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ABSTRACT

The changes required by many school reform policies address problems that are extremely difficult to clarify, with organizational and environmental factors densely intertwined. Accordingly, this document begins by identifying the "four C's" that must be taken into account if any strategy for school improvement is to succeed: complexity, comprehensibility, conflict, and change. It then presents and describes a change framework that directly addresses the "four C's." An instrument is included to help school officials understand where their school lies within this conceptual framework. After an extensive introductory discussion of the organizational dynamics of change, chapter II provides a review of the literature on change processes and the history of school, district, and state organizational structures. Chapter III is the instrument itself, how to administer it, and how to score it. The tryouts of the instrument in a variety of schools and districts are also discussed. Chapter IV provides a set of strategies that help the reader make sense of the scores from the instrument. Chapter V moves from the concrete steps of the strategy to the overarching elements that the models have in common and that give them larger meaning: collaboration, vision-building, action, and reflection/sense-making. Chapter VI contains concluding remarks and a wish-list for the next stages of development. Appended are a review of educational change and a list of instruments for school renewal, along with a bibliography. (TE)

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STRATEGIES FOR SCHOOL RENEWAL:
PROFILING ORGANIZATIONAL DYNAMICS

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INTRODUCTION

Why is it that a clear and powerful school improvement plan does such great things for some schools, yet leaves other schools embroiled in messy conflicts and declining performances? In these days when studies of education are stacking ever higher, there are few states, districts or schools without some type of educational improvement plan. However, as many have discovered, there is an important distinction between making a plan -- and making a plan work. A single school improvement strategy is simply not flexible enough to encompass the varying conditions and problems schools face today. As examples, the diversity in conditions is depicted in the four scenarios below:

Mayfaire Elementary School Mayfaire is a small elementary school with 189 students. It has a simple, straightforward curriculum and instructional program which has consistently resulted in moderately high student performance. Five of the seven teachers have been teaching at Mayfaire for more than four years and are generally pleased with their principal who maintains a well-organized "tight ship." There are few conflicts about schooling among parents or community members, and there is an active parent-teacher association with a loyal group of volunteer teacher aides. Recently, however, some teachers and parents have become concerned about the formation of cliques, which exclude less affluent students. Incidents of derisive name-calling, coupled with an increase in thefts of expensive clothing and jewelry, suggest to staff that elitism and social intolerance is becoming a serious problem among students.

Loren High School In a rural pocket of the same district is Loren High School. Forty percent of the students come from low socioeconomic backgrounds, and standardized tests show a strong rift, with affluent students scoring very high and poorer students scoring very low. Like Mayfaire, the curriculum at Loren is uncomplicated, and students are routinely tracked to allow for homogeneous classroom grouping. Teachers work autonomously in self-contained classrooms and rarely have occasion to interact with one another professionally. A longstanding pedagogical division exists between "old-timers," who advocate greater attention to at-risk students, and "newcomers," who want more honors and elective classes. Similarly, a deep schism exists between parent factions. One wants a significant portion of the school's budget to support an honor's curriculum, and another faction wants a greater emphasis on a new Chapter I program.

Central Junior High Central Junior High sits adjacent to a small liberal arts college and finds enthusiastic support from parents who are on the college faculty or who own small businesses surrounding the campus. The school has a strongly integrated curriculum, including projects for 'writing across the curriculum,' 'thinking across secondary courses,' and a pilot curriculum that integrates health education, social sciences and biology. Teachers, in spite of their delight with the new curriculum, are finding it difficult to proceed with the changes. Complicated and interrelated issues must routinely be forwarded to the central district office for consideration, which leaves staff members waiting on distant decisionmakers, who frequently do not understand either the specifics of the situation or how those decisions are likely to play out in the school.

Jefferson High School Students of Jefferson High School are bused from all over the city under a desegregation plan. The school's student body changes rapidly in both size and composition. Controversy attends both maintenance of and revisions to school plans, and the school board is regularly visited by persistent and vociferous special interest groups. Jefferson has suffered a turnover of five principals in the last eight years and ongoing tension exists between teachers and central administrators.

The schools described above are all in the same district, but conditions affecting each are quite different. Mayfaire has few conflicts and a non-complex organizational structure. Loren also has a reasonably simple structure, but faces very strong conflicts. At Central Junior High conflict is low, but the program and staff relationships are complex. Increasingly common are schools such as Jefferson, where complex programmatic and staffing decisions are made difficult by high conflict and uncertainty among community and school populations.

Experience in the educational enterprise and an extensive review of educational change research and organizational development tools, lead one to believe school systems can improve the odds on educational improvement in all schools.

Much has been learned about change over the last two decades -- the plethora of school and district assessment tools is only one indication. To successfully use what is known of change, school and district leaders need to be able to match their choice of tools and strategies to the often messy realities of schools and their environments.

They also need an approach that will allow large-scale, comprehensive, organizational or systemic change. This means moving beyond the implementation of discrete programs common among past school improvement efforts; efforts which so often devolved into tidy and linear projects. It means learning from the "here today, gone tomorrow" change efforts that were frequently ephemeral or disruptive.

Many of the best educational planning tools are designed to address fairly simple, straightforward changes. There are several good step-by-step models for implementing changes in school facilities or instructional texts. However, the changes required by many school reform policies are not simple; they address problems that are extremely difficult to clarify, with organizational and environmental factors that are densely intertwined.

Further, most educational planning tools tend to presuppose the absence of disagreement. The typical descriptions of how to develop a master plan do not dwell on seriously divided stakeholders, deep organizational tensions between staff and management or value system stalemates.

Yet these are everyday realities facing most members of educational institutions. By its very nature, educational reform intends transformation of individual and group behavior and values, and thus invites resistance.

Acknowledging The Dead Elephants

In schools, districts and states attempting significant reform, certain dynamics are salient, sometimes by their acknowledgement, but more often by their avoidance--like the proverbial dead elephant in the living room that all the guests are too polite to mention. The dead

elephants of organizational or systemic improvement efforts are complexity and conflict; their sidekicks are comprehensibility and change. Complex school systems are frequently engaged in issues that are difficult to understand and resolve completely, thus complexity and a lack of comprehensibility are linked. Conflict and change also tend to go hand-in-hand. Change frequently produces conflict; conversely, ongoing conflicts can easily result in counter-productive changes (e.g., high staff turnover). Complexity, conflict, comprehensibility and change (the "four Cs") have a lot to do with whether an improvement effort ever gets beyond the advisory group stage. Yet, few school improvement strategies or tools invite consideration of them.

The change framework found later in this document directs attention specifically to the "four Cs." It describes their singular and combined dynamics, and it examines their effect on schools engaged in improvement efforts.

The instrument and strategies in the change framework are designed for schools. Although there are clear implications for district and state education systems, the focus on organizational conditions in schools is a crucial first step. Whether school officials use the concepts discussed in this document to reframe their mindset about systemic change or actually use the instrument to understand where their school lies on the dimensions of the four Cs, the framework should help them decide how to go about school improvement efforts.

Why Another Change Instrument?

It is no accident that complexity, comprehensibility, conflict and change are key concepts. In the world outside of schools, economists and other scholars describe a significant shift in national and global economies. Where economic goals once were to produce more and bigger

products for more people (a "mass economy"), the nation now recognizes a need to emphasize methods of production and patterns of consumption that use less energy, fewer capital resources and more knowledge (an "information economy").

If the country is to compete successfully in this new global "information economy," citizens need to understand and become comfortable with some of its implications.

The table below presents a few of the changes already occurring.

TABLE I

MASS ECONOMY

Expansive Success depended upon expansion. Cheap resources favored centralized manufacturing and therefore large-scale distribution and marketing.

Repetitive Large-scale production required product uniformity and long runs to achieve maximum efficiency.

Accretive Wealth and power were achieved by gathering and amassing resources or by cornering and dominating markets.

INFORMATION ECONOMY

Contractive When resources are more costly, contraction is key to success. Contraction makes consumers smarter and business leaner. Strategic thinking becomes essential.

Differentiative With the break-up of mass markets, production must be flexible to meet specific needs of smaller groups. Production lines must rapidly change their organization and outputs.

Associative As large monopolies wane, society benefits from mutuality of interests in order to maintain living standards. Adversary regulation and rule are too expensive; power accrues to those who can bring groups together.

As this shift from a mass economy to an information economy takes place, marketplace success will depend increasingly upon the nation's ability to deal with dynamic and complex conditions. These kinds of conditions make it difficult for one person or group to grasp all of the information relevant to decision-making. As a result, "one brain" decision-making becomes ineffective, signaling a need for greater collaboration and increased interdependence to solve problems.

These changes strongly suggest that the skills and abilities emphasized in the past must change if children are to navigate these societal conditions successfully. For example, aggressive, competitive skills will be less important than cognitive skills and the ability to reason and communicate well. Memorization and ability to identify the one "right answer" will give way to more creative skills -- flexibility and originality.

Education already mirrors the changes taking place in the world. School systems today face complicated problems that change rapidly. Attempts to frame and solve these problems independent of one another only increase the complexity. Because of paradoxical pressures on school systems, solutions to one set of problems can exacerbate other, equally troubling, problems. A need to provide students with higher levels of skills and the ability to reason, for example, is often balanced against the need to provide at least minimum basic skills to a very diverse student body.

Even when schools manage to balance these instructional needs, the balance is constantly threatened by special demands -- the needs of at-risk kids, the implications of growing poverty among families with school-aged children, increases in minority dropout rates -- the list of societal problems apparent in most schools seems endless.

Most educators accept the fact that one single panacea is not going to appear. However, it is equally important to acknowledge that piecemeal, stop-gap solutions are not the answer either.

Current educational reform measures, particularly state-initiated efforts to raise standards and increase school and district accountability, are perhaps a necessary first step toward school improvement. The attention that such measures provoke can help to stimulate needed changes. But it is rapidly becoming obvious that increased regulation alone cannot improve schooling, nor can top-down reforms drive the needed changes in education.

In addition to improvement mandates, schools need the tools to fashion their own solutions to their unique sets of problems. This means providing local systems with a repertoire of options to promote improvement and a range of leadership and planning, managing and energizing approaches.

These tools and options already exist; there is no immediate need to develop "new" approaches to school change. There is, however, a need to help schools make informed decisions about which approach to choose. Schools need a way to match their circumstances with an appropriate approach to change.

The change framework allows schools to identify the complexity, conflict, comprehensibility and amount of change present in their environment, and then use that information to select appropriate tools for managing change. It provides schools with a better capacity for planning and implementing long-term, systemic change -- by embracing the four Cs, not avoiding them.

What exactly is the change framework? Among other things it is:

- o A frame for viewing school change.
- o A "diagnostic" approach through which systematic data gathering about the degree of complexity and conflict in the school is encouraged and made feasible. In so doing, it takes into account organizational variables not previously considered in the educational change literature.
- o An entry point to a wider array of change strategies than is usually provided, giving another look at management options which are often neglected.
- o A perspective beyond the false dichotomy of "forceful" and "participative" planning methods.
- o A contingency approach that helps the user match variable school conditions with alternative strategies.
- o A source of strategies for complex schools and schools engaged in conflict--in urban settings, for example--that historically have been resistant to planned change.

Roadmap to the Report

In developing the change framework instrument and strategies, the authors reviewed past and recent literature, both inside and outside education, to examine the evolution of change processes and the history of school, district and state organizational structures. These provided rich insight into how far research has come and how far there is to go. By far the most thought-provoking recent literature was not found in education, but in business and sociology, where individuals have been hard at work on organizational dynamics and nonlinear approaches to change. This review makes up Chapter II, as the "backdrop to action" that begins with Chapter III.

Chapter III is the instrument itself, how to administer it and how to score it. The tryouts of the instrument in a variety of schools and districts are discussed. Even though the tool is in an early development stage, the four Cs generated an enormous amount of interest among school personnel who tried it, and resulted in requests from other systems to try it out.

Chapter IV provides a set of strategies that help the reader make sense of the scores from the instrument. Four strategies, which amount to ideal types, and some variations are discussed. There is no "best" strategy; what is most effective depends on each school's character. The steps that accompany each model are meant to give a flavor of how one might proceed, given a particular configuration.

Chapter V moves from the concrete steps of the strategy to the overarching elements that the models have in common and that give them larger meaning. The elements are collaboration, vision-building, action and reflection/sensemaking. The message of Chapter V is that if schools go through the steps of a strategy and have not attended to the larger meaning, they've missed the boat.

Chapter VI contains a few concluding remarks and a wish-list for the next stages of development of the change framework's instrument and strategies.

CHAPTER II

TOWARD AN UNDERSTANDING OF CHANGE

Several branches of research on change were particularly relevant to developing the concepts of the change framework. First, studies of school change provided a look at evolving processes and theories of school change, the responses of school personnel to change efforts, and the growth of school, district and state organizational structures. A more detailed examination of school change appears in Appendix B.

A second research branch with significant implications for the change framework was the study of change in organizations. This research, which draws upon findings in the fields of business and sociology, describes organizational dynamics and the effect of change or renewal efforts. It also describes nonlinear approaches to change, which are especially important in today's complicated and interdependent organizations.

The School Change Studies

American educators have been seriously crafting and studying school change for decades. Early models of educational change (between 1955 and about the 1970s) emphasized a linear approach. Literature during this period focused primarily on generating and communicating accurate information, indicating a belief that, with the right input and information, educators would automatically adopt the appropriate innovations.

By the mid-1970s, researchers began to realize that accurate communication did not necessarily lead to effective action. As a result, emerging change models increasingly focused on humans in organizations, the idea being that it was people who accepted and incorporated (or resisted) organizational changes that were required by school improvement.

Toward the end of the 1970s, the attraction toward the human dimension of change had waned. Several studies even blamed declines in student achievement scores on too much attention being given to the human side, leading to a "soft" instructional approach. A "back-to-the-basics" movement ensued in many educational circles.

At the same time, however, several studies demonstrated that good teaching improved student learning, in spite of poverty or other disadvantages. Some urban schools, with the toughest neighborhood demographics, had managed to effect comprehensive change. In these schools, change permeated all the way down the hierarchy, modifying day-to-day attitudes and behaviors of teachers and students.

Eventually labeled "effective," characteristics common to these schools were identified, scrutinized and widely published. The effective schools' characteristics gave state and district policy makers concrete conditions that they hoped all schools might emulate to move toward improvement.

A final research thrust of the late 1970s and into the early 1980s evaluated federal and state-funded school improvement efforts. These evaluations isolated schools that had shown successful implementation of improvement projects, and sought to identify programmatic and organizational conditions that aided the effort.

Some findings dovetailed nicely with the school effectiveness studies. But they also showed that large-scope system change, such as that needed to really renew schools, is difficult to achieve.

One important implication was that emulating the conditions found in effective schools is only a first step on a long and difficult road toward real improvement of student learning. There are no shortcuts to change. Change must occur on all fronts simultaneously, all the pieces need to fit together in some way that is appropriate to individual education systems. Yet, a look at the system itself makes it clear that previous attempts at systemic change have been like shooting at a moving target.

Some of the research described above also targeted the dynamics that act as barriers to change. In addition to people resisting change, the system itself has become a barrier to change.

People As Barriers

The shift in focus from piecemeal programmatic change to sweeping systemic change encounters more difficulties than appear on the surface. Values and belief systems may present the first snag. Contrary to some opinions, those who resist the changes may not be careless or undermotivated; in fact, often they are motivated by deep commitment. Getting teachers to change their day-to-day classroom practice is not easily accomplished because "what teachers are already doing represents their best professional and personal judgment" (Mann, 1977).

A series of studies looked at the depth and eventual success of many types of innovative educational programs. They found that when schools started implementing instructional change, most teachers didn't want to learn about the innovation; they believed in what they were already doing.

Further, although local educators often see reform efforts as heavily imposed or overburdening, few policy makers understand how some fundamental components of reform with the emphasis on top down change and highly directive instructional environments are at odds with the organizational processes schools need to revitalize themselves. The culprit is an ever-present, and necessary, feature of school organizations -- hierarchy. Sustained school reform is only successful when the building's principals and teachers become actively involved. It's a long reach from statehouse to students.

School Systems as Barriers

A major barrier impeding this reach is the inertia of massive, complex school systems. Eagleton (1984) notes that in 1930 there were approximately 128,000 school districts in America which contained more than 238,000 elementary schools and 234,000 high schools. The typical child attended a locally governed school organization containing 230 students. By 1980, there were 60,300 elementary schools, 22,800 secondary schools, and fewer than 16,000 school districts in the United States. School populations almost doubled and the retention rate increased from 30% to 80%. Massive organizational units resulted.

These large, complex bureaucracies have several characteristics that tend to nullify reform efforts. In 1930, the typical school board member was an independent citizen who represented, for the most part, the prevailing common sense of his or her community. By

1980, school board members tended to seek election from specific community subgroups, and they came to the board expecting to adhere to constituent demands. The change brought significant gains for special interest and minority groups, but community and policy consensus became difficult to achieve. Conflict became an ever-present component in school leadership and change.

Massive educational organizations require a new type of educator. A highly complex organization -- by its very nature -- discourages risk-taking, innovation and personal ingenuity. A complex environment makes it difficult for people to see the long range effects of their actions, to visualize where their contributions fit. Consequently, employees usually find it more comfortable to isolate themselves from the welter of conflicting messages, participating only superficially in the latest innovation because it, too, shall likely go the way of myriad other attempts at reform. It is a vicious circle: constant attempts at reform breed a cynical refusal to take the attempt seriously. The resulting stagnation ultimately provokes another attempt at reform, and so on.

Large, complex organizations encourage ever-increasing specialization. Previously it was common to find one teacher to four or five grade levels of students. Now, teachers teach students within one grade level or one or two disciplines with the help of special education aides, reading specialists and counselors.

Concomitantly, complex administrative bureaucracies have been established to manage teachers and their supportive specialists. Attempts at change which threaten to alter or remove their "turf," are often met with resistance to reform in order to preserve their organizational "survival."

An Organizational Development Perspective

Because corporate survival hinges on an ability to understand and use cutting-edge data effectively during times of change, an analysis of literature on organizational development provide some insights for school change. This discussion focuses on literature that addresses some of the kinds of problems found in schools. This branch of organizational development emphasizes the conditions in the world today that create pressure to change and promotes a contingency approach that takes organizational context into account.

Because this line of research was germane to the Change Framework, the following section includes citations and quotes (see the Bibliography for full citations).

Changing to Meet the Future

A number of writers have speculated on the marked difference in social and economic context that organizations will face in the next decade compared to the present. Labels such as the technetronic era (Brzezinski, 1970), the information society (Masuda, 1980), and the third wave (Toffler, 1980) have been used to describe the unique circumstances that will face organizational systems, and particularly schools, in the 1990s. Drucker (1980) observed, for example, that turbulence would be the hallmark of the future:

The one certainty about the times ahead, the times in which managers will have to work and perform, is that they will be turbulent times. And in turbulent times, the first task of management is to make sure of the institution's capacity for survival, to make sure of its structural strength and soundness, and its capacity to survive a blow, to adapt to sudden change and to avail itself of new opportunities. (p.1).

Hand in hand with turbulence goes paradox. The world is no longer easily controlled with straightforward, linear strategies. Suddenly contradictions abound; and they are not lightly dismissed.

In fact, as Cameron noted (1986), "One paramount attribute characterizing organizations that have the capacity to adapt successfully to turbulent conditions is the presence of paradox." In successful post-industrial organizations, attributes such as the following will be present:

Loose-coupling -- encourages wide search, initiation of innovation and functional autonomy; as well as tight coupling -- encourages quick execution, implementing innovation and functional reciprocity (Morgan, 1981; Zaltman, Duncan Holbeck, 1973; Weick, 1976).

High specialization of roles -- reinforces expertise and efficiency; as well as high generality of roles -- reinforces flexibility and interdependency (Lorsch and Lawrence, 1967).

Continuity of leadership -- permits stability, long-term planning and institutional memory; along with infusion of new leaders -- permits increased innovation, adaptability and currency (Chaffee, 1984).

Deviation amplifying processes -- encourage productive conflict and opposition that energize and empower organizations; as well as deviation reducing processes -- encourage harmony and consensus needed to engender trust and smooth information flows (Maruyama, 1963).

Expanded search in decision-making -- allows for wider environmental scanning, access to more information and divergence of input; as well as the creation of inhibitors to information overload -- reduces and buffers the amount of information reaching decision makers and leads to convergence in decision-making (Huber, 1984).

Disengagement with past strategies -- fosters new perspectives and innovation and inhibits defining new problems simply as variations on old problems; as well as reintegration and reinforcement of roots -- fosters commitment to a special sense of organizational identity and mission and past strategies (Tichy, 1982).

The presence of paradox and its embedded conflicts is no longer seen as a sign of organizational trouble. In fact the ability to integrate paradox has become a hallmark of organizational health. Without the tension that exists between simultaneous opposites in organizations, unproductive "schismogenesis" occurs, according to Bateson (1936) and Morgan (1981). Schismogenesis is a process of self-reinforcement where one action or attribute in the organization perpetuates itself until it becomes extreme and, therefore, dysfunctional. Cameron (1986) gives the example of one group's dominance producing submissiveness in another, which in turn reinforces even more dominance on the part of the first group and more submissiveness on the part of the second. A negatively reinforcing cycle is produced. One group's actions produce more extreme reactions in the other until the system becomes so out-of-balance that it disintegrates. Or consider the situation where dominance in one group provokes an attempt for dominance by another, which sets up a cycle of escalating competition and eventual deadlock, if not mutual destruction.

In a school system, this can be seen in familiar conflicts. Community leaders versus educators; union leaders versus school administrators; parents of at-risk students versus parents of honors students -- all stakeholders are potential sources of schismogenesis if they exert too much control in school systems.

The demise of the manufacturing economy swept away the ability to control organizational affairs with straightforward, linear change models. Instead, it called for models that somehow help keep an eye on a coherent, big picture while simultaneously resolving very confusing, hotly competing issues. The school consolidation era left massive bureaucracies

where complexities far outnumber easily understood, simple realities. Linear models and reliance upon agreement and consensus were no longer effective within the changing system. It became necessary to find models that were embedded with paradox; that not only allowed, but embraced, multiple conflicts among stakeholders.

A New Change Framework: Embracing Conflict and Complexity

Organizations that are complex and full of conflict often require systemic change in behavior and values. Yet, it is the uncertainty bred by these characteristics that polarizes an organization's stakeholders and impedes solutions -- be they collaborative or imposed.

Traditional approaches to managing change have not had a good track record in dealing with such situations. But with the emergence of a new "hard science" of chaotics, in which nonlinear systems are studied, has come a general fascination with turbulent systems change. Despite its random appearance, an underlying order exists in these non-linear systems. Calvin Pava of the Harvard Business School proposed a contingency model for selecting linear and nonlinear change strategies. He notes (1986), "Situations where change is occurring can have different characteristics. For purposes of managing change, two distinctions are critical in the social and technical aspects of the situation, respectively: (1) the degree of conflict between different parties and (2) the level of complexity in the conditions that must be altered." Pava goes on to describe the advantage to the contingency approach:

Combining social and technical dimensions yields a two-by-two matrix, with four ideal change situations, each representing a single niche for distinctive change strategies. No single approach is best, for any type suits only a certain set of conditions

This framework affords two advantages. It expands the options for managing change, by identifying neglected strategies that are not usually considered. Also, it provides a basis for selecting among alternate change strategies or combining them as the situation changes. (p. 616-617)

The Link Between High Complexity and Low Comprehensibility

In Pava's framework, complexity in the organization's technical system can range from high to low. Where complexity is greater, the situations appear messy with a large number of intertwined or interdependent factors. When complexity is low, planning can be more premeditated because the target of change is clear and relatively easy to isolate. Insights gained from a thorough needs assessment during the planning phase are likely to remain essentially intact over substantial periods of time in the future. This is not the case in situations with high complexity.

"Complexity" is certainly not a new term to writers on organizational change. Mintzberg (1979) points out that an organization's environment can range from simple to complex. He notes, along with Heydrebrand and Noell (1973), that the main feature of complexity is the variable of "comprehensibility" of the work to be done. An environment is complex if it requires the organization to have a great deal of sophisticated knowledge about processes, products, clients, etc. In simple environments, the work is readily broken down into easily comprehended components.

Pava, like other researchers (Lawrence and Lorsch, 1967; Galbraith, 1973), connects the concepts of complexity and stability. Highly complex environments are described as highly unstable. However, Mintzberg (1979) and Duncan (1973) demonstrate that the two dimensions are distinct. In Duncan's research, uncertainty is related to the degree of

stability or change in an organization, not to complexity. A stable or static dimension results in low perceived uncertainty within the organization, whereas a dynamic dimension with high levels of change results in high perceived uncertainty. Mintzberg concurs and carries the analysis further. Summarizing the research of Hage and Aiken (1970) and Pennings (1975), Mintzberg concludes that "The complexity dimension has a very different effect on structure from the stability one. Whereas the latter affects bureaucratization, the former affects decentralization."

Decentralization is required when the organization, faced with high complexity, must deal with problems of comprehensibility. In Galbraith's terms, one brain can no longer cope with the information needed to make all the decisions -- planning, administrative, operating. It becomes overloaded. So the set of decisions to be made must be carved up into subsets, each of which can be comprehended by a single brain -- or team of brains. The organization must decentralize; the decisions must be moved closer to the origin of action. With low complexity, one brain (or one group of brains) can readily comprehend the situation and so centralization can be maintained.

Breaking out the interrelationships between high and low organizational complexity on one hand, and static and dynamic conditions (low and high levels of change) on the other, led Duncan, like Pava, to present a four-cell matrix.

Along with this framework, Duncan (1979) spelled out a process he called "decision tree analysis," which managers can use in selecting the right organizational structure to fit the demands of their context or environment. The process holds promise for school leaders contemplating various versions of school "restructuring."

The Link Between High Conflict And High Change

To Pava, conflict arises from contrasting values. Its intensity can range from high to low. Conflict may surround the initial diagnosis of the situation, the description of the problems, the means proposed to change or the expected ends of the change itself. As he states, "Diversity of viewpoints between different interests is the product of numerous factors, like the number of parties involved, the degree of polarization between them and the amount of historical precedence imbuing their concerns."

Mintzberg, like Pava, also concerns himself with conflict in organizations, seeing a range from "munificent to hostile." He regards hostility (high conflict) as influenced by competition, by standing relationships with unions, government and other outside groups, and the availability of resources. Interestingly, he felt that the conflict dimension could be tied to the change dimension because highly conflicted environments are typically experiencing high levels of change. He also noted that high levels of conflict result in unpredictable environments.

Mintzberg finds that the greatest effect of high conflict is the need for a speedy response, since conflict demands fast reactions. The more dynamic the environment and the higher the change, the more organic the organization's structure needs to be. Change requires adaptability and flexibility, and so the bureaucratic structures of such organizations must become less rigid.

On the other hand, in a highly stable environment with low levels of change, the whole organization takes on the form of a protected or undisturbed system which can standardize its procedures from top to bottom (Mintzberg, 1979; Duncan, 1973 and 1979). In this vein,

Chandler (1977) describes the National Aeronautic and Space Administration's (NASA's) organic structure as ". . . designed to cope with an endless series of unpredictable problems." They argue that "Structure impedes change; stability works against adaptation." The study by Litzinger, et al. (1970) demonstrates the organic nature of this structure through description of NASA's Manned Spaceflight Center, which went through 17 reorganizations in the first eight years of its existence.

Like Pava and Duncan, Mintzberg also created a four-cell framework to describe four basic organizational environments.

In Mintzberg's framework, simple stable environments give rise to centralized bureaucratic structures. This classic organizational type relies on standardization of work processes, or formalization of behavior, to coordinate production. Typical examples are mass production manufacturing firms.

Complex stable environments lead to structures that are bureaucratic but decentralized. These organizations coordinate by standardizing skills; in effect, they become bureaucratic because professional organizations impose standard knowledge and procedures learned in formal training programs. These organizations are decentralized both vertically and horizontally, their power passing to professionals. Typical examples are general hospitals and universities.

When the environment is dynamic, but nevertheless simple, its power can remain centralized. Direct supervision becomes its prime coordinating mechanism. This is the structure characteristic of the entrepreneurial firm, where the chief executive maintains tight, personal control.

When the dynamic environment is complex, the organization must decentralize to managers and specialists who can comprehend the issues, yet be flexible enough to respond to unpredictable changes. Mutual adjustment emerges as the prime coordinating mechanism, as changes in one area spark changes in others. The use of mutual adjustment for coordinating is encouraged by liaison devices (as opposed to direct supervision). These devices were described in interesting detail by Rosabeth Moss Kanter in her popular Change Masters which offers a clear bias toward organic structures.

The School Change Framework: A Contingency Model

From the review of literature on school change and organizational development, it appears that the large-scale, systemic change needed for school reforms to succeed requires a different approach. Not all schools face the same environments, nor do they all need the same organizational structure. The change framework began as a contingency model to help administrators, policy makers and change consultants identify organizational conditions to more effectively plan change strategies.

The change framework model presents scales that range from high to low on four dimensions: 'complexity' and its related factor 'comprehensibility,' and 'conflict' with its related factor 'change.' The characteristics of each dimension, culled from the sources previously cited, are organized as follows:

A. Conflict

1. Low conflict characteristics (Mintzberg, 1979 and Pava, 1986) include:
 - a. Harmony
 - b. Trust
 - c. Openly shared information
 - d. Collegial support
 - e. A "win-win" approach to differences
 - f. Value and goal agreement
 - g. A "safe" organizational environment
 - h. A friendly culture
 - i. Clarity of means and ends
 - j. Use of collaborative approaches
 - k. Agreement over methodology
 - l. Tolerance of different perspectives
 - m. Employee productivity and tranquility
 - n. Cooperative behavior resulting in shared benefits

2. High conflict characteristics include:
 - a. Hostility
 - b. Suspicion
 - c. Exclusiveness
 - d. Cautious withholding of information
 - e. Professional attacks, political aggression
 - f. A "win-lose" approach to differences
 - g. Value and goal disagreements

- h. Threatening organizational environment
- i. Antagonistic culture
- j. Misunderstanding of means and ends
- k. Personality clashes among colleagues
- l. Differences over methodology
- m. Intolerance of different perspectives
- n. Employee frustration and stress, low productivity
- o. Competitive behavior to dominate scarce resources

B. Change

The degree of conflict affects the stable and dynamic characteristics of the organization.

[Note: This is a departure from Pava's framework, which attaches stability to the dimension of complexity.]

- 1. Stable characteristics associated with low conflict (Mintzberg, 1979; Duncan, 1973; Ansoff, 1979) include:
 - a. Stable governance procedures
 - b. Predictable funding
 - c. Consistent public demands and values
 - d. Low change in school size
 - e. Predictable student needs and abilities
 - f. Client demands for maintenance and conformity
 - g. High levels of planning
 - h. More drills and routines
 - i. Better day-to-day (maintenance) decisions
 - j. Low employee turnover

- k. Low instructional/curricular change
 - l. Slow reaction to environmental changes
 - m. Formalized work rules/bureaucratic chain of command is well-known
 - n. Standardized skills
2. Dynamic characteristics associated with high conflict include:
- a. Unstable governance procedures
 - b. Uncertain funding
 - c. Unexpected changes in public demands and values
 - d. Rapid change in school size
 - e. Unexpected student needs and abilities
 - f. Client demands for creativity or novelty
 - g. High levels of reactivity
 - h. Flexibility in negotiation/problem-solving
 - i. Makes better innovative decisions
 - j. High employee turnover
 - k. High instructional/curricular change
 - l. Fast reaction to environmental changes
 - m. Direct supervision (adaptable, on-the-spot decisions rather than bureaucratic rules)
 - n. Mutual adjustment in work processes (rather than standardized skills)

C. Complexity

1. Characteristics associated with low complexity (Pava, 1986; Mintzberg, 1979; Duncan, 1979) include:
 - a. Centralized structure
 - b. "One brain" decisions
 - c. Decisions from the top leading to conformity
 - d. Small number of factors and components in the environment
 - e. Factors and components somewhat similar to one another
 - f. Desire to increase the amount of information available for decision-making
 - g. Low interdependence
 - h. Direct contact
 - i. Small size
 - j. Homogeneous student body
 - k. Generalists
 - l. High degree of uniformity within organization

2. Characteristics associated with high complexity include:
 - a. Decentralized organizational structure
 - b. Multi-brain decisions
 - c. Professionalism (empowerment) leading to role diversity
 - d. Large number of factors and components in environment
 - e. Factors and components dissimilar to one another
 - f. Desire to decrease the amount of information available for decision-making
 - g. High interdependence
 - h. Liaison and representative contact

- i. Large size
- j. Diverse student body
- k. Differentiated staffing (specialists)
- l. Difficulty in integrating, coordinating

D. Comprehensibility

The degree of organizational complexity affects comprehensibility in the organizational culture.

1. The aspect of comprehensibility associated with low complexity implies that:
 - a. Organizational problems discrete and unchanging
 - b. The target of change relatively clear
 - c. The phenomena involved in the change can be analyzed rigorously -- often quantitatively
 - d. The detailed analyses make it possible to build a finely detailed implementation plan at the beginning of the change effort
 - e. The insights gained from the thorough analyses remain essentially intact over substantial periods of time
 - f. The need for major revisions in the implementation plan is minimized

2. The aspect of incomprehensibility associated with high organizational complexity implies that:
 - a. Task uncertainty manifests itself in the form of imprecise problems
 - b. The nature of difficulties is poorly defined
 - c. Problems change rapidly

- d. Because there is usually a bias favoring orderly management, few leaders are willing to "own" the messy problems
- e. Lacking leadership focused on the problems adds to the sense of organizational chaos
- f. Decisions usually need to be moved closer to the point of organizational action

Approaches to Change

The change strategies that follow are based on the implications of the organizational dynamics of complexity and conflict. The first three strategies are relatively familiar, although they are often applied rather haphazardly. In contrast, the fourth strategy has only recently gained acceptance in organizational development circles.

A. Master Planning

- 1. Low conflict/low complexity
- 2. Possible to gain agreements
- 3. Analytical outcomes hold steady over long period of time
- 4. Typical "orderly" approaches to planning change; i.e., master planning, strategic planning, forecasting, facilities planning, etc.

B. Negotiative Problem-solving

- 1. High conflict/low complexity
- 2. Not possible to gain common agreements quickly

3. Instead of using analytical surveys to gather data about the problems, acquire data through incremental compromises arrived at through negotiative problem-solving
4. Needs a "political" approach that arrives at small negotiated changes; i.e., disjointed incrementalism, bargaining, negotiative problem-solving, voting, etc.

C. Organizational Restructuring

1. Low conflict/high complexity
2. Possible to gain common agreements about goals and values among stakeholders
3. Problems not clearly defined -- lack of leadership "ownership" of problems adds to confusion
4. Needs a "restructuring" approach that makes more visible the information which is known by the implementors and frees up bottlenecks and gridlock by placing decisions organizationally closer to the point of action. (see Guthrie, 1986; Purkey and Smith, 1985; Duncan, 1979; Golembiewski, 1972; Deal, 1982; Naisbitt and Aburdene, 1985)

D. Ad Hoc Visioning And Team Building

1. High conflict/high complexity
2. Not possible to gain common agreements about goals and values among stakeholders
3. Problems not clearly defined -- lack of leadership "ownership" of problems adds to confusion

4. Needs an approach which embraces several paradoxes such as excellence and equity, learning for adults as well as children, course content and instructional process, flexibility and stability, etc. Ad hoc task forces create themes to embrace the paradoxes, and also begin to implement solutions which are arrived at through negotiative communication. (See Pava, 1986; Anderson and Cox, 1988; Cameron, 1986; Kanter, 1983; Argyris and Schon, 1977; Golembiewski, 1972; Trist, 1983).

CHAPTER III

USING THE CHANGE FRAMEWORK INSTRUMENT

Key elements that should be considered before school improvement efforts begin are described more completely in this chapter: (1) the level of complexity of the instructional program and overall organization, the interdependence of staff members and the ease with which the whole picture can be comprehended; and (2) the degree of conflict between and among administrators, staff, students and community members as well as the overall level of change or stability in the organization. Positive and negative features of high and low levels of these elements in schools are described as well.

Chapter III ends with the change framework instrument, scoring instructions and relevant information from tryouts in schools. The instrument is used to diagnose the basic dynamics of each school's situation. It is also used to sort schools by their profile on the complexity/comprehensibility and conflict/change dimensions. Change strategies for each of the four organizational models will be presented in Chapter IV.

Complexity

A school's complexity and staff interdependence largely determine whether centralized or decentralized decision-making is indicated. For example, when tasks are simple and people work at them in relative isolation, (i.e., in self-contained classrooms), organizational complexity is low, and it is possible for one or a few leaders to comprehend and manage the whole structure.

Characteristics associated with low complexity include a centralized structure, top-down decision-making, an emphasis on conformity, a small number of organizational components or larger numbers of similar components (e.g. a small school or a somewhat larger school with a homogeneous staff and student body). Low interdependence among staff members limits organizational complexity as well. With a small staff of primarily generalists, school or district leaders can manage their work using direct contact and relatively uniform directions. The low complexity allows "one brain" decision-making and enables centralized decision makers to make effective judgments.

In contrast, characteristics associated with high complexity include a decentralized organizational structure, many decision makers at various levels of the organization, role diversity, a large number of components (e.g., a large high school or a somewhat smaller school with specialized staff and diverse student body). With a large, interdependent staff (perhaps made up primarily of specialists) school or district leaders must manage their work through liaison and representative contacts, with contingency options or flexibility built into decisions. Leaders of complex organizations find that an excess of information makes "one brain" decision-making impossible. Effectively considering all the options may require collaborative decision-making.

Comprehensibility

Closely tied to complexity is a lack of comprehensibility of the organization's problems, their apparent clarity or "messiness." A situation might be considered to have low comprehensibility when thoughtful, long-range plans fail to hold up over time, or when

attempts to solve one set of problems seem to generate new problems. Low comprehensibility is usually associated with high complexity, while high comprehensibility, or clarity, is related to low complexity.

Characteristics of high comprehensibility include problems that are discrete and unchanging, or those where the heart of the problem is well-known. Problems that are easily comprehended are more easily analyzed, allowing decision makers to build a finely detailed implementation plan at the beginning of the change effort. Because of the consistent nature of the problems, progress may be more definitively charted. Insights gained from the initial analysis remain essentially intact over time and the need for major revisions in the implementation plan is minimized.

Low comprehensibility, on the other hand, manifests itself in the form of imprecise, poorly defined problems or those which change rapidly. School or district leaders may be unwilling to tackle problems of this order, which are hard to understand or to nail down long enough to attempt solutions. In many cases, the kind of global organization-wide solutions available to centralized leadership would not be effective in dealing with these situations. Instead, decisions (and the resources to implement them) usually need to be moved closer to the point of organizational action.

Positive features often associated with low complexity.

- o Staff members experience professional autonomy in their day-to-day activities.
- o Roles are clearly defined with clear accountability.

- o An atmosphere of efficiency prevails with shorter timelines from initiation to completion of tasks.
- o Decisions are made quickly.
- o Harmony exists between school and community with a strong sense of tradition and 'appropriate' procedures.

Negative features often associated with low complexity.

- o Instructional delivery focuses on discrete self-contained classrooms; there are few integrative programs such as writing across the curriculum.
- o Instructional time may be overly concerned with facts and basics; not enough attention given to reasoning skills, cooperative learning.
- o There are few projects, such as peer coaching, which formally generate collaboration among staff members.
- o Staff members may resist innovation and change.

Positive features often associated with high complexity.

- o A holistic curriculum enables learning and inquiry to follow students' interests across subject areas or content specialties.
- o Staff members work together, collaborating on several teams and committees.
- o Programs are enriched from the involvement of "many brains" and multiple ideas.

Negative features often associated with high complexity.

- o Often projects threaten to become too confusing, with an impending sense of organizational chaos.

- o The interaction of teams and committees are difficult to coordinate; person A is waiting for person B who is waiting for C who is waiting for A before tasks can get completed. The result can be organizational gridlock.
- o There is always more to do than can be done, that is, "the harder we work the behinder we get."
- o Staff members are vulnerable to outside experts who promise quick fixes.

Conflict

The degree of conflict within the organization, as seen in relationships between and among staff, administrators, students and community members, affects the ease or difficulty of reaching broad, secure agreements over values and policy, instructional issues and the use of resources. Low-conflict organizations include those where individuals have relatively few reasons for conflict, as well as those where people tend to have good relationships because they can agree to disagree. In organizations of the latter variety, areas of disagreement stimulate new discussions rather than conflict.

Low-conflict characteristics include harmony, trust, openly shared information, collegial support and a "win-win" approach to differences. In such an organization, staff and constituents might agree on values, goals and methods or be tolerant of different perspectives. Collaborative approaches to problem-solving and generally cooperative behavior are more likely when conflict is low and the organizational environment is usually nonthreatening and friendly. Employees are generally productive and happy in their work in a low-conflict organization.

Characteristics of high conflict in an organization include hostility, suspicion, exclusiveness and a cautious withholding of information. Professional attacks, political aggression and highly competitive behaviors are likely as a "win-lose" approach to differences pervades. Value, goal and method disagreements tend to polarize individuals and groups, and intolerance of different perspectives is common. Most people will find a high-conflict environment threatening or antagonistic; low productivity may result from employee frustration and stress.

Change

Low-change characteristics tend to emphasize stability: predictable funding, consistent public demands and values, stable school size and governance procedures or predictable student abilities. Schools and districts that exhibit low levels of change may be responding to a perception of relatively straightforward and unchanging student needs. Client demands for maintenance and conformity may be viewed as a mandate for instructional conformity, including perhaps a reliance on routines or standardized skills in supervising employees.

Low-change organizations are able to conduct effective planning and can make good day-to-day decisions related to maintenance of the stable situation. However, reaction to environmental changes tends to be slow. Formalized work rules and the chain of command are clear and well-known to all, and employee turnover is usually low.

Organizations exhibiting a high change profile may be characterized by uncertain funding, inconsistent public demands and values, unstable school populations and governance procedures or sudden changes in student needs and abilities. High levels of change may result from community demands for constant innovation or novelty or may be the product of unusually dynamic leadership. Typically, this kind of organization can adjust quickly to

environmental changes and is quite flexible in negotiation and problem-solving, but may find long-range planning more difficult. Decisions are often made on-the-spot, and work processes may be aligned through mutual adjustment rather than standardized skills. Instructional and curricular changes are common, and high change can be both the result and the cause of high employee turnover.

Positive features often associated with low conflict.

- o Harmony and trust exists among staff members and the central office, schools and community members.
- o Leaders, staff and community members openly share information when appropriate.
- o There is tolerance of different perspectives and a "win-win" approach to differences.
- o The organizational culture is friendly with a "safe" environment.
- o Leaders, staff and community members agree on values, goals and methodologies.

Negative features often associated with low conflict.

- o Decision-making processes are less dynamic or probing; pat answers, traditional approaches are relied on too much.
- o A prevalent spirit of conformity stifles change and creativity.
- o There is a tendency to smooth over differences rather than trust one's capacity to gain from confrontational experiences. This results in shallow encounters which leave staff less able to perceive significance.
- o Leaders and staff tend to be naive about (and less appreciative of) cultural diversity and differences of perspective.

Positive features often associated with high conflict.

- o With appropriate processes, conflict can improve decision-making by getting lots of information out to be considered.
- o The search for negotiative solutions can encourage creativity and relevant program improvement.
- o Confrontational experiences can increase participants' grasp of each other's needs and perspectives.
- o Increased knowledge (and appreciation) of cultural diversity and differences of perspectives can occur.
- o The visibility of disagreements can encourage staff and leaders to develop mature conflict-management processes.

Negative features often associated with high conflict.

- o An atmosphere of hostility and suspicion may prevail.
- o An ethic of exclusivity may encourage "in-groups" and "out-groups."
- o Cautious withholding of information may be a norm.
- o Staff, leaders and/or community members may engage in personal or professional attacks and political aggression.
- o Personality clashes may occur frequently.
- o Low productivity may result from much work time being taken up with expressions of self-justification and anger.
- o Domination fights may occur to control scarce resources, prevailing values and goals and/or instructional methodologies.

Using the Change Framework

Tailoring the change framework to the organizational development work of Pava, Mintzberg and Duncan (see Chapter II for references) hinged on an ability to identify levels of complexity and comprehensibility, conflict and change (the "four Cs") within schools. Developing an instrument to measure the dynamics of the "four Cs" required that it (1) relate to issues that school personnel routinely deal with (2) be easy to understand and (3) be quick to complete.

The questionnaire in Figure 1 is followed by a scoring mechanism. Members of the school staff, including principals and other administrators, teachers, clerical and custodial staff, as well as school specialists and parents all complete questionnaires and return them for scoring. Each of the questions addresses one of the "four C's" and presents participants with a forced choice between a high level or low level of that dimension in the school. (For example, question 1 on the instrument is a "change" question. Participants pick 1a to indicate low change or 1b to indicate high change.)

When the questionnaires are completed the school personnel can chart their school on the matrix (Figure 2) that follows the instrument and scoring instructions. The matrix identifies four models of school organizations which map back to the "four C's." Chapter IV then describes four strategies tied to these organizational models.

Figure 1. The Change Framework Instrument

The Change Framework Instrument

Name of School:

Below are paired statements about your school. Choose the statement that best describes your situation.

- 1a. The school is stable; there is little change in staff turnover.
- 1b. The school is unstable; there is a lot of change in staffing and a high degree of staff turnover.

- 2a. There is unpredictable funding for the school year to year.
- 2b. There is predictable funding for the school year to year.

- 3a. It is hard to get a handle on what the problems are in this school.
- 3b. We know what our problems are in this school; what needs to be changed is clearly defined.

- 4a. There are rapid or unpredictable changes in student enrollment.
- 4b. Changes in school enrollment are easily predicted.

- 5a. The school has a reputation for changing things such as the curriculum very slowly.
- 5b. The school has a reputation for implementing new trends, such as new curricula, frequently.

- 6a. Most decisions are made by a limited number of people.
- 6b. Most decisions are made by a variety of people.

- 7a. The school has a lot of bureaucratic layers.
- 7b. The school is streamlined.

- 8a. The principal and staff agree on most issues.
- 8b. The principal and staff disagree on most issues.

- 9a. Detailed analyses make it possible to build a fairly complete implementation plan when changes are needed in this school.
- 9b. Few staff leaders are willing to claim "ownership" of the messy problems in this school long enough to plan a major change effort.

- 10a. The school is composed of people who have clear values for education which are widely shared.
- 10b. The school is composed of factions and special-interest groups that have differing ideas on what schools should do.

- 11a. Our community is stable, which makes it easy to do long-range plans.
- 11b. Our community is undergoing a lot of changes, so it is difficult to do long-range planning in our school.

- 12a. The principal makes good short- and long-range plans.
- 12b. The principal tends to react to crises and uses primarily short-term solutions to problems.

- 13a. Our student population is very homogeneous.
- 13b. Our student population is very diverse.

- 14a. Decisions are made by the principal and carried out by staff.
- 14b. Decisions are made informally at the school by those most affected by them and carried out autonomously.

- 15a. Problems in this school are so diverse that multiple solutions create more chaos.
- 15b. Long-term solutions devised by school leaders seem to hold up over time.

- 16a. Staff tend to trust each other.
- 16b. Staff tend to be wary of each other.

- 17a. Staff generally agree on how to get things done.
- 17b. Staff seldom agree on how to get things done.

- 18a. The school has a history of implementing innovative programs.
- 18b. The school has a history of keeping things pretty much the same.

- 19a. A lot of background information is used in decision-making.
- 19b. Only a few key facts are used in decision-making.

- 20a. The problems in this school are complex and will require complex solutions.
- 20b. The problems in this school are somewhat simple and straightforward.

- 21a. Community members can come to agreement over school goals and practices.
- 21b. Strong community disagreement over school goals and practices is evident.

- 22a. Disagreements are tolerated in this school.
- 22b. Disagreements tend to polarize people in this school system.

- 23a. The major problems we face next year are pretty much the same as we've faced in the past two or three years.
- 23b. We are often surprised by new problems; it is hard to tell what we will have to face next.

- 24a. Our decisions are usually made by the people who have high enough authority to achieve solutions.
- 24b. Our decisions are made too often by people who don't have high enough authority to get results.

- 25a. Our problems are tough, but they are fairly clear and easy to define.
 25b. Our problems are so intertwined that they are confusing and hard to define.
- 26a. The people who make our decisions are too far from the action to be effective.
 26b. The people who make our decisions are close enough to the action to understand what is really needed.

II. GENERAL INFORMATION

What is your role in this school district? (Circle One)

- Principal
 Assistant Principal
 Teacher
 Counselor/Nurse
 Support Staff
 Parent of student in this school
 Community member (not a parent of student in this school)
 Other: _____

SCORING

<u>Complexity</u>		<u>Change</u>		<u>Conflict</u>		<u>Comprehensibility</u>	
<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
6b	6a	1b	1a	8b	8a	3a	3b
7a	7b	2a	2b	10b	10a	9b	9a
13b	13a	4a	4b	16b	16a	15a	15b
14b	14a	5b	5a	17b	17a	23b	23a
19a	19b	11b	11a	21b	21a	24b	24a
20a	20b	12b	12a	22b	22a	25b	25a
		18a	18b			26a	26b

Total

Scoring the change framework instrument is relatively straightforward. Using the scoring mechanism above, circle the appropriate responses as they appear on the questionnaire itself. Then count up the number of responses in each column. If, for example, the total number of circled items under the high complexity column exceeds the total number of circled items under the low complexity column, then the score indicates that the participant views the organization as complex.

The matrix below (Figure 2) is used to sort schools based on their score on the change framework instrument. For example, a low complexity score (and its usual sidekick, a score of high comprehensibility) combined with a low conflict score (and its sidekick, a score of low change) would place a school in the upper left quadrant of the matrix. Such a school would thus be a "Model I" school.

CHANGE FRAMEWORK MATRIX

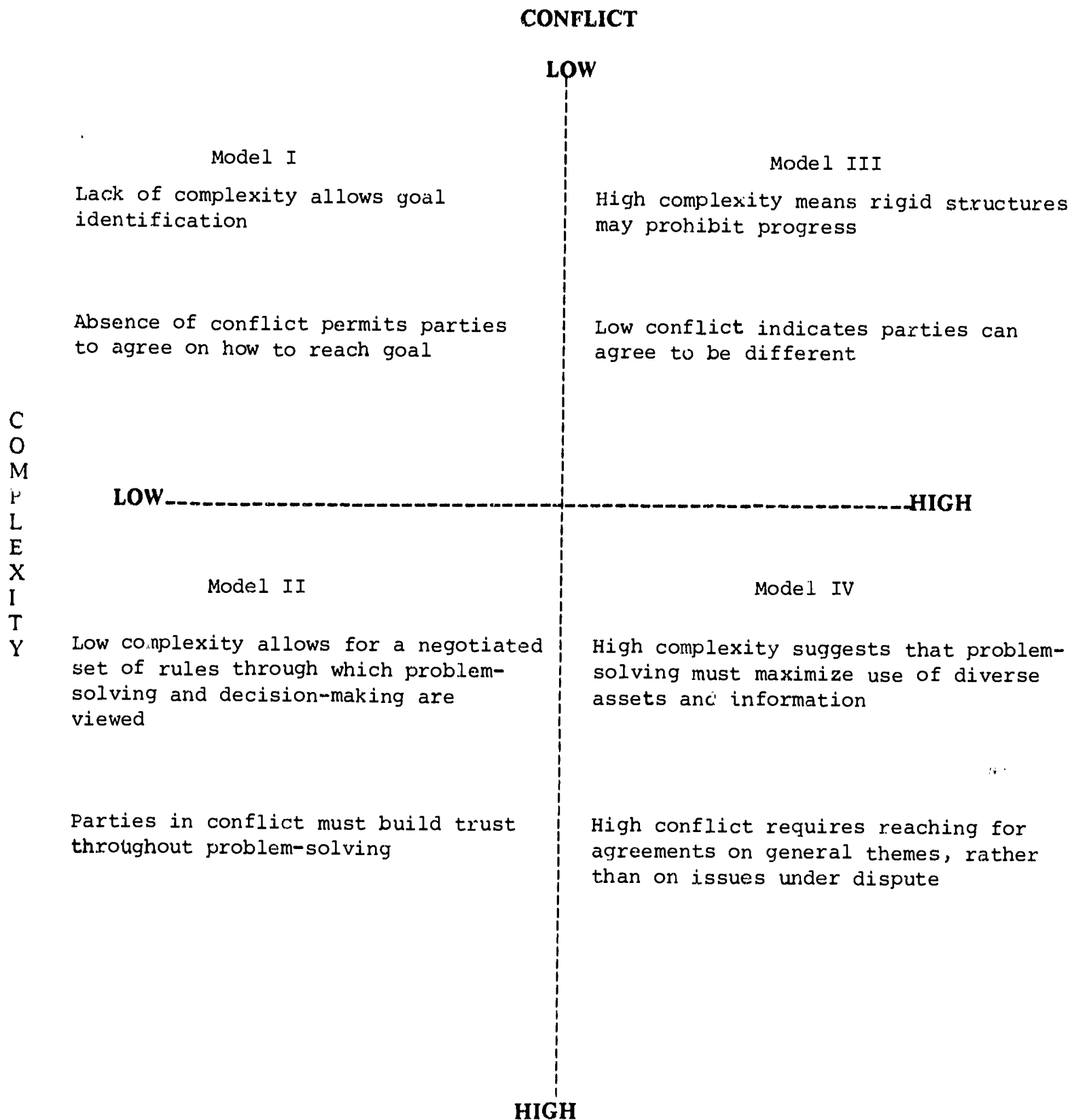


Figure 2. Organizational Models

Exceptions

The instrument measures schools' organizational dynamics as they relate to the "four C's." The complexity score will normally correlate with the comprehensibility score (in other words, low comprehensibility is usually found with high complexity), and the conflict score will often correlate with the change score. To test the relationships between the items on complexity and comprehensibility, conflict and change, scoring for the four dimensions was split. In large part, the dimensions did correlate as predicted.

During tryouts to determine the face validity of the items on the instrument, however, some exceptions to the theory became obvious. For example, respondents in one elementary school perceived high change but low conflict. They were members of a staff with 10 years experience in developing and implementing sophisticated innovations. Because of the teachers' history of innovation together, and the system of support for change that they had constructed (using frequent relevant professional development sessions), high change in this particular school did not correlate with high conflict.

As a result of this exception and lengthy debate on the issue, the decision was made to build some possible exceptions into the strategies. These exceptions can be found toward the end of the initial description of each strategy in the next chapter.

Chapter IV describes four strategies for school change: approaches to school improvement extrapolated from the organizational development work of Pava, Mintzberg and Duncan. The strategies each address a certain set of organizational conditions and recommend options for planning and managing school improvement, based on the models identified above.

CHAPTER IV

STRATEGIES FOR CHANGE

Each of the strategies that follow begins with a basic description of how the conflict/complexity dimensions affect the environment. Because the model school organizations presented in the previous chapter are ideal types, few schools will fall clearly into one model. As a result, it may be necessary to consider elements of more than one strategy. To emphasize this, exceptions to the general linkages of conflict/change and complexity/comprehensibility are provided as well.

For school improvement to proceed, choosing a team, committee or group to be responsible for developing and overseeing the process is an important step. The strategies highlight differences in the composition and responsibilities of these groups, based on the levels of conflict and complexity present.

Next, a set of planning and action steps is provided for each strategy. These steps identify the types of activities necessary and who should be responsible for each type. Each of the strategies ends with a very brief description of leadership and decision-making styles indicated.

Leadership style is a pattern of behaviors affecting how a group leader interacts with others regarding tasks, power and human relationships. All of the styles described are effective; none is better or worse than the others. However, it seems likely that different styles are more effective when unique strengths and weaknesses are matched to the contingencies of the organization's context and structure.

Decision styles, on the other hand, are related to work team cohesion and interaction. The process of decision-making differs among people in two key dimensions: the amount of information used and the degree of focus (or number of alternatives generated). Again, the decision styles presented are all effective; more important than the style itself is the match between style and circumstances.

CHANGE FRAMEWORK MATRIX

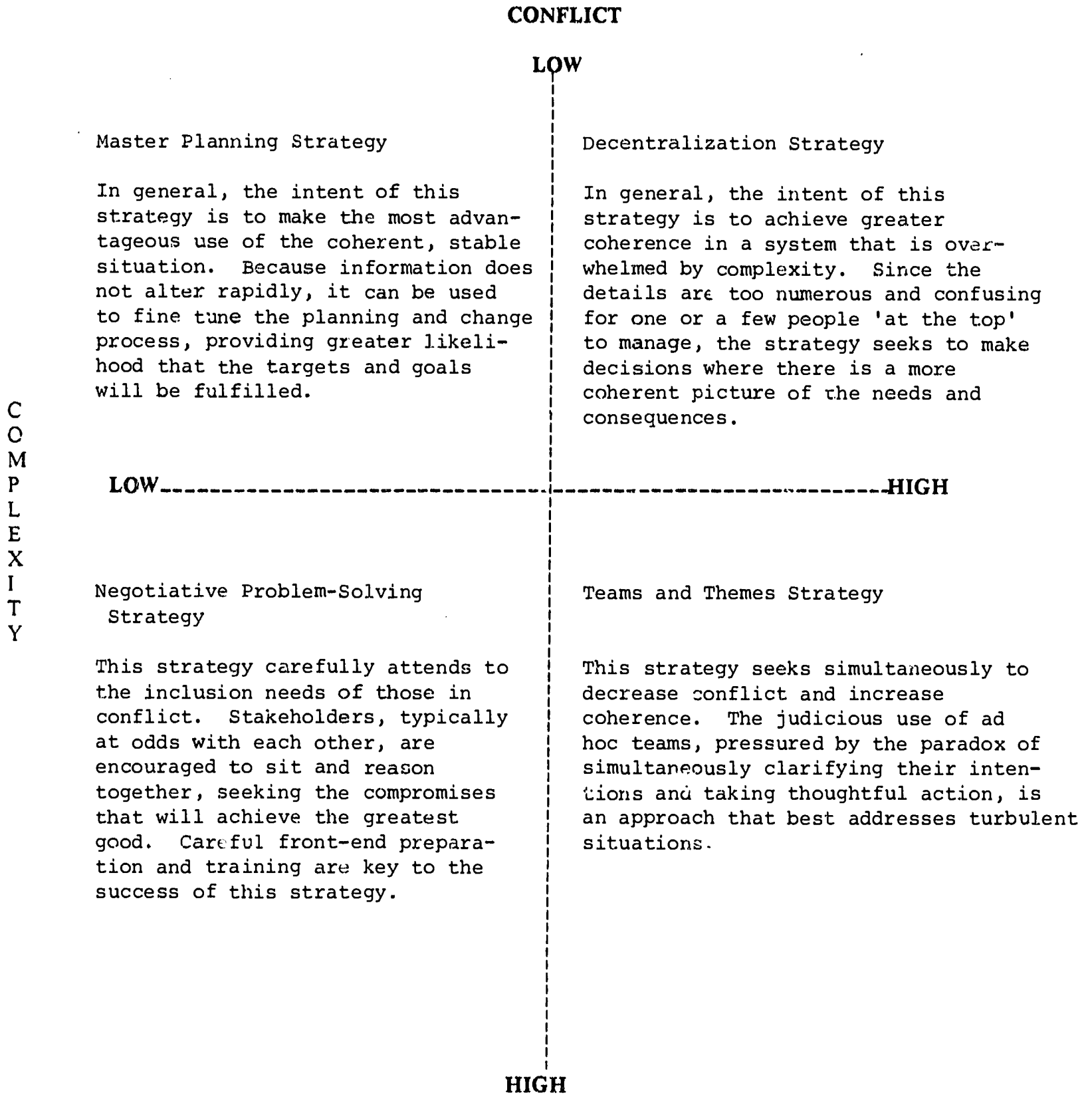


Figure 3. School Change Strategies

A Strategy For Model I Schools -- Low Conflict/Low Complexity

When a school has low levels of conflict, it is able to proceed with a straightforward master plan for school improvement. Because there are few ongoing arguments, it is possible to gain agreement from various stakeholder groups on the issues and preferred solutions.

Low levels of complexity in the instructional programs and a fair degree of autonomy among staff members suggests an instructional program with few interrelated components. This means that people work pretty independently and do not need to alter direction according to the influence or needs of other staff. In the simple environment, individuals can comprehend the purpose of the school and the procedures most people will use to carry out that purpose. This enables long-term goals to be set with a good assurance that they will yield predictable outcomes.

In a low-conflict situation, people do not feel a need to withhold information, as they might in more polarized conditions. Thus, the school's stakeholders can be carefully surveyed and their opinions analyzed in detail. The survey data will form a solid foundation for a detailed implementation plan -- typically called a "goal-based" master plan.

In most schools, the existence of low conflict implies there will also be low levels of change. The riskiness and unsettledness of change upsets people, setting the stage for conflict. When there is low change in a school, the need for major revisions to the master plan is likely to be minimal; therefore, the goals derived from the survey results usually

hold true over the long term. For these reasons, the considerable up-front work involved in the comprehensive surveys and search committees required by this approach proves to be worth the effort.

Occasionally, a school will find that it is primarily a Model I organizational type, but with some unique variations. For example, it may find that although it has low complexity it also has low comprehensibility. This can occur in situations where staff members have become so isolated in their individual classrooms that they have not entertained any thought about the school as a whole. No one has brought all staff members together to fashion a larger picture and to experience an overarching shared purpose. Sometimes the low comprehensibility is intensified when a school endures the absence of an active leader or suffers under a leader who remains aloof from the day-to-day struggle to actualize the larger school purpose.

Another significant variation to the typical Model I situation occurs when a school experiences low conflict but high levels of change. This may occur because the school has become quite sophisticated at implementing innovation and can manage high levels of change without losing comprehensibility or suffering conflict. Sometimes, however, the absence of conflict in the presence of high levels of change indicates that a staff has become anesthetized by a traditional view of reality and refuses to acknowledge that changes have entered into the picture. This occurs most often when a staff has been unprepared to cope with change and, having no repertoire to deal with the upheavals, simply chooses to ignore them.

Selecting Planning Teams and Advisory Groups

Generally speaking, people in a Model I school have a strong sense of shared values and a pretty clear picture of how tasks are best accomplished. These factors influence the selection of planning teams and advisory groups. Because of the low conflict, representing diverse viewpoints or reconciling strong disagreements is not a problem. The emphasis is on putting together a group who can competently collect data about the needs of the school and efficiently propose the action steps indicated by the data.

The selection process for these groups could benefit from accommodating the following factors.

- a. People who understand the community values and traditions and who demonstrate competence in achieving the school and instructional goals should be included on the committee so that an orderly school environment can be maintained.
- b. In "sense of community meetings," staff members will delegate many tasks and routine decisions to the committee.
- c. Decisions, if they involve strong value differences or significantly affect how people accomplish their priority tasks, should be decided directly by the staff using consensus.

A Planning Strategy For School Improvement

When engaging in a school improvement effort, there are many voices, each advising a particular set of steps to take. As a whole, educators have learned there are many good

ways to implement school improvement; the trick is to find the method that best matches the situation at hand. The following steps indicate the actions especially suited to the low complexity and low conflict found in a Model I school.

Goal-Based Master Planning

1. Select a leadership team to include the principal, two, three or more teachers and a representative from the district central office. This team becomes the group responsible for planning and implementing effective practices in the school organization.
2. The leadership team gains commitment from the school and community at large to initiate the improvement process through the media, "town meetings" or sanctions from formal school/community groups.
3. The leadership team collects data in several areas, including student test results, school climate, discipline and truancy records, fitness tests, etc.
4. Accommodating the results of the initial data search, the team administers opinion surveys to parents, staff and students.
5. Based on the survey results and collected data, a school profile is created describing the strengths and weaknesses of the organization, noting which indicators of "effectiveness" are present or absent.
6. The leadership team identifies areas for school improvement that are consistent with parent, staff and student concerns.

7. The team develops a plan for improvement, solicits general comments on the plan and makes necessary final revisions.
8. The team oversees implementation of the plan.
9. Progress is monitored and results are reported.
10. If the level of complexity or conflict increases in the organization, procedures from the strategies for Models II or III may be introduced.

The straightforward processes indicated for Model I schools are well served by a leader who is primarily task focused and comfortable taking charge of the school improvement process. This style can be characterized as an "organizing style." Common features of this style include:

- o Ease, rapidity in decision-making
- o Strong will power
- o Focus on high-capacity performance
- o Persistence
- o Ambition
- o Makes good use of time
- o Likes linear, logical solutions

When carrying out a school improvement strategy, decisions must be made both by individuals and groups. The low complexity and minimal conflict of Model I schools match well to "decisive style" decision makers who use a minimum amount of data to arrive at one satisfactory choice. Strong points of this style include the ability to be:

- o Fast
- o Consistent
- o Reliable
- o Loyal
- o Orderly
- o Compliant with the rules

Model I schools are the most straightforward and easiest to comprehend. Historically, most school improvement strategies have been targeted to these kinds of schools. But, in schools, where conflict is high, implementation of improvement plans is different unless conflicts are resolved. Improvement strategies for schools in conflict are discussed in the next model.

A Strategy for Model II Schools -- High Conflict/Low Complexity

High conflict, even in environments with low complexity, presents barriers to successful school improvement. Intense disagreements create an atmosphere of hostility and suspicion which suffocates a formal goal-setting process. People in a situation full of conflict are reluctant to disclose authentic needs or ideas during a survey for fear of "giving information to the enemy."

Generally, a high-conflict environment also experiences high levels of change. This occurs either because people dissatisfied with the situation bring significant pressure to change and alter it, or because high levels of turnover and change create aggravation and conflict.

Although conflict can make successful school improvement difficult, low levels of organizational complexity make it possible to achieve acceptable results by seeking minor adaptations or well-placed compromises. Under these conditions, it works well to train the opinion leaders of various stakeholder groups to use collaborative bargaining, negotiative problem-solving and tactical decision-making procedures. These are all processes that rely on small compromises which can yield imperfect, but acceptable, results.

One thing favoring this approach is the tendency, due to low complexity, for a common big picture to emerge. People may disagree about the relative values of the ingredients of that picture, but they are not likely to disagree about what it is.

In this approach the planning process is slow and the gains are incremental. The ever-present conflicts preclude reaching for a grand, sweeping change. However, having invested shared ownership in the series of compromises, the stakeholders are more likely to override their hostilities and work incrementally for school improvement. An enthusiastic "bandwagon effect" will not usually develop, but opportunity to create a solid sense of community is present with this strategy.

Occasionally, a Model II school will vary from the typical situation. It may, for example, have high levels of conflict but low levels of change. This often occurs when members of

the school become locked into cliques, polarizing themselves into old-timers and newcomers, maintainers and innovators, or academic teachers and hands-on teachers. The adversarial relationships can freeze the subgroups into unyielding patterns that accommodate little movement.

Another variation can occur when a Model II school having low complexity also suffers low comprehensibility. This may occur because the conflicts themselves contribute to a sort of myopia where people are locked into "us-them" perceptions and refuse to see the larger picture common to all. In this sense, the emergence of cliques prevents the flow of information that would raise the level of comprehensibility.

Selecting Planning Teams and Advisory Groups

The presence of high levels of conflict make it very important that the selection process used to form planning teams and advisory groups carefully includes all the stakeholder groups of the school. To carry this out, the following factors should be kept in mind:

- a. The committee should have opinion leaders who can represent the various interests and values which are felt among the various factions and role groups.
- b. In sense-of-community meetings it may be beneficial for staff members to witness the opinion leader group in "fishbowl" discussions to build confidence in the routine decisions and tasks of the opinion leaders.

- c. **Decisions that involve strong value differences or that significantly affect how people accomplish their priority tasks should be decided directly by the staff using a negotiative problem-solving process.**

Negotiative Problem-Solving Approach

With the presence of high levels of conflict, it is important for a Model II school to spend a great deal of time during the initial stages of an improvement strategy in carefully selecting a wide variety of opinion leaders and equipping them with the training and procedures to face and resolve the conflicts constructively. Steps toward this end can include:

1. **Use of town-hall meetings or widespread information sharing to gain commitment from community, staff, students and administrative leaders to engage in the school improvement process.**
2. **A temporary school community group determines the "criteria of mix" of community and school opinion leaders.**
3. **A nomination letter is sent to the community explaining the process and asking the recipients to nominate themselves or someone else as an opinion leader.**
4. **The temporary school community group selects from the nominations a permanent group to serve as the school improvement committee.**

5. This committee and the entire organizational staff receive appropriate training in communication skills, decision-making, conflict management, team building and the steps of negotiative problem-solving.
6. The committee and school staff together create group agreements about ground rules, broad goals, criteria of success and intent of ongoing school improvement.
7. A school/community survey is sent to staff, community and students, and the results are publicized.
8. The committee engages in negotiative problem-solving around the areas of primary disagreement and concern. The negotiated outcomes form the basis for the school improvement plan.
9. The committee and school staff form task forces to carry out steps in the improvement plan. Small, more focused surveys or interviews may be used to collect input during implementation. There are continual group and written communication flows to keep all parents informed of the action being discussed. Opportunity to influence the implementation process is kept open and highly visible to all participants.
10. Ongoing debriefings and formative evaluations are used to adjust according to the feedback. If greater trust and lower levels of conflict are achieved in the school/community culture, then the organization may elect to implement the master

planning approach. However, if the school improvement process results in greater complexity and staff interdependence in instructional activities, then the decentralization approach (Model III) will be indicated.

The necessity of attending to conflict and negotiative processes requires that the leader is comfortable with affective concerns and uses behaviors that attract the attention and compliance of others. This "promoting style" includes:

- o Ease in making and changing decisions
- o Warmth and flexibility
- o Persuasiveness
- o High enthusiasm
- o Insightfulness
- o Out-front behavior, forcefulness
- o Builds rapport with groups and communicates well

The low complexity but high conflict of Model II schools suggest a "flexible style" among decision makers which focuses on a few key inputs and then generates a list of optional outcomes in order to meet the needs of each constituency flexibly. The strong points of this style include:

- o Intuitive
- o Adaptable
- o Likeable
- o Fast
- o Spontaneous

Negotiable problem-solving is one way of improving schools with high levels of conflict. Ignoring the conflict leads to intense disagreements, over how to proceed. But if stakeholders are able to develop a shared ownership in a series of compromises, they are more likely to resolve their differences and work incrementally for school improvement. In the next model, consideration is given to how to proceed in highly complex environments.

A Strategy For Model III Schools -- High Complexity/Low Conflict

Low conflict and high complexity foster school conditions that have implications for the locus of decision-making. High amounts of complexity create imprecise problems; the difficulties are poorly defined and their implications shift rapidly. Along with high complexity, low comprehensibility is likely when the overwhelming tangle of details obscures the common big picture. This leaves people with the frustration of not knowing what to do next and not sensing how it will all ultimately turn out.

Before school improvement procedures can begin, this confusion must be formulated into a workable problem. The absence of high conflict means that different teams and committees can work jointly to define the problem and select solutions. Rather than follow a linear goal-based plan, the process focuses on moving decision-making closer to the point where action takes place. With high complexity, low comprehensibility the school can no longer be successful with "one brain decision-making" and the hierarchy begins to decentralize itself.

Low levels of conflict enable the shared decision processes to be defined and implemented participatively. Restructuring the organization increases the commitment to the school improvement effort.

Often the low levels of conflict indicate that the school is not facing gripping scarcities, hostile stakeholders or other factors that result in high levels of change which block or distort the flows of information. This means that ongoing feedback can be collected from various teams and project groups to inform the task of decentralizing the structure, so that decisions come closer to the point of action. Thus protected from conflict and its attendant turmoil, the improvement effort can continually modify and renew the school.

A school with high levels of complexity occasionally will also enjoy high levels of comprehensibility. This exception often occurs in schools that serve an economically homogeneous student body, with families pursuing similar goals and values. This commonality means that many decision details have been presorted and generalities have already been achieved. People easily recognize the big picture that has grown out of common sense of purpose.

High complexity sometimes is accompanied by high comprehensibility because there is good communication (smooth information flow and rich content) between professional development staff and all parts of the school. Well-established support and assistance provide an integrated big picture so that teachers aren't getting piecemeal training which forces them into fragmented, reactive roles.

Another exception for Model III schools may result in low levels of conflict, yet high levels of change. This is most common in schools that enjoy a high SES in their attendance area, resulting in ample economic support. Staff members are then able to create high

levels of change through their pursuit of innovative programs. Ample resources, however, reduce the sense of role pressure, time scarcity and hard choices that usually attend high change levels in schools.

Selecting of Planning Teams and Advisory Groups

Because of the high complexity present in Model III schools, advisory group members must be able to sift through and make comprehensible a vast amount of information.

- a. The committee should include coordinators and leaders of various programs, projects and activities who can describe and negotiate the various timelines, outcomes and processes which are occurring in the school.
- b. In the "sense of community" meetings, the staff may identify those decisions that significantly affect how people accomplish their priority tasks or that involve value differences. Staff may ask that, before making a decision, the issue be investigated by the committee using methods to collect the pertinent data systematically. Pre-decision analyses should be prepared to display the pros and cons of various options.
- c. Based upon the data and analyses of the committee, the staff then discusses the issue and reaches a consensus decision.

Decentralizing Approach

Low levels of conflict allow people with different perspectives to jointly consider a school improvement effort. Because such a plan relies on low conflict, the steps below emphasize communication and sharing responsibility:

1. Gain commitment from various work groups, instructional teams, middle managers and administrative leaders to engage in the process.
2. A temporary committee determines the appropriate mix of formal and informal leaders who comprehend the work-related concerns of the organization.
3. The temporary committee selects a permanent committee from nominations taken from the organization at large.
4. This committee and the entire organizational staff receives training in communication processes, organizational design, shared decision-making and management of professional disagreements.
5. A survey is sent to appropriate work units, committees, project teams and instructional task forces to determine the major work-related concerns and sources of organizational "gridlock." Analysis of the survey enables the committee to create new shared decision-making procedures designed to move decisions closer to the point where action occurs. A decentralization plan is proposed.

6. Formal commitment to the decentralization plan is achieved through consensus decision processes.
7. The organization carries out steps in the decentralization plan. Small, focused surveys may be used to collect input during implementation. Written and group communication is continued to keep all participants informed of the decision changes and the resulting strong and weak effects.
8. Ongoing debriefings are conducted. The opportunity to influence the committee and decentralization process is kept open and highly visible to all participants.
9. Formative evaluations are made and corrective actions are taken as indicated. Within the criteria for decentralization and the group decision processes, trade-offs are negotiated with parties who suffer perceived loss of status or power. If indicated, further training in shared decision-making or participatory communication is given to staff.
10. If sudden environmental shifts cause the levels of conflict to rise higher than the decentralization process can manage, it may be advisable to move to the teams and themes approach recommended for Model IV schools.

The complexity of instructional activities and resulting organizational confusion requires that the school leadership have strong abilities to analyze and comprehend tasks and their effects. The need to implement a decentralized, shared decision-making structure will be best facilitated by a leader who easily allows others to initiate and implement decisions and actions. This "analyzing style" includes:

- o Thrives on facts, concepts
- o Task oriented, systematic and orderly
- o Pays attention to cause and effect relationships
- o Quietly non-threatening
- o Allows others to initiate
- o Problem solver
- o Persistent, serious and supportive of other's achievements

The high complexity but low conflict of Model III schools indicates a consensual style of decision-making which collects a wide range of background information from various task teams and work groups and is able to gain common agreement that focuses on an appropriate solution. The strong points of this style include:

- o Attentive to quality
- o Views the complete picture
- o Has rigorous discipline
- o Controlled and logical
- o Thorough
- o Seeks consensus

Model III seeks to decentralize decision-making and increase communication and collaboration in complex organizations to promote school renewal. In Model IV, both conflict and complexity are high, making traditional school improvement strategies ineffective. In Model IV themes are encouraged to emerge to overcome the gridlocks of high conflict and complexity.

A Strategy For Model IV Schools -- High Complexity/High Conflict

An organization with high levels of complexity and conflict favors an approach to school improvement that gets scant attention. The organizational confusion associated with high complexity requires that the organization adopt a decentralized system of decision-making. But the high level of conflict makes a direct approach to decentralization impossible without polarizing groups that already disagree. This indicates an indirect approach to systematic change and school improvement -- with unclear objectives, imprecise methods, disorderly action and tacit emphasis on changing an entire organization.

In rare cases, a Model IV school may experience high complexity and high comprehensibility. Given the general turmoil found in Model IV environments, this exception is found only where there is an external source of motivation for change. For example, a new leader, a third party facilitator, or a small, relatively detached group helps the staff to see a potential big picture amidst all the confusion.

A more frequent exception to Model IV is the presence of high conflict but low levels of change -- the "gridlocked" school, where conflicting groups have escalated their hostilities to a complete standoff. There is low change because no one budges. Typically, in these environments, most staff members have grown cynical that anything could ever be done to move the school toward a constructive culture.

The Model IV approach involves three activities: theme, action and reflective feedback. A group launches the theme, based on a feeling that it will bring good to the organization, but no one fully understands it.

Slowly, a collection of shared actions and experiences accumulates, and the theme is appreciated in hindsight as something more than just a slogan. This hindsight allows the theme and action to inform each other gradually.

This is an unusual approach to school improvement, to say the least, but one that suits conditions of high conflict and high complexity. In the framework presented here, no single method of implementing school improvement is the best. The appropriateness of any approach depends on its fit with specific organizational circumstances. This is a contingency perspective. From this viewpoint, it seems that educators' dominant preference to appear orderly often leads to the neglect of alternative strategies for implementing school improvements. In some schools, the compulsion to create a precisely defined goal with a preordained implementation process may actually impede the improvement of the schooling.

Selecting Planning Teams and Advisory Groups

If there is high conflict and cultural change and high program complexity and confusion, it is important to have all stakeholders involved in the improvement process through ad hoc task forces.

- a. The opinion leaders, as described in Model II and the program leaders described in Model III should be organized in ad hoc task forces which address the most volatile issues and major program problems facing the school.
- b. The staff requests the task forces to create a metaphoric theme which is capable of embracing all sides of the conflicts.

- c. Before the task forces can fully develop the theme, the staff requests the task forces to begin to solve some of the programmatic problems.
- d. Bringing both efforts back to the staff encourages everyone to play "fill in the blank" by finding ideas for programmatic solutions in the discussion of the theme, and by incorporating into the theme some of the ideas that occurred while seeking solutions.

Teams and Themes Approach

The high conflict and complexity present in Model IV schools create a necessity to rise above areas of disagreement for broad themes upon which all can agree.

1. Pull together an informal cadre and discuss the possibilities of introducing more participatory decision processes and stronger negotiative problem-solving into the organization.
2. Organize opinion leaders from community, staff and student groups into cross-role teams to address ways to implement decentralization and conflict management. Major paradoxes are discovered. Informal networks are used to find a strong metaphoric theme which can embrace the paradoxes.
3. Leadership requires that action be taken to implement the metaphoric themes even before their meaning becomes clear. Various aspects of the organization's operations, human relationships, instructional activities, traditions and culture are addressed related to the theme. New actions are taken to decentralize and manage/contain conflicts.

4. A collection of formal work teams and informal task forces launches an implementation plan for the theme, based on their collective hunch that somehow it has something good to add to the organization.
5. Training is contracted to give all key individuals the leadership tools and teambuilding skills.
6. Gradually, through the active listening that occurs during the team and task force meetings and through the information revealed in debriefing sessions, a collection of shared meanings accumulates. People begin to say, "These are the behaviors that we want around here," "These actions really do work to carry out our theme," and "Hey, we really can make this a good place to be!"
7. Informally, during organizational ceremonies and celebrations, members of opposing interest groups join together.
8. Several teams and task forces are brought together to address an issue that seems to be blocking further evolution of the vision's actualization.
9. Conflict management and negotiative problem-solving tools are consciously used to remove the barriers to the theme and join together the various interest groups into a larger, cohesive organization.
10. If conflict levels are significantly reduced, the organization can begin a decentralization approach (see strategy for Model III).

The confusion and high conflict that characterize Model IV schools call for leadership that is simultaneously able to deal with the affective and able to analyze and understand tasks and expected outcomes. Further, Model IV school leaders need to be comfortable allowing others to initiate and implement decisions while at the same time maintaining pressure to progress so that momentum doesn't wane. The "facilitating style" includes:

- o Facilitates decisions agreeable to others
- o Good listener
- o Concern for fairness and equity
- o Friendly, likes diverse groups of people
- o Allows others to initiate and gain credit
- o Puts others at ease and reduces interpersonal tensions
- o Shares power well

The high complexity and high conflict of Model IV require an "integrative style" of decision-making which faithfully collects concerns and information from all formal and informal sources in the organization and stands ready to generate many possible solutions to fit each organizational perspective. The strong points of this style include:

- o Creative
- o Empathic
- o Cooperative
- o Broadly informed
- o Open
- o Has breadth of vision

Model IV is rarely used as a school improvement strategy because most educators feel most comfortable with a goal-based plan. In a highly conflicted and complex environment, however, a goal-based strategy won't get off the ground. Model IV provides educators with an alternative strategy to develop shared actions and experiences to move a school forward.

CHAPTER V

TAKING THOUGHTFUL ACTION

In the change strategies presented in the previous chapter, as with the models in Chapter III, important contextual differences are emphasized. But what is the larger meaning of the discrete steps? How do school officials get beyond merely "going through the motions?"

A different view of change is essential for moving individuals and organizations forward in the Information Age. Four elements are common to all the change strategies. These are **collaboration, vision-building, action and reflection.**

During development of the change framework, it became clear that one must not only know what steps work well in the situation at hand, but also be aware of how to go about taking those steps. We discovered that:

- o It is ineffective to ignore the realities of how people do (or don't) work together in a given situation; attention to factors that encourage collaboration, and awareness of those which impede it, must be deliberate.
- o Building a vision is not something that occurs in a vacuum; a new vision of schooling begins only when school people intentionally set out to craft one.
- o Making a vision real means motivating people and stimulating self-interest through actions that energize.
- o Leadership and empowerment are not mutually exclusive. Modifying behavioral norms, expanding the base of active problem-solvers, and exploring the notion that good teachers share their expertise will increase a school's quotient of able and willing leaders.

- o Reflective practice -- thinking and talking about one's work -- helps keep a school vision dynamic, in spite of unexpected changes in the environment.

Collaboration

Particularly when facing complex problems, it has become critical to have multiple, diverse perspectives to help frame problems and craft workable solutions. Moreover, schools can no longer afford to leave anybody out: individual fates are inevitably and inextricably linked. Those who are not part of the solution became part of the problem.

It is necessary to move beyond maximizing the self-interest of a few to maximizing the self-interests of all. To accomplish this, collaboration and inclusion must be the very essence of the process, not just something done at the beginning as a perfunctory step to build ownership or overcome resistance.

Why does collaboration seem so foreign to the normal workings of schools? Collaboration of any kind, let alone cross-role or cross-organizational collaboration, is widely considered time-consuming, cumbersome, task-multiplying, resource fragmenting, not related to one's main work and, frankly, likely to result in credit either being diluted or going to someone else.

The above perceptions are particularly likely to be held when one is looking through the lens of traditional hierarchical power. However, well-established collaborations can motivate and inspire people, generating new ideas that would not otherwise result.

Successful cross-role and cross-organizational collaboration has the following attributes:

- o Trust between partners based on interdependence Trust comes from mutual recognition of a need for partnerships in order to accomplish goals. Participants must agree that a new opportunity requiring partners exists, and the organizations must have sufficient capability and maturity to develop systematic linkages.
- o Authentic communication It is essential to have a two-way exchange of information to enhance the public image of the partners, to encourage risk-taking and to allow participants to learn from mistakes.
- o Goals, tools and purposes Collaboration should begin with an analysis of the problem from multiple perspectives and the actions needed to solve it. Available resources need to be determined. Goals should be defined, and it should be made clear how results will be achieved more efficiently with partners than alone. The big picture behind the goals and purposes must be clear.
- o Power used with mutual respect Participants must be skilled in the collaboration process and overcome feelings of independence or dependency. There must be an equitable exchange among collaborators with visible and mutually enhancing outcomes.

Hindrances to effective collaboration include:

- o Internal confusion and conflict that prevents successful trust-building.
- o Territorial conflicts or incompatibility between partners' organizations.

- o Doubts as to the utility of the goals or vision or a high monetary, social or "ego" cost.
- o Poor performance history of some of the partners or little knowledge and few skills in the collaborative process.

When collaboration and inclusion are genuinely embraced, the challenge becomes, as Harlan Cleveland (1985) posed it, "How do you get everyone in on the action and still get action?"

Vision-Building

Vision-building is the encompassing frame that grows out of the processing of a group.

Vision is the warp and woof that gives structure -- and therefore pattern and meaning --to the individual strands of the fabric of change. Because so much of what school people do is undertaken in situations of complexity, change, conflict and resulting low comprehensibility, fitting individual actions to the larger whole becomes a tricky, exhausting matter when undertaken alone. No wonder so many have resigned themselves to going through the motions. Shared vision is what makes possible the mutual adjustments necessary for functioning in situations of high complexity.

A vision is a personal blend of organizational philosophy, values, context, goals and the meaning of the school's work. Much of what is known about creating a vision is bound up in discussions of leadership. Research describes "visioning" primarily in terms of how the most effective leaders have used a vision to achieve above and beyond reasonable expectations. School leaders (principals, in particular) are in a unique position to gather and synthesize information and are more likely to have the resources and authority to get

things done than other school personnel. In addition, carrying out a schoolwide vision requires someone who believes in the vision and is available to interpret it into daily activities, to model behaviors that make the vision real and to analyze new situations in light of the vision.

Nevertheless, the following discussion of creating and carrying out a vision is addressed to all school personnel, regardless of how small or specialized their sphere of influence. The professional autonomy that characterizes most work in schools suggests that virtually all staff should understand vision building, if only to chart the course of their own improvement more effectively.

In successful schools, a shared vision gives staff members an understanding of where they are going. The vision provides everyone a common frame of reference for daily decisions; it infuses their routine work with a special purpose.

One reason that a vision of success is so compelling is that it is non-negotiable. It is broad enough to bridge school tradition and innovation. The tools that make the vision come alive are the result of collaborative effort and thinking. These tools include a strategic plan, environmental scanning or thorough self-assessment (a variety of these tools are presented in the appendices).

When a dynamic school vision is in place:

- o Staff members have a better understanding of what is expected of them, and why it is important.
- o Achievement of goals results in a sense of real accomplishment.

- o The separate actions of staff and students are tied into a cohesive whole.
- o The mutual commitment to a vision encourages collaboration and teamwork.

Action

Perhaps the only generalizations about action that should be made across the different strategies are that they should be organization-wide in intent. To be sure, a systemic change may proceed in stages -- e.g., this year the first grade, next year the second or this year volunteer teachers will be trained, next year the remaining teachers -- but the goal must be something more than a project that comes to roost in one part of the school with no connections to the rest.

No matter which strategy best fits a school, there are some tactics that help along the way -- if one can remember to use them. The building of a shared vision in and of itself typically begins to motivate people to action that will make that vision a reality, however, other stimulators are needed as well. There are a number of "energizers" that can be used to encourage productive and meaningful action (Anderson and Cox, 1987).

Harnessing self-interest Many people act as though self-interest and the interests of the organization are mutually exclusive, however, it does not have to be that way. Paying attention to what people want and what they are concerned about is a step toward imagining the future.

Success in ameliorating an overriding problem is dependent on harnessing the energies of multitudes of individuals. What sparks engagement of a given person might be a task she or he needs to do anyway, a set of relationships that needs to be built or repaired, a desire

for professional and personal growth or just the prospect of doing something interesting; with any luck, it is a combination of all these. Most people want to do a good job, to have impact, so individuals may buy in if they perceive an opportunity to really make a difference, to accomplish a larger purpose -- or vision.

Compacting tasks This energizer is an antidote to the busyness that takes on a life of its own. It is using the larger purpose to find linkages, overlaps, concentricities that exist in the tasks of one individual and across the tasks of many individuals in the same domain. It is also packing more than one meaning into a task so that for a small amount of extra energy --or none at all -- there can be a more significant outcome. This does not mean working harder or longer hours; it means working smarter.

Acting for cumulative impact At the same time one should assess his or her actions for their contribution to the overall goal. One must understand what others are doing so that each action magnifies the benefits of the others. Likewise, the tasks shouldn't be seen as ends in themselves, but only steps toward a better future.

Recasting conflict Today's competitive world implies that there is only one right way, only one truth, only one winner and so on. However, multiple perspectives remind us that each offers a version of the truth. Multiple perspectives are a potent force because they offer more information about an issue than any individual would have access to. Moving one's focus from "which one is right?" to "what's the overall picture?" allows more energy to be focused on the problem and its solution. When that happens, the vicious cycle of winning and losing can be transformed into joint forward movement.

Enabling communication Communication is the main way people construct, reflect upon, and mirror reality; it is the major way to transfer meaning. Although much time these days is spent collecting all types of data, much of it remains simply data -- it is not explored or considered during decision-making. Far more time is spent "managing" (i.e. "coping with") data and information than analyzing or plumbing its depth.

Communications that enable are messages and processes that allow others to fit the parts to the whole, to see their individual actions and those of others in a new light. They are communications that successfully attach multi-dimensional meaning and significance to activities and tasks. Sense-making is an example of an enabling communication.

Fostering integration and coherence This energizer helps to make meaning by encouraging people to find the larger connections among things rather than proceeding in bits and pieces. It is related to compacting tasks but is aimed at building a whole out of what might otherwise appear to be fragmented or unconnected activities. The central offices of successful school districts assist individual schools by weaving together disparate federal, state and local initiatives into a coherent fabric of intents and actions. State department of educations facilitate the operation of districts and schools to the extent that they move beyond categorical to integrated action, with each policy initiative conceived and implemented as part of an articulated approach that guides statewide action.

Transforming reactivity to proactivity The use of cooperative power rather than coercive power spreads responsibility and control among the multiple players. Enabling leaders do

not give up power; they multiply it by helping individuals focus on what they need to do for impact in their respective situations rather than for approval from some higher authority.

Building knowledge and skills to undergird change Successful improvement efforts are ones where somebody has carefully measured the "amount of required change" -- that is, the gap between what is and what should be -- and has translated that into support and assistance for those involved. In almost all cases, this means professional development, not scattered one-shot, inspirational sessions, but knowledge and skill development activities that are carefully targeted to the needs of both the organization and the individuals.

Modeling desired behaviors as the quickest way to produce change This energizer has been captured in the expression, "walk your talk." Practicing what one preaches is not only good for one's internal consistency, it makes it possible quickly to transfer behaviors that are hard to talk about. For example, if people experience collaboration in a positive and useful way, they will be much more likely to consider collaboration in other settings. In like manner, teachers must themselves experience active learning before they can help their students to do the same.

Leadership and Empowerment

Leadership is easier to recognize than it is to define. It has something to do with an ability to move people or institutions into uncharted territory. It has something to do with sureness of purpose and ingenuity in action. It has a great deal to do with concentrating and directing the energies of other people. It has only indirectly to do with hierarchy and authority, which are, after all, grounded in the status quo.

Empowerment increases a school's leadership density. An empowered staff is one in which all school members are asked to take the lead in their areas of expertise and interest. In this way, professional development better serves the needs of the school and the individual. As more people become involved in activities once reserved for hierarchical leaders (decision-making, budgeting, and analysis are examples), they gain a broader understanding of the mission of the school and a better grasp of how each person's actions affect that mission.

If school change is to lead to renewal, leadership and empowerment can no longer be considered mutually exclusive. Schools must become places where principals and teachers are expected to learn and grow professionally, where new knowledge is identified or generated and explored collectively, where each person has something unique and valuable to contribute to the school's understanding of itself and its purpose.

This kind of change will not come about overnight. Teachers feel they are isolated, not always respected, not encouraged to take the initiative and discouraged from searching for new ways to address the problems they face daily. Most never observe other teachers in action, have no way of knowing what other teachers would do in their place and are not significantly involved in school-wide resolution of problems or improvement plans.

Empowerment is realistic only where teachers feel supported, appreciated, trusted, able to exercise ingenuity and able to take risks. This happens when teachers feel skilled, they are encouraged to talk about their work with peers, and thus have a solid basis for self-confidence and pride in what they do. Leadership for change requires attention to the

school's behavioral norms, problem-solving as a professional development technique and the initiation of a schoolwide base of knowledge developed as teachers learn to observe the practice of their peers.

Influencing Behavioral Norms

Schoolwide behavioral norms frequently inhibit the ability and willingness of staff members to initiate or even talk about change. In most schools, principals, department heads and/or respected teachers strongly influence the evolution of these norms. This group of cultural or symbolic leaders of a school can intentionally modify behavioral norms through the intricate and simple activities that make up their day-to-day work.

This work includes formal duties such as staffing decisions, responding to community needs and district requirements, goal-development, resource allocations, presentation or organization of inservice programs, scheduling and monitoring. These kinds of formal duties influence the school norms by describing the kind of work that is expected and rewarded. What decisions are made and who makes them tells staff members what to expect of working relationships within the school.

School rituals play a part in the initiation and evolution of schoolwide norms as well. These rituals include the way new teachers are introduced into the system, the workshops, internships and the granting of tenure. Awards and public recognitions tell school people what kinds of behavior are worthy of reward. Sometimes small ceremonies are associated with these rituals, and they too help to describe the school norms in the minds of staff.

Other rituals show what kinds of behaviors are unacceptable. These include reassignment, extra monitoring duties, or, as a more extreme example, the stripping of tenure. Whether or not the action is publicized, the school grapevine will make the punishment and its cause clear to the rest of the staff (Conway, 1986). Symbolic leaders can make sure that the formal expectations and school rites together send a consistent message to staff members about what is important and what is unacceptable.

Symbolic leaders also influence norms in the more informal aspects of work: hallway discussions, messages of encouragement or direction, quick exchanges of information and the small, instantaneous decisions that, taken as a whole, reflect the school's priorities. While the formal job expectations and rituals can be collaboratively deliberated in advance, these more informal influences require school leaders to assimilate bits and pieces of information and then quickly make decisions that help staff to remain on school goals and priorities.

One of the challenges of leadership is mastering the skill of thinking on one's feet. These informal contacts influence school norms just as much or more than the formal requirements and rituals. Modifying norms over time in this way is an exercise in communication. The aim is to use the opportunities inherent in routine activities to promote behavioral norms that encourage experimentation, risk-taking, continuous improvement and collaborative problem-solving by all staff.

Problem-solving for Professional Growth

In schools where behavioral norms deliberately emphasize renewal, teachers and administrators have discovered that their own professional growth is essential to a

successful learning environment for children. They have also learned that working together to identify and resolve school problems serves many professional development purposes.

Staff members in some very successful schools share ideas, disagree with one another, objectively critique each other's performance -- activities that are non-existent in other schools. Perhaps the biggest difference is that the staff in successful schools have been given, or have simply taken the time, to talk with each other professionally. Through such talk, they begin to build a shared language through which they can more confidently discuss intricate issues of practice, solve school problems and build a culture of renewal.

Developing a shared language requires that teachers have some opportunity to learn to trust one another. In one school, "It took a while to build trust and to raise the level of the dialogue. When we first started . . . we did not discuss the conditions that acted as barriers to learning at our school. Instead our issues focused on whether there should be rolled or single toilet paper in the bathrooms and whether we should allow children to use pencils with or without erasers" (Soo Hoo, 1987, p. 13).

In an exploration of staff development, Judith Little (1984) found that the organization of time contributes to the relative success of change programs. The more successful program was characterized by higher frequency of teacher involvement, "the sheer number of opportunities that teachers had to work together on ideas" and by extended duration of involvement (e.g., Wednesday morning for two years), which "provided for gradual and cumulative discovery" of how to apply ideas.

The first six months, according to teachers, were slow and clumsy on all sides. Teachers were uncertain of how to make sense of what they were hearing; staff developers and principals were learning from and with teachers which advice was sound and which was off the mark." (Little, 1984, p. 91)

An initial period of seemingly unproductive time for talking among teachers is necessary before any sense of team work and shared language and values can develop. Administrators and teachers may need to engage in creative scheduling to allow for structured idea sharing. For some, adding time to the end of the day will make sense if it allows teachers to discuss their students while the day's happenings are still clear; for others, the last hour of the day is not a productive time to engage in intellectual stimulation. In one successful school, interdependent groups of teachers take an 80-minute lunch hour once a week to discuss their work (Houston, 1987).

In addition to providing structured time for professional discussion, principals and school staff must work on developing a school culture that rewards collaboration rather than rewarding those who insist on going it alone. School leaders themselves must be willing to admit that there are areas in which they could use some help, that growth is an important aspect of work and that questioning, wondering and exploring are valuable characteristics in adults as well as children.

This kind of a culture is unusual in most schools. Teachers, like the rest of the population are "burdened by their extensive experience as students" (Bird and Little, 1986, p. 494).

The images left by that experience are familiar and not easily changed. Teachers worked

alone in classes of 20 to 30 students; students never saw them asking for help or collaborating with other teachers; rarely, if ever, did they admit ignorance of subjects or seem unsure of how to proceed.

To erase these pervasive images, some time must also be set aside for teachers and school leaders to talk about what the school means to them, what it means to be a member of the staff, what kinds of values are important and how the school fits into the larger world outside. This kind of reflection serves at least two purposes -- it helps to establish bonds of communication among staff members (and perhaps a separate shared language of sorts), and it serves as a base for a continuing dialogue leading to development of a shared vision of what school can become.

Peers in the Classroom

Little's work on teacher leadership (1987) reveals that the image of teachers being completely opposed to observation and/or evaluation of their practice is inaccurate. Nor do teachers ignore thoughtful feedback, as some administrators would believe.

In some schools, the entrance to the classroom is well-trafficked. In one junior high school, for example, teachers reported that their high expectations for observation were in fact being met by colleagues who observed them. Teachers tended to observe one another in the course of work they were doing jointly to refine the curriculum -- an endeavor that had already paid off handsomely in the form of increased test scores, daily classroom performance and a virtual elimination of discipline problems. (p. 15)

In schools where the classroom doors are open to colleagues, participants adhere to some "ground rules" that ensure the experience is productive for teacher and observer alike. For example, Little (1987) found that certain conditions "establish professional reciprocity between observer and observed." Teachers in these schools treat observations as a professional service to one another; observers provide the teachers with a written record of the observations, and take the time to "engage in a properly thorough and deferential discussion afterward, concentrating on the response elicited from students."

Because of the groundwork that has been laid in these schools, these teachers expect a great deal of their colleagues during observation. For example:

- o Observers will describe what they've seen, and invite the teacher's commentary.
- o Observers who find something to admire or praise will say so directly.
- o Observers who have suggestions to make will help teachers to act on them by providing demonstrations or by joint planning.
- o Teachers who observe will request feedback on their observation practices (reciprocity) (Little, 1987, p. 15).

The new information itself becomes an important tool in the continuing cycle through which successful school leaders and their staffs travel. Creating a consensus for change among staff, building a vision tied to values and beliefs and developing a plan are the first steps. Next comes acting on the vision using energizing behaviors -- communicating it through daily decision-making, giving it meaning for staff members by modeling, interpreting and translating it with respect to real situations, and establishing organizational structures that

make the most of both leadership and empowerment. In the next section, the fourth and final aspect of the cycle is considered -- reflection upon the vision and the actions taken to implement it.

Reflection

Reflection/sense-making is an essential concomitant of thoughtful action. An old truism says that those who think about where they're going have a better chance of getting there. Formal evaluation and assessment have their place, but it is critical that the involved actors take stock themselves, not leave it to others. Reflection/sense-making can occur anytime, anywhere; it can be formal, informal; formative or summative (see Anderson and Cox, 1988).

What can schools do to keep their vision dynamic, to make sure their plans mature and lead to positive outcomes, in spite of unexpected changes in the environment? A growing number of educators are embracing the concept of reflection to ensure both the vitality of their goals and their own continued professional growth.

Thinking about or reflecting on one's practice is a way of identifying the knowledge behind what is often called intuition. Good teachers and administrators don't just mysteriously know how to handle decisions and problems. They have learned techniques and approaches from past experience, and they have become adept at applying those lessons creatively. Reflecting on what they know and how they apply it expands the knowledge base and increases decision-making creativity.

Reflection is also becoming recognized as a valuable tool for professional growth. Through reflection, educators consider research and theory and then explore how they fill in the blanks between theory and practice, how they adapt theory to encompass the issues that research doesn't address. This means simultaneously reaching out to external sources for ideas and reaching inside to compare one's experience with the new ideas.

The most important, and most difficult, aspect of reflection, is sharing what one learns through the process. Bringing different points of view to bear on new ideas stimulates further reflection, it challenges individuals to substantiate assumptions and allows them to think about things a little differently. This broadened understanding allows the school's staff a new frame of reference within which to solve problems. Through reflection, the staff grows professionally as a group, members grow individually, and the staff begins to build a bank of knowledge about teaching and learning that will ensure their reflections are saved to inform future efforts.

Why then is reflection so important to successful schooling? And how do educators learn to reflect on their practice and their schools?

The Importance of Reflection

Schools are complicated organizations, and staff members every day must make important and difficult decisions quickly, usually without benefit of consultation. Making these decisions often means weighing paradoxical options -- only rarely does a technical or rational solution make the choice clear. One makes such a decision by synthesizing his or her prior experience with some, perhaps, unrelated bits of relevant information and then

making a determination about how it all pertains to the situation at hand. Because time is such a precious commodity in schools, these kinds of decisions can instead become automatic, and routine responses are developed.

Reflection forces the practitioner to think about the pieces as well as the whole, to consider whether the routine response is always appropriate. Of course, a crisis may require immediate decisions; stopping to weigh untried options is not always practical. Once the crisis is defused, however, staff can think about and talk about why the decision seemed to fit the situation, what past crises had in common with the current one and what other options might have worked.

Crucial to successful reflection is avoiding a judgmental stance toward whoever made the decision. Productive reflection requires that the decision is evaluated, not the decision maker. Staff are then able to question the assumptions that are brought to the decision, contemplate the intricacies of the mental sorting process and ponder the decision itself. Such contemplation should include these questions:

- o How might it have been different if other types of information were available?
- o To what extent do mental habits or ways of thinking about similar situations in the past shape the present decision?
- o What might have happened had some other decision been reached?

Reflection allows schools and decision-makers to learn from their past experiences and make adjustments for the future. It becomes the basis for "renewing" a school. Reflection provides a broadened understanding and a new frame of reference for school staff to solve problems. A larger meaning is constantly created within a school.

CHAPTER VI

CONCLUSIONS

The major purpose of this Change Framework project has been to argue that school improvement be considered a system-wide effort and that organizational dynamics be a component of the process.

To date, most strategies for school change have not taken into account a school's organizational dynamics -- in particular, its level of conflict and complexity. This is partly due to the history of the effective schools' movement. Classroom and school characteristics related to increased student achievement were emphasized, especially in urban settings. Little attention was paid to the context and organizational structure.

In implementing the effective schools' characteristics and other improvement plans, a piecemeal approach has frequently been used. Discrete programs organized in a linear fashion affect only one part of the educational process. Many of the best educational planning tools address fairly simple, straightforward changes. This has resulted in a series of ephemeral change efforts which have had limited impact on improving student learning.

What is now needed is large-scale, comprehensive organization or systemic change. As student diversity increases and students need to acquire higher literacies, the task of the school becomes more difficult. Schools must respond to new student needs created by an increasingly complex society and economy. The only way schools will be successful in meeting these demands is if the entire school organization responds to needed improvements.

This document has presented strategies for these improvements. The major contribution has been the inclusion of an organizational perspective when thinking about change. Schools can now identify complexity, conflict, comprehensibility and change in their environment and then use that information to select appropriate strategies for managing change. The Change Framework provides schools with a better capacity for planning and implementing long-term, systemic change -- by embracing the four Cs, not avoiding them. Educators can no longer ignore the "dead elephant in the living room."

This Change Framework is still under development. The authors intend to make refinements in the framework itself, as well as the supplemental "tools." As the instrument is used in more schools and school districts, consideration of the four variables -- conflict, complexity, comprehensibility and change -- will be expanded. Additional work will be done to understand how these four aspects of organizational dynamics work together or independently to affect strategies for school change.

This Change Framework also has the potential to speak to school districts as well as state education agencies. Later steps on this project will include a Change Framework for districts, and possibly states. School districts have their own unique organizational culture which could suggest unique improvement strategies. Some tailoring of these strategies could be made for individual schools within a district based on the results of the school profiles. School needs could be met within the larger context of a district-wide school improvement effort.

School improvement efforts have never been easy. It is hoped that this Change Framework will provide educators with a more comprehensive view of the school as an organization and a contingency approach that will match unique school conditions with alternative strategies that offer a good chance for success.

APPENDIX A
REVIEW OF EDUCATIONAL CHANGE

Models of Educational Change - 1955 to 1970s

Early models of planned change emphasized a linear approach to change; i.e., "Research-Development-Dissemination-Utilization (RDDU)." Five models of the RDDU process received notable attention in the 1960s and 1970s; the first three described by Havelock (1970) among others and the last two by Sashkin, et al. (1973), among others. Howard Davis and Susan Salasin (1975) have succinctly summarized these models as follows:

- (1) The research, development and diffusion model assumes that local teachers and school leaders will be a relatively passive target audience, accepting an education innovation or reform policy if it is delivered appropriately -- in the right way, at the right time. This model calls for a rational sequence of activities from research to development to packaging before dissemination takes place. It assumes large-scale, front-end planning, and requires a division of labor and a separation of roles and functions. Evaluation is particularly emphasized in this model.

- (2) The societal interaction model is more sensitive to the complex and intricate set of human relationships, substructures and processes that are involved in the dissemination phase, and which stresses the importance of face-to-face contacts. This model implies that a user holds a variety of positions in the communication network and people tend to adopt and maintain attitudes and behavior which they perceive as normative for their psychological reference group. The size of the adopting group is basically irrelevant. The model follows the basic steps of the first model.

(3) The problem-solving model starts with the user's needs as a beginning point for research, with diagnosis as an essential first step in the search for solutions. The change agent is largely non-directive, mainly guiding the potential user through internal resources. This model assumes self-initiated and directed change has the firmest motivation and hence the best prospect for maintenance.

(4) The planned-change model is considered useful only if it leads to action and is shared between the change agent and the client. The assumptive base of this model is that change occurs through a consciously controlled sequential and continuous process of data generation, planning and implementation. The changes made need to be stabilized and supported.

(5) The action-research model is similar to the problem-solving and planned-change models, but is distinctive in emphasizing the development of research within the organization. The type of research and its methodology are influenced by its concurrent conduct with the ongoing activity of the organization. The results of the research, while primarily intended for the organization itself, may prove useful to others and contribute to behavioral science itself. This model assumes the action research to be a sequential, circular process of research, action, evaluation and more research.

In 1973, the National Institute of Education's Task Force on Resources, Planning and Analysis described an underlying change model which called for the coordinated operation of four subsystems:

- (1) A monitoring system to discern patterns of need and success;
- (2) an external research and development system, which used regional laboratories and centers to translate research into materials useful for practitioners;
- (3) a linkage and support system, which subsequently gave rise to a large body of literature on "linkers" and "networking;"
- (4) an internal, problem-solving operating system -- located in the local school districts.

This model, which perpetuated the linear approach to school change, clearly encouraged widespread involvement in the educational improvement process. Rather than rely so heavily upon compliance by a relatively passive target audience, this model emphasized a problem-solving approach and called for well-supported, coordinated efforts.

As the literature on change grew, several writers sought to set down the types or categories of change models. Chin (1961) described two major categories of models: the systems model which concerned itself with defining and describing the interrelationships among "system," "boundary," "tension," "stress," "conflict," "equilibrium," "steady state" and "feedback;" and the development model which addressed such concepts as "direction," "identifiable state," "form of progression," "forces" and "potentiality." Bennis (1963) referred to three approaches to planned organization change: (1) the equilibrium model in which the mechanism for change is released through anxiety reduction; (2) the organic model in which the mechanism for change is power redistribution and conflict resolution; and (3) the development model whereby the mechanism for change is the transformation of values.

By the mid-70s the literature on school and organizational change had been focused primarily on generating and communicating accurate, appropriate information. Follow-through was relatively ignored. A National Science Foundation study in 1973 found that only one-fourth of one percent of the federal R & D dollar was earmarked for utilization -- the transfer activities that occur beyond dissemination. Eventually, researchers had to come to terms with the reality that effective action was not necessarily a direct consequence of accurate communication of sound solutions. There was more involved in school change than simple steps of stimulus-response-consequence. Thus began a movement away from the tendency to define organizations simply in terms of abstract systems. Brown wrote (1973), "Organizations must be seen not as an abstract wall chart, but as a living reality, a structure of people" A central characteristic of emerging change models was their increasing focus on the humans in organizations and social systems. It was people who accepted and incorporated (or resisted) organizational change (Crandall, et al. 1982). The diverse backgrounds of change agents led them to espouse different frameworks of the human response to change. Some examples are:

- o a commonly used approach to organizational change that was developed by the Tavistock group based, essentially, on a psychoanalytic model.
- o a number of organizational change frameworks in the formal field of organizational development based on Gestalt psychology.
- o other change models that grew out of the national fascination with personal growth and human potential that swept such enterprises as EST into popularity.

Although different in their favored techniques, each approach had in common with the others the human touch. In the early 70s Davis and Salasin described six broad "influencers" which professional evaluators of education should consider when studying the human dimension of change. These are:

1. Motivation The sensed obligation or need to "do something" was an important feature of successful change. By now, the change literature recognized that the human motivation for change is not always triggered by an adverse situation. Lippitt (1971) wrote that problem-focused change was not as effective as growth-oriented change. Creativity, renewal and personal growth were seen as accounting for as much change as problem identification.

2. Analysis Ideas for achieving a solution needed to be readily available. It was discovered that something happens when a pool of alternative ideas for change are presented. As potential participants carefully consider each proposal -- Can it be implemented here? What are the negative consequences? Primary payoffs? Is it timely? -- their very act of analysis often nudged them to take action!

3. Values The beliefs and value systems of potential participants in change needed to be reflected in the content and technology of the change. Not all innovations needed to look alike; in fact, a measure of successful school change was termed the "mutual adaptation" between innovative projects and the adopting system so that the local values and norms would be accommodated.

4. Ability The capacity to bring about change -- funding, available human resources, ability of participants, absence of competing demands -- are considerations that had been seriously overlooked in the change literature until studies like Glass and Ross (1971) focused on their importance.

5. Circumstances and Timing A potential change site always contains prevailing factors that urge toward or detract from the proposed change. Effective change consultants often advise the speed up or delay of an innovation to match with "facilitative" factors such as the induction of a new leader, the start of a budget cycle, new legislation, mounting dissatisfaction with conditions, even seasonal variations in a region.

6. Resistance The backlash against a change is seldom visible on the surface in the beginning stages. A thorough diagnosis of a potential change site, however, often reveals that resistance receives the most extreme rating in the negative direction. The CBAM studies legitimized resistance as the natural "first stage" of successful innovations in education. Allowed to grow unaddressed, however, the resistance will lead most change efforts back to former patterns and the status quo.

7. Yield People engage in change -- as in other activities -- with a purpose or reward in mind. Both direct and indirect benefits to program participants and their clients increase the likelihood of a change's successful utilization.

Systemic Continued School Reform Requires Change On Multiple Levels

By the end of the 1970s the attraction toward the human dimension of change had waned; in fact, several studies which focused on American students' falling test scores blamed the decline on too much attention being given to the human dimension, leading to a "soft" instructional approach.

"Effectiveness" became the rallying cry; organizational effectiveness not only grew into a fashionable topic in the popular press, it became the key rationale for engaging in school change. Two aspects were inherent in the concept of school effectiveness: a) the capacity

of schools to increase the productivity of their students and teachers; and b) the capacity of schools to equip students for becoming adults in the information age.

The first effective schools' researchers identified urban elementary schools where students' academic achievements were higher than similarly situated students. Characteristics common to these schools (but not found in lower-achieving schools) were then isolated and described. School effectiveness studies soon broadened to include a wider range of schools.

The lists of "effective schools" characteristics varied somewhat, but a core of agreed-upon conditions for effective schools soon emerged.

CHARACTERISTICS OF EFFECTIVE SCHOOLS

The following characteristics and practices are synthesized from studies of schools where student achievement is higher than in similarly-situated schools. These were adapted from Onward to Excellence: Making Schools More Effective, compiled by the Northwest Regional Educational Laboratory, April 1984.

Classroom Characteristics and Practices

- o Instruction is guided by a preplanned curriculum.
- o There are high expectations for student learning.
- o Students are carefully oriented to lessons.
- o Instruction is clear and focused.
- o Learning progress is monitored closely.
- o When students don't understand, they are retaught.
- o Class time is used for learning.

- o There are smooth, efficient classroom routines.
- o Instructional groups formed in the classroom fit instructional needs.
- o Standards for classroom behavior are explicit.
- o Personal interactions between teachers and students are positive.
- o Incentives and rewards for students are used to promote excellence.

School Characteristics and Practices

- o Everyone emphasizes the importance of learning.
- o Strong leadership guides the instructional program.
- o The curriculum is based on clear goals and objectives.
- o Students are grouped to promote effective instruction.
- o School time is used for learning.
- o Learning progress is monitored closely.
- o Discipline is firm and consistent.
- o There are high expectations for quality instruction.
- o Incentives and rewards are used to build strong motivation.
- o Parents are invited to become involved.
- o Teachers and administrators continually strive to improve instructional effectiveness.
- o There are pleasant conditions for learning.

District Characteristics and Practices

- o High expectations pervade the organization.
- o There are policies and procedures that support excellence in student performance.
- o Student learning is checked regularly.
- o Improvement efforts are monitored and supported.
- o Excellence is recognized and rewarded.
- o Curriculum planning ensures continuity.

A final research thrust of the late 1970s and into the early 1980s evaluated federal and state-funded school improvement efforts. These evaluations isolated schools that had shown successful implementation of improvement projects, and sought to identify programmatic and organizational conditions that aided the effort.

Some findings dovetailed nicely with the school effectiveness studies. They also showed that large-scope system change, such as that needed to really renew schools, is difficult to achieve.

- o Schools are the necessary center of educational reform.
- o Both teachers and schools are critical to success; without classroom and school changes, student performance cannot be improved (Rosenblum, et al., 1982; Crandall, et al., 1982).
- o Teacher commitment is critical to implementation success of a school improvement program (Berman and McLaughlin, 1975; Crandall et al., 1982; Stallings, 1981; Purkey, 1983).
- o A critical mass of teachers is important if school improvement is successfully implemented (Berman and McLaughlin, 1975; Bentzen, 1974; Crandall, et al., 1982).
- o Typical school decision structures must be modified, since successful implementation of school improvement requires the active involvement of teachers, especially in planning (Berman and McLaughlin, 1975; Rosenblum, et al., 1981) and in using new practices frequently (Crandall, et al., 1982); Joyce and Showers, (1980).
- o School and district leaders have a critical influence upon the success of the change effort (Berman and McLaughlin, 1975; Rosenblum, et al., 1981; Bentzen, 1974; Crandall, et al., 1982).
- o Leaders involve staff and others in planning implementation strategies. They set and enforce expectations for participation, commitments are made and followed through

with determination and consistency; leaders rally support from the different constituencies in the school community, (BlumLerg, 1980; Bassert, 1982; Brookover, 1979b; Duke, 1982; Hall, 1982; Little, 1981; Purkey and Smith, 1983; Stallings, 1981).

Local orientation toward change is also affected by how well the system is able to understand its problems, and by its past experience with change efforts. When problems are comprehensible to system leaders and personnel, it is easier to identify where change is needed and what kind of changes are most appropriate. Even when clarity about problems exists, a history of ineffective change efforts or innovation overload in a system can subvert willingness to engage in change.

In sum, conditions associated with ease of change implementation include:

- o stability of staff and leadership;
- o good interpersonal relations, including good labor/management relations;
- o small school size and low complexity;
- o lack of organizational and environmental turmoil; and
- o absence of innovation overload. (Armstrong et al., 1987 and Crandall, et al., 1982)

Components of Effective Change Efforts

For a change effort to succeed, local motivation and resources (particularly time, energy and commitment) must be engaged. (Crandall, et al., 1982). This is more likely if:

- o the focus of the change effort is perceived to be a core educational issue (e.g., increased instructional effectiveness or student achievement, better curriculum);
- o local educators feel a need to change exists, because of community or systemwide pressure. State policies for increased local accountability, and concerted emphasis on improvement by district and school leadership creates systemwide pressure to change;

- o the innovation chosen to facilitate change is of high quality, is supported by the system (financial and symbolic commitment), and is a good fit with local needs. (Armstrong, et al., 1987).

The likelihood of lasting changes in schooling practices is increased if the innovation program:

- o is designed to involve teachers in the specifics of the implementation process;
- o encourages collegiality among school staffs;
- o provides good up-front training and ongoing technical assistance,
- o allows the participants an opportunity to experience early rewards and successes;
- o builds local capacity to identify and solve problems;
- o provides discretionary resources at the school level (Crandall, et al., 1982).

Where Are We Now: Barriers to Change

Prevailing opinion holds that ill-defined, complex problems, such as those which permeate education, are best solved by comprehensive, systemic change (Argyris, 1985; Bennis, 1985; Golembiewski, 1972). In support of this generalization, yet going against many of our intuitions, a recent synthesis of research on successful school reform finds that the extent of change required by an individual user to implement it is more important than the attributes of a promising practice (Crandall, et al., 1982). When the improvement effort is large in scope (e.g., the practice is a significant change for the users), there is more possibility for lasting changes to occur (Berman and McLaughlin, 1975; Fullan and Promfret, 1977; Crandall, et al., 1982).

If educators have learned anything about school change in the past two or three decades, however, it's that large-scope systemic change is very difficult to achieve (Goodlad, 1984; Fullan and Pomfret, 1977; Berman and McLaughlin, 1977). "Planned change is hard!" notes Fairweather and the team of evaluators of national educational innovations (1974). "There are no quick tricks in planned change. The reward of seeing desired consequences comes only after sustained effort, practice and belief in what one is about have been liberally injected into the process." (Davis and Salasin, 1972). Among the barriers recognized today are the norms and values present in schools, the size and complexity of school systems, and increasing specialization of school personnel.

Values and belief systems may present the first snag. Contrary to some opinion, those who resist the changes may not be careless or undermotivated; in fact, often they are motivated by deep commitment. The willingness of teachers to agree to change their day-to-day classroom practice is not easily accomplished because "what teachers are already doing represents their best professional and personal judgment." (Mann, 1977).

A series of studies which looked at the depth and eventual success of many types of innovative educational programs found that in the beginning stages when schools started implementing instructional change, most teachers hadn't wanted to learn about the innovation; they believed in what they are already doing (Hall and Loucks, 1977). This evidence moves Mann (1977) to write, "We have failed to stimulate as much improvement in schools as we had hoped because we have failed to take account of the norms and values implied in the changes that we want people to make." (Mann, 1977).

Yet, even when they are aware of the research findings, most teachers and school leaders do not understand the dynamics of school change, and how it relates to the success or failure of their school improvement program.

Although the reform efforts are often felt at the local level as heavily imposed or overburdening, few policy makers understand how some of the fundamental components of the reform strategy -- the emphasis on top-down change and highly directive instructional environments -- are at odds with the organizational processes schools will need in order to revitalize themselves. The culprit is an ever-present, and necessary, feature of school organizations -- hierarchy. Sustained school reform is only successful when the educators at the building and classroom level become actively involved. Yet, virtually all school reform initiatives now originate among state policy makers. It's a long reach from statehouse to students.

Another major barrier that impedes this reach is the inertia of massive, complex school systems. American schools have grown much larger -- and significantly less effective -- than their European or Asian counterparts. It hasn't always been the case. Eagleton, (1984) notes that in 1930 there existed approximately 128,000 school districts in America which contained over 238,000 elementary schools and 24,000 high schools. The typical child attended a locally governed school organization containing 230 students. By 1980 there existed 16,000 school districts in the United States. The number of high schools remained constant, while their school populations almost doubled and while the retention rate increased from 30% to 50%. Massive units of organization have resulted in these shifts.

These large, complex bureaucracies created several specific characteristics that tend to nullify reform efforts. First, large organizational units attracted a new type of board member. In 1930, the typical school board member was a run-of-the-mill independent citizen who represented, for the most part, the prevailing common sense of his or her surrounding community. By 1980, school board members tended to seek election from specific community subgroups and they came to the board expecting to adhere to the demands of their constituents. The change brought significant gains for special interest and minority groups -- but a sense of community and policy consensus became difficult to achieve. Conflict was an ever-present component in school leadership and change.

Massive educational organizations also required a new type of educator. A highly complex organization -- by its very nature -- discourages riskiness, innovation and personal ingenuity. Instead, employees usually find it more comfortable to isolate themselves from the welter of conflicting messages, participating only superficially in the latest innovation because it, too, shall likely go the way of myriad other attempts at reform. It is a vicious circle: constant attempts at reform breed a cynical refusal to take the attempt seriously. The resulting stagnation ultimately provokes another attempt at reform, and so on.

Finally, large, complex organizations encourage ever-increasing specialization. Earlier in our history, it was common to find one teacher to four or five grade levels of students. Now, teachers direct learning of students within one grade level, or one or two disciplines with the attendance of special education aides, reading specialists, counselors, etc.

Concomitantly, complex administrative bureaucracies have been established to manage teachers and their supportive specialists. Any attempt at organizational change which threatens to alter or remove their "turf," is often met with adroit tactics that seek to preserve their organizational "survival" by resisting the reform efforts.

APPENDIX B

INSTRUMENTS FOR SCHOOL RENEWAL

I. Reviews of Instruments

Title: Report on Instruments for Measuring School Effectiveness
Authors: Barbara S. Guzzetti, Ph.D.
Source: Mid-continent Regional Educational Laboratory
12500 E. Iliff Avenue, Suite 201
Aurora, Colorado 80014
Date: 1983

Title: Assessing School and Classroom Climate: A Consumer's Guide
Authors: Judith A. Arter
Source: Northwest Regional Educational Laboratory
101 S. W. Main Street, Suite 500
Portland, Oregon 97204
Date: November, 1986

Title: School Climate Assessment Instruments: A Review
Authors: Denise C. Gottfredson, Lois Hybl, Renee Casteneda
Source: Center for Social Organization of Schools
The Johns Hopkins University
3505 North Charles Street
Baltimore, Maryland 21218
Date: 1986

Title: Assessing Learning Motivation: A Consumer's Guide
Authors: Richard W. Naccarato
Source: Northwest Regional Educational Laboratory
101 S. W. Main Street, Suite 500
Portland, Oregon 97202
Date: 1987

Title: Assessing Leadership and Managerial Behavior: A Consumer's Guide
Authors: Judith A. Arter, Jennifer R. Salman
Source: Northwest Regional Educational Laboratory
101 S. W. Main Street, Suite 500
Portland, Oregon 97204
Date: 1987

II. Self-Assessment Instruments

Title: School Effectiveness Survey: Teacher Questionnaire
Authors: Santa Clara County Office of Education
Source: Educational Development Center
Santa Clara County Office of Education
Mail Code 237, 100 Skyport Drive
San Jose, California 95115
Date: 1983

Title: Mini-Audit No. 1: Activities and Projects for Climate Improvement Program
Determinants; Mini-Audit No. 2: Process and Material Determinants
Authors: Eugen Howard
Source: Association for Supervision and Curriculum Development
225 N. Washington Street
Alexandria, Virginia 22314
Date: 1980

Title: Middle Grades Assessment Program
Authors: Gayle Dorman
Source: Center for Early Adolescence
University of North Carolina at Chapel Hill
Suite 223, Carr Mill Mall
Carrboro, North Carolina 27510
Date: 1984

Title: Building-Level Effectiveness Survey
Authors: Robert E. Blum
Source: Northwest Regional Educational Laboratory
Goal-Based Education Program
101 S. W. Main Street, Suite 500
Portland, Oregon 97204
Date: 1982

Title: Classroom-Level Effectiveness Survey
Authors: Robert E. Blum
Source: Northwest Regional Educational Laboratory
Goal-Based Education Program
101 S. W. Main Street, Suite 500
Portland, Oregon 97204
Date: 1982

Title: The Fracture Profile: An All Purpose Tool for Program Communication, Staff Development, Evaluation and Implementation
Authors: Susan Loucks and David Crandall
Source: The Network
290 S. Main Street
Andover, Massachusetts 01810
Date: 1982

Title: Elementary Program Review Handbook
Secondary Program Review Handbook
Authors: Contact: Walter Denham and/or Dr. Doornek
California State Department of Education
Source: California State Department of Education
721 Capitol Mall
Sacramento, California 95814
Date: No date given.

Title: School Improvement Questionnaire (SIQ)
Authors: Bob Ewy, Larry Hutchins, Susan Everson, Ann Riley
Source: Mid-continent Regional Educational Laboratory
12500 E. Iliff Avenue, Suite 201
Aurora, Colorado 80014
Date: No date given.

Title: Effective Schools Program: A Process for School Improvement
Organizational Health Description Questionnaire
Authors: San Diego County Office of Education
Source: San Diego County Office of Education
6401 Linda Vista Rd.
San Diego, CA 92111
Date: 1986

Title: School Effectiveness Program
Authors: Marsha Weil
Source: Santa Clara County Office of Education
School Effectiveness Program
100 Skyport Drive
San Jose, CA 95115
Date: 1984

Title: The Living Systems Questionnaire (School Effectiveness Analysis)
Authors: Steve Mills
Source: Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, CA 94103
Date: 1988

Title: The Effective School Battery
Authors: Gary Gottfredson
Source: Psychological Assessment Resources, Inc.
P.O. Box 98
Odessa, FL 33556
Date: 1984

III. Building School Improvement Teams

Title: School Improvement Profile
Authors: Anne Newton
Source: Regional Laboratory for Educational Improvement
of the Northeast and Islands
290 S. Main St.
Andover, MA 01810
Date: 1987

Title: Illinois Quality Schools Index
Authors: Larry Werner
Source: Illinois State Board of Education
100 N. First St.
Springfield, IL 62777
Date: No date given.

Title: "What's a Plan Without a Process?" A Training Handbook
for Staff Work Groups
Authors: Rima Miller
Source: Research for Better Schools
444 North Third St.
Philadelphia, PA 19123
Date: 1984

IV. Parent Involvement

Title: Project Access
Authors: Citizens Education Center Northwest
Source: Citizens Education Center Northwest
105 S. Main St., Suite 327
Seattle, WA 98104
Date: 1982

Title: Polling Attitudes of Community on Education (PACE)
Authors: Phi Delta Kappa
Source: Phi Delta Kappa
Eighth and Union
P.O. Box 789
Bloomington, IN 47402-0789
Date: No date given.

V. Concerns About Change

Title: Measuring Stages of Concern About the Innovation
Authors: Gene Hall, Archie George, William Rutherford
Source: Concerns-Based Adoption Model Project (CBAM)
Southwest Educational Development Laboratory
211 E. Seventh St.
Austin, TX 78701
Date: 1986

Title: Readiness for Change (A VICTORY Technique)
Authors: Kiresuk
Source: Handbook of Evaluation Research, Volume I
Elmer Struening and Marcia Guttentag, Editors
Sage Publications, Inc.
Date: 1975

VI. Leadership Styles

Title: Assessing Leadership and Managerial Behavior: A Consumers Guide
Authors: Judith Arter and Jennifer Salmon
Source: Northwest Regional Educational Laboratory
101 S.W. Main St. Suite 500
Portland, OR 97204
Date: 1987

Title: Administrator Perceiver Interview
Authors: Selection Research, Inc.
Source: Selection Research, Inc.
P.O. Box 5700
Lincoln, NB 68505
Date: 1979

Title: Leadership Skills Inventory
Authors: Francis Karnes and Jane Chauvin
Source: D.O.K. Publishers
P.O. Box 605
East Aurora, N.Y. 14052
Date: 1985

Title: Leadership Behavior Analysis II
Authors: Kenneth Blanchard, Ronald Hambleton, Drea Zigarmi, Douglas Forsyth
Source: Blanchard Training and Development
125 State Place
Escondido, CA 92025
Date: 1985

VII. Conflict Resolution

Title: Thomas Kilman Conflict Mode Instrument
Authors: Kenneth Thomas and Ralph Kilman
Source: XICOM Incorporated

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