The model is proposed as an instrument for describing the process of change in school systems. It is a composite of ideas derived from the findings of researchers in the fields of agriculture and education, and from authors' observations of the change process in five Wisconsin school districts. The model describes the flow of the change process in a school system, and allows for the fact that ideas for improvement may either be supplied to, demanded by, or originated within, the school system. It also underscores the importance of interaction among all the major entities (school board members, administrators, teachers, and citizens) within the system if there is to be optimum commitment to decisions for improvement. (Author)
THE SCHOOL BOARD AND A MODEL FOR EDUCATIONAL IMPROVEMENT

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Report from the Project on Models for Effecting Planned Educational Change

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STATEMENT OF FOCUS

The Wisconsin Research and Development Center for Cognitive Learning focuses on contributing to a better understanding of cognitive learning by children and youth and to the improvement of related educational practices. The strategy for research and development is comprehensive. It includes basic research to generate new knowledge about the conditions and processes of learning and about the processes of instruction, and the subsequent development of research-based instructional materials, many of which are designed for use by teachers and others for use by students. These materials are tested and refined in school settings. Throughout these operations behavioral scientists, curriculum experts, academic scholars, and school people interact, ensuring that the results of Center activities are based soundly on knowledge of subject matter and cognitive learning and that they are applied to the improvement of educational practice.

This Practical Paper is from the Models for Effecting Planned Educational Change Project in Program 3. General objectives of the Program are to develop and test organizations that facilitate research and development activities in the schools and to develop and test the effectiveness of the means whereby schools select, introduce, and utilize the results of research and development. Contributing to these Program objectives, the main objective of the Planned Change Project is to develop and test system-wide mechanisms which local school systems can employ in utilizing knowledge and innovations of the type generated by the Center. Change-agent teams have been organized in area school systems and their effectiveness is being evaluated.
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ABSTRACT

Important improvements in education usually require gross adjustments throughout the entire school system. The school board is but one of the agents of educational change. Administrators, teachers, and citizens are also major entities in the process. The introduction of improvements in school systems requires knowledge of how change takes place. The authors propose the Model for Educational Improvement as an instrument for describing the process of change in school systems. This model is a composite of ideas derived from the findings of researchers in the fields of agriculture and education and from the authors' observations of the change process in five Wisconsin school districts. The model describes the flow of the change process in a school system. It allows for the fact that ideas for improvement may either be supplied to, demanded by, or originated within the school system. It underscores the importance of the role of interaction among all the major entities (school board, administrators, teachers, and citizens) within the system if there is to be optimal commitment to decisions for improvement.
INTRODUCTION

In a culture of change there must be concern for improvement. The fact of school change during the past decade is accepted as is the potential for continued change during the next. This being true, boards of education will deal with the change process either by design or by default. It is by design that the focus can be switched from mere change to positive action culminating in improvement.

School boards will miss the potentials of improvement if they think they alone are responsible for introducing change. Teachers, administrators, and the community need to be in on the act. These three, along with the board, make up the groups who have an opportunity to direct the process of change if they want to and if they understand it. Their "minds' eye" needs to focus on a picture of what the improvement process is like.

A research team at the University of Wisconsin has pictured this "minds' eye" image of the improvement process in a school district. The image is called the Model for Educational Improvement. This Model may be used as a guide to those school districts wishing to organize for improvement or it may serve as a backdrop against which to compare what a district is already doing. It took shape after careful study of the work completed by other social scientists who have pictured the change process in both agriculture and education and after observations in five Wisconsin school districts. In these five districts, change-agent teams were formed and the school improvement action of these teams was either observed or tape recorded for later analysis.
There are a few things that all 26,000 U.S. school districts have in common. Figure 1 illustrates some of these. It is a representation of a three-dimensional conceptual schema of the school district as a social system. The outside boundaries of the Figure represent both the actual boundaries of the district as a physical unit and its boundaries as a social unit. Thus included are land and people as well as school buildings and other community institutions along with those who manage them.

Is it wrong to assume that all school districts have access to resources outside of the district or that outside influences have a way of getting to the district? We believe not. The opening at the top of Figure 1 represents the assumption that it is an open system. It is the point of access to the school district and the avenue for influences within the system to move out.

Another characteristic that all districts share is an internal structure. When Figure 1 is viewed as a three-dimensional model, its internal structure may be more readily visualized. It is within this internal structure that the program of the school takes place. Because programs are not the same in all school districts there are consequently variations in internal structure.

In addition to the regular school program and its operation is the social machinery that is responsible for change, innovation, and improvement. There are changes, innovations,
and improvements that can be made by individual teachers in the classroom; by supervisors in their relationships with teachers; by boards in the way their meetings are run. These individual or unit changes are not our major concern. In total school improvement the concern is with those gross adjustments that involve and relate to the entire system. The social machinery necessary for this kind of adjustment is located within the Mechanism for Change in Figure 1. It is the cauldron of change that every community institution concerned with service must have if it is to "keep up" or "move ahead" in a dynamic society.

Figure 2 is an expansion of the cauldron, or social change mechanism. We call it the Improvement Module and it is the key to unlocking the planning and decision resources of those who are in a position to improve an educational system. In a school district those with the greatest potential to lead or to impede improvement are board members, administrators, teachers, and citizens (including the students). With formal or informal interaction among representatives of these key groups comes the chance for commitment decisions on improvement. Without this interaction change may come without unifying purpose. The interaction among the four key groups is noted in Figure 2 by the arrows at Point I.

It is possible for some improvement to occur without total group interaction. Point II in Figure 2 shows such an example. In this instance there is interaction only between the community and the board of education. In our observations we have noted a number of schools where there is far less than a complete and interacting Improvement Module such as that illustrated at Point I. What we often see is a number of Mini-Modules similar to that noted at Point II. It can be predicted that Mini-Modules will lead to mini-improvement. Strong commitment to change requires a decision in which the total group has participated.

Developing a model has been done in this research required visualizing the process and drawing it. The process flows from a

![Fig. 2. The Improvement Module: A Mechanism for Change](image-url)
Figure 3. The Improvement Process

concern with purposes, problems, and needs to solutions and action. The arrows in Figure 3 illustrate the path of this flow from problem to solution. There are a number of alternate routes which the path may follow. First, the Internal Input or the External Input may not be acted upon. The open area around the Improvement Module is symbolic of the inefficiency of all educational agencies. There are places where improvement ideas can get lost. Thus, an input may disappear before it reaches the Improvement Module. In a school district where there is not a specific organization for improvement, the chance for inefficiency is greater than that shown in Figure 3. That is, the space surrounding the Improvement Module is large and ideas are easily lost. Second, if the input is acted upon (gets into the Improvement Module) and a commitment decision is made with subsequent administrative follow-through, the action can next go to any level: research, development, diffusion, or total adoption. There is no necessity for the flow of action to start with research and move through each level until it reaches adoption. The processes occurring within the Improvement Module make many shortcuts possible. The internal structure of the model shows that it is possible for a proposed improvement to move easily from one level to another. The proposed improvement may move toward adoption or away from it depending on the level of assurance that the decision makers have about its appropriateness for the school district.
III
THE MODEL IN OPERATION

Observations in schools and a review of tape-recorded meetings of change-agent teams in cooperating schools provided evidence that there is a structure and process similar to that pictured in Figures 1, 2, and 3. The Model helps explain what goes on as a school moves to an improved practice.

Figure 4 places in a single drawing the total structure and process described above. A few words are added to complete the picture. The base of the pyramid includes the philosophy, values, and traditions of the district. These are the long-term stabilizers. The external and internal input is identified as being "supply-" or "demand-" oriented. The use of supply and demand in this context is to indicate whether the solution to a problem is sought (demand) or whether it is available (supply). The results of research by a university or any other agency can provide an external input to a school district by either the "supply" or "demand" route. If the school asks for help, the input is "demand-" oriented. If a university professor disseminates the results of his research in an article such as this one and it reaches the school district, it is a "supply-" oriented input.

The process flow of an external input ("supply-" oriented) is demonstrated by letters "A" through "D" in Figure 4. In this instance, and on the basis of experience, a professional section within the State Depart-

Figure 4. A Model for Educational Improvement
ment of Public Instruction believes that rural community schools should work out cooperative arrangements with neighboring districts for the employment of school social workers. A spokesman for the department decides (Point "A") to disseminate (supply) this belief in his monthly newsletter to schools. It is at this point—"B"—that the idea is noticed by the guidance counselor and gets into the school system. This could be the end of the idea. In this instance it is brought to the attention of several staff members and the administrator. After some informal discussion the administrator decides to turn the suggestion over to the school's committee on improvement (Point "C"). Here it is discussed in detail by all concerned groups (Point "D"). Recommendations and decisions are made to diffuse (Point "E") the idea into the system in order to have the teaching staff become acquainted with its potential. At Point "F" the determination is made to adopt the idea in full and commit the institution to the joint employment of a school social worker in cooperation with a neighboring district.

An example of an internal input (demand-oriented) in the same district is shown by numbers 1 through 7 in Figure 4. Beginning near the bottom of the model at Point 1 is an illustration of an input brought to the system by a teacher. The teacher has a major reading problem in her Fifth Grade. She brings the problem to the attention of her principal (Point 2). On the basis of his contact with the reading problems experienced by other teachers, the principal is convinced that the problem is one that affects the entire school. This being the case, he suggests that it be reviewed by the committee for improvement (Point 3 in the Improvement Module). A search for solutions is made (Point 4) by an interacting and concerned group. Help is sought and obtained from many sources both within and outside the system. In the process, information on a non-graded reading program is studied and special committees are established to determine whether a non-graded program would appropriately solve the problem for the district. At one point in discussions a suggestion is made to have the system establish its own research program to test out a non-graded program. Later information received from a research and development center (external input on the basis of demand) convinces the committee that a non-graded program would work if carefully developed to meet the special characteristics of the children in the district. On this basis the committee on improvement proposes and receives administrative sanction to research a few aspects and to develop the overall non-graded idea (Points 5 and 6) in the lower grades in 1968-69. If it works well, they will diffuse it throughout the system (Point 7) as soon as possible. If success continues, they would bring the practice to full adoption (Point 8).
THE ROLE OF THE SCHOOL BOARD IN EDUCATIONAL IMPROVEMENT

A careful examination of the Model clarifies the fact that improvement is not the sole responsibility of the school board. Yet the board has a vital part to play if improvement is to occur. The board is one major entity in the improvement module.

The Model suggests two key roles for the board of education if it is to be an effective participant in school improvement. First, the board should and can be the stimulator of improvement. A board’s potential for being the bottleneck blocking improvement is so great that every effort should be made to lead toward improvement rather than to stand in its way. Second, the board is in a position to deliberately organize for improvement in its district. Every school board can compare the structure and the process for improvement that exists in its district with the Model for Improvement described in this report. This Model gives the board of education a chance to appraise what happens in its district and compare it with what would happen if it were to organize an "Improvement Module" to do the job.