner, 4(2), 1-4.
- Doll, Russell C., Barbara J. Love, and Dariel U. Levine (1973). Systems renewal in a big-city school district: The lessons of Louisville. Phi Delta Kappan, 54(8), 524-534.
- Duffin, Richard Arnold Falusi, and Philip Lawrence (1972). Organization development, Part I: What's it all about? School Progress (Toronto), 41(9), 34-36; and Part II: Problems can only be solved from the inside. 41(10), 62-64.
- Duncan, Robert B., Susan A. Mohrman, Allan M. Mohrman, Robert A. Cooke, and Gerald Saltman (1977). An assessment of a structural task approach to organizational development in a school system. (Final report to the National Institute of Education under Grant No. 6-003-0172) Evanston, IL: Northwestern University.
- Ely, Vivien King (1975). Collaboration for planned organizational change in a state vocational education agency. Doctoral dissertation, North Carolina State University at Raleigh.
- Feitler, Fred C. and Lawrence L. Lippitt (1972). A multi-district organizational effort. Educational Technology, 12(10), 34-38.

- Flanders, Ned A. (1964). Some relationships among teacher influence, pupil attitudes, and achievement. In B. J. Biddle and W. J. Ellena (Eds.), Contemporary research on teacher effectiveness. New York: Holt, Rinehart, Winston, pp. 196-231.
- Flanders, Ned A. (1969). Analyzing classroom interaction. Reading, Massachusetts: Addison-Wesley.
- Flynn, C. Wayne (1971). The principal as an organizational consultant to his own school. Doctoral dissertation, University of Oregon.
- Flynn, C. Wayne (1974). Management effectiveness by organizational development. Bulletin of the National Association of Secondary-School Principals, 58(382), 135-141.
- Flynn, C. Wayne (1974). Collaborative decision making in a secondary school: An experiment. Education and Urban Society, 8(2), 172-182.
- Fosmire, Fred R., Carolin S. Keutzer, and Richard Dilworth (1971). Starting up a new senior high school. In R. A. Schmuck and M. B. Miles (Eds.), Organization development in schools. Palo Alto, CA: National Press Books (now Mayfield Publishing), pp. 87-112.
- Francisco, Richard F. (1979). The Documentation and Technical Assistance Project in urban schools. Theory Into Practice, 18(4), 89-96.

Fullan, Michael, Matthew B. Miles, and Gib Taylor (1978). OD in schools: The state of the art. (5 vols) (Final report to the National Institute of Education under contract Nos. 400-77-0051 and 0052) Toronto: Ontario Institute for Studies in Education (252 Bloor Street West, Toronto, Ontario, Canada M5S 1V6). The authors have made three extractions from the original report: (1) M. Fullan and M.B. Miles. OD in schools: The state of the art. In W.W. Burke (Ed.), The cutting edge: Current theory and practice in organization development. San Diego, CA: University Associates, 1978; pp. 149-174. (2) M. Fullan, M.B. Miles, and G. Taylor. Organization development in schools: The state of the art. Review of Educational Research, 1980, 50(1), 121-182. (3) M.B. Miles and M. Fullan. The nature and impact of organization development in schools. In M.M. Milstein (Ed.), Schools, conflict, and change. New York: Teachers College Press, 1980; pp. 72-95.

Gentry, Joe E. and J. Foster Watkins (1974). Organizational training for improving race relations. In C. B. Derr (ed.), Organizational development in urban school systems. Beverly Hills, CA: Sage, pp. 138-152.

Goodson, Max R. and Warren O. Hagstrom (1971). Using teams of change agents. In R.A. Schmuck and M.B. Miles (Eds.) Organization development in schools. Palo Alto, California: National Press Books (now Mayfield Publishing), pp. 155-184.

- Gross, Thomas Frank (1980). Illusions, crisis, awareness, and realignment: A case study of an organizational change project and a model of the consultant-client relationship. Doctoral dissertation, Harvard University.
- Hatley, Richard V. and Michael J. Tull (1978). Effects of organization development of teacher effectiveness and teacher-student relationships. Southern Journal of Educational Research, 12(3), 125-150.
- Jamieson, David W. (1976). Organizational change and development in schools: An assessment of the structural-process strategy for redesigning and developing the management system. Doctoral dissertation, University of California at Los Angeles.
- Keutzer, Carolin S., Fred R. Fosmire, Richard Diller, and Mary Dell Smith (1971). Laboratory training in a new social system: Evaluation of consulting relationship with a high school faculty. Journal of Applied Behavioral Science, 7(4) 493-501.
- Keys, Chris B. (1979). Renewal processes in urban parochial schools. Theory Into Practice, 18(2), 97-105.
- Keys, Chris B., and R.L. Kreisman (1978). Organization development, classroom climate, and grade level. Group and Organization Studies, 8(2), 224-238.

- Keys, Chris B., and Jean M. Bartunek (1979). Organization development in schools: Goal agreement, process skills, and diffusion of change. Journal of Applied Behavioral Science, 15(1), 61-78.
- Langmeyer, Daniel (1968). An exploratory study of group effectiveness using two tasks and three populations differing in organizational history. Doctoral dissertation, University of Oregon.
- Langmeyer, Daniel, Leonard Lansky, and W. Brendan Reddy (1973). Organizational training in subsystems of a midwest school district. In W. Claiborn and R. Cohen (Eds.), School intervention. (Vol. 1) New York: Behavioral Publications, pp. 191-205.
- Lehman, Linda (1972). Organizational change and the teacher. Educational Technology, 12(10), 52-54.
- Luke, Robert A., Jr. and Dorothy Mial (1971). An emergent interuniversity consortium for educational change. Journal of Applied Behavioral Science, 7, 194-214.
- Macbeth, Paul R. (1971). Preparing organizational specialists for a school district: Some effects of laboratory training within an organizational development project. Doctoral dissertation, University of Oregon.
- Manno, A.O. (1969). Group interaction as a means of inducing innovative teaching in elementary schools. Doctoral dissertation, Teachers College, Columbia University.

- McElvaney, Charles T. and Matthew B. Miles (1969). The school psychologist and organizational improvement. In M. G. Gottsegen and G. B. Gottsegen (Eds.), Professional school psychology. (vol. 3) New York: Grune and Stratton, pp. 20-50. Reprinted as: Using survey feedback and consultation. In Schmuck and Miles (1971); pp. 113-138.
- McMillan, Charles B. (1975). Organizational change in schools: Bedford-Stuyvesant. Journal of Applied Behavioral Science, 11(4), 437-453.
- Miles, Matthew B., Ph.H. Calder, H.A. Hornstein, D.M. Callahan, and R.S. Schiavo (1966). Data feedback and organizational change in a school system. Paper presented to American Sociological Association.
- Miles, M.B., H.A. Hornstein, D.M. Callahan, P.H. Calder, and R.S. Schiavo (1969). The consequences of survey feedback: Theory and evaluation. In W.G. Bennis, K.D. Benne, and R. Chin (Eds.), The planning of change. (2nd ed.) New York: Holt, Rinehart, Winston, pp. 457-468.
- Milstein, Mike M. (1979). Developing a renewal team in an urban school district. Theory Into Practice, 18(4), 106-113.
- Milstein, Mike M. (1978). Evolution of an internal change team: Expectations, design, and reality. Paper read at meeting of the American Educational Research Association, Toronto.

- Milstein, Mike M. and Paul A. Lafornera (1980). The institutionalization of an internal change team: The Buffalo experience. Paper presented to annual meeting of the American Educational Research Association.
- Mohrman, Allan M., Jr., Robert A. Cooke, and Susan Albers Mohrman (1978). Participation in decision making: A multidimensional perspective. Educational Administration Quarterly, 14(1), 13-29.
- Mohrman, S.A., A.M. Mohrman, R.A. Cooke, and R.B. Duncan (1977). A survey-feedback and problem solving intervention in a school district. In P. Mirvis and D. Berg (Eds.), Failures in organization development and change. Toronto: Wiley-Interscience.
- Murray, Donald G. (1973). Organizational development training for adopting multiunit structure: A comparative case study of two elementary schools. Doctoral dissertation, University of Oregon.
- Nelson, Jack E. (1971). Collegial supervision in multiunit schools: A study of an inservice program for primary teachers in newly formed units in schools which have received two forms of organizational development training. Doctoral dissertation, University of Oregon.

- Phelps, Jane H. and Richard I. Arends (1973). Helping parents and educators to solve school problems together: An application of organization development. Technical report. Eugene, OR: Center for Educational Policy and Management. Reprinted as "Bringing a school staff and parents into effective interaction" by Arends and Arends in Schmuck, Runkel, Arends, and Arends, Second handbook of organization development in schools. Palo Alto, California: Mayfield, 1977; pp. 448-456.
- Poole, Edward Archie (1971). A study of the effects of an organizational problem-solving intervention strategy on the development of self-renewing characteristics of a school faculty. Doctoral dissertation, Indiana University.
- Porterfield, Robert W. and Illah J. Porterfield (1979). School-based renewal coordinators. Theory Into Practice, 18(4), 82-88.
- Roark, Albert E. and Wallace E. Davis, Jr. (1981). Staff development and organizational development. In P. Dillon-Peterson (Ed.), Staff development and organization development. Alexandria, Virginia: Association for Supervision and Curriculum Development, pp. 37-57.
- Runkel, Philip J. (1975). Conditions for success and failure of organizational development in schools. CEDR Quarterly, 8(4), 6-10. ERIC order number ED 088 242.

- Runkel, Philip J. and Warren E. Bell (1976). Some conditions affecting a school's readiness to profit from OD training. Education and Urban Society, 8(2), 127-144.
- Runkel, Philip J., Spencer H. Wyant, Warren E. Bell, and Margaret Runkel (1980). Organizational renewal in a school district: Self-help through a cadre of organizational specialists. Eugene, OR: Center for Educational Policy and Management.
- Runkel, Philip J., Richard A. Schmuck, Jane H. Arends, and Richard P. Francisco (1979). Transforming the school's capacity for problem solving. Eugene, Oregon: Center for Educational Policy and management.
- Saturen, Steven L. (1972). On the way to adaptability: Some conditions for organizational self-renewal in elementary schools. Doctoral dissertation, University of Oregon.
- Saturen, Steven L. (1976). OD in Adams County School District No. 50. Education and Urban Society, 8(2), 196-212.
- Scheinfeld, Daniel (1979). A design for renewing urban elementary schools. Theory Into Practice, 18(2), 114-125.
- Schmuck, Richard A. and Philip J. Runkel (1970). Organizational training for a school faculty. Eugene, OR: Center for Educational Policy and Management.
- Schmuck, Richard A. and Philip J. Runkel (1985). Handbook of organization development in schools (3rd ed.). Palo Alto CA: Mayfield.

Schmuck, Richard A. and Matthew B. Biles (Eds.) (1971).

Organization development in schools. Palo Alto, California: National Press Books (now Mayfield Publishing). Reprinted in 1975 by University Associates with an annotated bibliography that includes reports of research published since 1971.

Schmuck, Richard A., Philip J. Runkel, and Daniel Langmeyer (1969). Improving organizational problem solving in a school faculty. Journal of Applied Behavioral Science, 5(4), 455-482. Winner of the 1969 McGregor Award. Reprinted in ISR Journal of Education Personnel Relations, 1970, 2(2), 69-93. Adapted and retitled "Using group problem-solving procedures" in R.A. Schmuck and M.B. Miles (Eds.), Organization development in schools. San Diego, CA: University Associates, 1976; pp. 51-69. Reprinted in W. W. Burke and H. A. Hornstein (Eds.), The social technology of organization development. Fairfax, VA: NTL Learning Corp., 1972; pp. 286-306. Reprinted in Joel Meyers, Roy Martin, and Irwin Hyman, School Consultation. Springfield IL: Charles C. Thomas, 1977; pp. 285-313.

Schmuck, Richard A., Donald Murray, Mary Ann Smith, Mitchell Schwartz, and Margaret Runkel (1975). Consultation for innovative schools: OD for multiunit structure. Eugene, OR: Center for Educational Policy and Management.

- Simons, David L. (1974). Durability of organizational training for a school faculty. Doctoral dissertation, University of Oregon.
- Smith, Mary Ann (1972). A comparison of two elementary schools involved in a major organizational change, or You win a few; you lose a few. Doctoral dissertation, University of Oregon.
- South, Oron (1976). Diffusing a system. Education and Urban Society, 8(2), 183-195.
- Starling, William (1973). An unsuccessful attempt to implement an educational innovation: A case study. Doctoral dissertation. University of Oregon.
- Thomas, Terrance A. (1969). The effects of laboratory training on the interpersonal relations of elementary school principals with their teaching staff. Doctoral dissertation, University of Oregon.
- Torbert, William R. (1976). Creating a community of inquiry: Conflict, collaboration, transformation. New York: Wiley.
- Watson, Goodwin (Ed.) (1967). Change in school systems. Washington, D.C: Cooperative Project for Educational Development by National Training Laboratories, National Education Association.
- Wyant, Spencer H. (1974). The effects of organization development training on communications in elementary schools. Doctoral dissertation, University of Oregon.