

# New Resources for Improving School Administration

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Well known for their work and research in developing instruments for measuring leadership behavior, the Likerts in this article describe the application of System 4, a participative group model of management, to school administration. The system has been applied successfully in business and industry.

EDUCATORS AND the public alike are concerned today about declining student scores on reading, language, and mathematics tests. The rising costs of education, student apathy and vandalism, teacher militancy, and the slow pace of adopting improved methods of instruction are also of great concern.

And to whom does everyone look to solve these kinds of problems? School administrators.

## Available Help

A particularly promising way to solve these problems that plague educational administrators is to examine the opportunities for improving the leadership practices, the organizational structure, and the interaction and decision-making processes of the school or school system.

The potential for substantially better management of our schools exist. Help that's available to school administrators includes:

- A superior system of management which yields much better performance than the management systems now being used by most school administrators.

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- Technical resources necessary for diagnosing organizational problems and for recognizing current strengths as well as opportunities for improvement.
- A highly efficient method for helping administrators become skilled in the use of this more effective management system.
- An extensive data bank for facilitating accurate and insightful diagnosis.

The superior system of management is called System 4. The System 1 to 4 models have been described in detail elsewhere (Bower, 1976; Likert and Likert, 1976). For purposes of this article, we need only a thumbnail sketch:

*System 1* is an exploitive, authoritarian model;

*System 2* is a benevolent, authoritarian model;

*System 3*, a consultative model;

*System 4* is a participative, goal-directed model which has been found to be the most effective.

Some \$15 million of research in business and government by the Institute for Social Research of the University of Michigan form the basis of the System 4 model.

### **Effectiveness of the System 4 Model**

More than 40 studies conducted in recent years (Likert, 1977) in school systems reveal that the System 1 to 4 model is as applicable to educational administration as it is to business, government, and other kinds of organizations. A brief summary of some of these studies illustrates this:

**A.** Haynes (1972) studied 10 Michigan school systems that had teachers' strikes of five or more days' duration in the 1969-70 school year and matched them with nearby school systems that had never had a teachers' strike. The matched pairs of systems were comparable on such variables as size, socioeconomic level, and expenditures per student. Those school systems that had never had a teachers' strike, in comparison with those that had, were found to be significantly closer to System 4 in their administration as perceived by:

- members of boards of education
- superintendents
- administrative staffs
- principals
- teachers.

The teachers in the school system where work stoppages occurred were more frustrated than were teachers in the systems where work stoppages

did not occur. This frustration was measured by the differences between the expectations of being involved in decisions affecting them and their actual experience. The scores resulting from surveys taken by all members of the school systems showed that the teachers in systems without strikes had slightly lower levels of expectations of involvement and experienced appreciably more involvement than did the teachers where strikes occurred.

The results compiled from the survey responses of the central staffs showed that they had much poorer relationships with their superintendents than had the principals. This gap was found to be greater in the work-stoppage systems than in the systems where strikes did not occur.

**B.** In Bernhardt's study (1972) of 67 schools in 12 New York State school districts, involving 979 teachers, the relationship of the administration of the school to teacher militancy was examined. The closer to System 4 the teachers perceived the school's administration to be, the less they displayed militant orientation. Conversely, teachers were found to be more militant "when they perceived low involvement in decision making and . . . goal setting." ". . . when schools approximate System 4, there is no apparent need for militancy, and hence, teachers' predispositions to behave militantly are reduced" (pp. 111 and 119).

**C.** In a study of sixth grade boys, Gibson (1974) found that in schools with administrative systems more toward System 4 as seen by both the teachers and the principals, the boys attain higher achievement test scores in relation to their intelligence test scores than do boys in schools with administrative systems more toward System 1. This relationship was found to exist both for inner city schools with a large proportion of blacks and lower socioeconomic levels, and for schools with fewer blacks and located in higher socioeconomic neighborhoods.

**D.** Belasco (1973) also reported the favorable effect of participation on educational achievement. He measured the influence of participation and trust and found further evidence to support the conclusion that a System 4 style of administration yields superior educational performance.

**E.** Miller (1970) reported data from a study of six school districts in California. His research which included findings from 82 principals, 329 teachers, and 1,099 students showed that the closer the administration of a school system or an individual school is to System 4:

- The higher is the motivation of students and teachers.
- The more favorable the attitudes toward the institution and the greater the commitment to it.
- The less the frustration of students and teachers as measured by the difference between the extent to which they expect to be involved in

decisions affecting them and the extent to which they experience such involvement. (Frustration indexes are lowest for grade school students, highest for senior high school students.)

- The greater the confidence and trust among persons in the school.
- The better the communication in all directions.

**F.** Morall's study (1974), based on samples drawn from five senior high schools in Florida, found that the closer to System 4 the administrative system of the school was seen to be, the higher the morale of both students and faculty. This relationship was found to exist for each subgroup, specifically, black (N=82), nonblacks (N=144), teachers (N=106), and students (N=120). Morall used a questionnaire designed by Likert to measure the administrative system of the Florida schools and a questionnaire designed by Woods to measure morale.

**G.** Likert and Likert (1976) report that teachers' views of their department heads influence their reaction toward their principals, their schools, and their own behavior. This is reflected, for example, in teachers' absence. Findings from secondary and intermediate schools in Hawaii showed that the more a teacher sees his/her department head as using supportive System 4 leadership and as having high educational performance goals, the lower is the teacher absence rate.

This overview of a few recent studies in educational institutions demonstrates the capacity of System 4 to assist administrators to achieve superior educational performance. The questionnaires used in the majority of these studies, The Profile of a School (POS), have been used to measure the human component of schools or school systems in 22 states, three Canadian provinces, and overseas in several United States Armed Forces school systems. The widespread use of these particular questionnaires makes available comparable data from approximately 50,000 respondents, representing more than 100 school districts and more than 800 schools at all levels.

These questionnaires provide the technical resource necessary to diagnose the organization's current situation. They have been designed to record the actual human behavior that occurs within the organization as seen not only by its leaders, but also by all of the other persons affected by that leadership behavior. The instruments are not attitude surveys. Except for a very few questions which determine overall attitude and motivation, the questionnaires focus on current behavior and organizational practices at various levels within a school system and on the consequences of these practices.

In the examples cited above, use of the POS questionnaires allowed for examination of various critical relationships within the school or school system such as the relationship between:

- Students/teachers/principals (subordinate perceptions)
- Students (subordinate perceptions) vs. teachers (self-appraisal)
- Teachers (subordinate perceptions) vs. principal (self-appraisal)
- Students: by grade (or sex)
- Teachers: high school vs. middle school vs. elementary levels.

An administrator's leadership behavior is measured by responses to the questionnaires made by members of that administrator's work group. Subordinates' descriptions of the leader's behavior are found to be more accurate than are the leader's perceptions of the same behavior. (See, for example, Cullers, Hughes, McCreal, 1973.)

Moreover, the behavior of subordinates is determined by their view of the leader's behavior and its impact on the work group. Leaders also describe their own leadership behavior, providing a comparison of their self-perceptions with the way they are viewed by their subordinates.

Educational administrators can use such survey instruments as the POS to help assess their organization. The System 1 to 4 model provides the framework for interpreting the scores. By comparing the scores with the model, the kind of management system being used is clearly evident. This comparison reveals whether the present management system is closer to System 1, 2, 3, or 4. The System 1 to 4 model can also provide a guide to changes which should be made if the organization is to deal constructively with its problems.

These questionnaires are designed to measure those variables that are most important either in determining the performance of that unit or in reflecting its current internal state. Each variable is measured by an index that usually is based on the mean score of two or three items in the questionnaire. The variables fall into three groups:

*Causal* variables are those which the leaders can modify and, if modified, cause changes to occur subsequently in the intervening or symptomatic variables and finally in the performance results. The causal variables include Organizational Climate, Supervisory Leadership, and Structure. Technical competence is also a key element, but is omitted here since it is not a behavioral characteristic in itself.

*Intervening* variables reflect the internal state and health of the organization, e.g., the loyalties, attitudes, frustrations, and motivations of all members and their collective capacity for effective interaction, lateral communication, sharing of influence, and decision making. Changes in the state of these intervening variables lag in time behind changes in the causal variable.

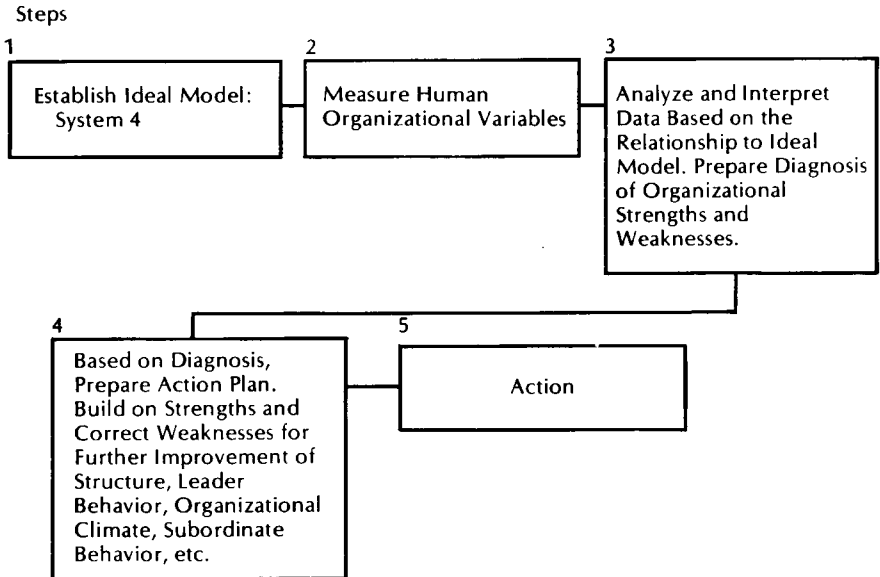
*End-Result* variables show the actual performance achieved and include the satisfactions with various aspects of the school environment. There usually is a time lag before the full effects of this causal, intervening, end-result linkage become evident.

### An Action Program To Improve School Administration

There is a well-developed, highly effective strategy, the survey feedback method which, when used with the System 1 to 4 model and an instrument like the POS, can assist any school or school system improve its administration (Bowers, 1973; Bowers and Franklin, 1976). The essential steps are shown in Figure 1.

As shown in Figure 1, school administrators and other personnel should be given the coaching, counseling, and training required to assist them in making the changes in the management system that they have set as their immediate goal. This may involve training in leadership and interaction skills. It may involve coaching in the use of a modified organizational structure. With the use of the survey feedback method, help can be given to administrators in diagnosing correctly the strengths and weaknesses of their operations and in taking the most effective steps to bring the desired improvements in the management system.

**Figure 1. Organizational Improvement Cycle**



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Personnel involved in such a program of change may also need assistance in building an action plan. Such a plan must be made with the full involvement of members of the relevant work groups and must have

clear-cut targets and target dates. Measurements assessing progress must be taken to see how far and in what direction the organization is moving.

In using the organizational improvement cycle shown in Figure 1, the following principles should be followed (Likert and Likert, 1976):

1. *Focus the action efforts on the causal variables*, such as leadership behavior and structure. Do not try to change by direct action the intervening variables such as communication, motivation, and control. If the causal variables are improved, there will be subsequent gains in the intervening variables. But if efforts to improve the intervening variables are made by focusing direct action on them, any improvement that occurs is likely to be minor and transitory, and there often is a deterioration in the causal variables with long-range, adverse consequences.
2. *Move to the System 4 model gradually*. Do not attempt one big jump such as from System 1 to System 4. Move, rather, from System 1 to System 2, from System 2 to System 3, from System 3 to System 4. Both leaders, (e.g., principals) and members, (e.g., teachers) lack the skills and find it difficult to make a sudden, sizable shift to System 4.

In moving toward the goal, a leader should make no greater shift at any one time than subordinates or members can adjust to comfortably and respond to positively. If a leader makes a sizable shift, the members do not have the interaction skills to respond appropriately and usually are made insecure or frightened by the shift, responding to it negatively.

3. *In planning the action to be taken, involve those whose behavior has to change to bring the desired improvement*. It is, of course, important to involve all the persons affected in all the steps of the improvement cycle, but it is especially important to involve them in planning the action effort.
4. *Use objective, impersonal evidence as much as possible in the action-planning process*. This includes using "situational requirements," that is, the hard facts of organizational life such as budgets, time, and legal restrictions. It also includes the discrepancies between the measurements describing the current situation and the desired model.
5. *Wherever possible, have those persons in the most powerful and influential positions take the initiative and become active in the improvement program*. In a school system, for example, the change programs that are initiated and supported by the governing board or top administrator are more likely to be successful than are those started by a department head or a faculty member.

6. *Conduct the action planning in a supportive, helpful climate.* A better plan is developed and is more enthusiastically accepted when members of the group feel that the other members are eager to hear their ideas and build on them than when the planning is done in an ego-deflating atmosphere.

### Conclusion

School administrators who embrace the opportunity to improve their administration by taking advantage of the resources available, e.g., the System 1 to 4 model, technical resources to diagnose organizational problems, and the survey feedback method for implementing change in a systematic manner, will be gratified with their greater success in coping with their problems. Their schools and school systems will realize financial savings, personnel and students will be more satisfied and more motivated to do a good job, educational performance will improve, the parents will be more supportive of the schools, and the physical and mental health of the members of the school community will be better.

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### Vocational Education Teaching Strategies

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