THE ROLE OF PLANNING IN THE SCHOOL IMPROVEMENT PROCESS

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ABSTRACT

Henri Fayol is generally regarded as a foundational author on classical management theory. He enumerated five basic functions of management: planning, organizing, commanding, coordinating, and controlling. Consistent with Fayol's model, over the past half-century, planning has generally been recognized by administrative theorists as one of the major functions expected of administrators, including school administrators. This article examines various approaches to educational planning, including the rational, incremental, mixed-scanning, and developmental models, and discusses how they can be used to guide large-scale school improvement processes.

INTRODUCTION

Henri Fayol, a French mining engineer whose 1916 book, *General and Industrial Management*, is generally regarded as the foundational work on classical management theory. In this work he enumerated five basic functions of management: planning, organizing, commanding, coordinating, and controlling. Although these functions have been challenged as being too structured to portray the true, chaotic nature of the administrator's role (Mintzberg, 1973), they do offer a useful framework for understanding the responsibilities of management (Barnett, 2006). Consistent with Fayol's model, over the past half-century, *planning* has generally been recognized by administrative theorists as one of the major functions expected of administrators, including school administrators (American Association of School Administrators, 1955; Carroll & Gillen, 1987; Drucker, 1974; Gardner, 1990; Gregg, 1957; Gulick & Urwick, 1937; Johnson, Kast, & Rosenzweig, 1967; Knezevich, 1984; Newman, 1950; Newman & Sumner, 1961; Quinn, 1980a; Sears, 1950; Urwick, 1952).

Fayol defined planning, *prevoyance*, as the forecasting of future trends, the setting of objectives, the determination of means to attain those objectives, and the coordination and harmonization of the organization's efforts to achieve those objectives. He called for the development of timelines, action plans, and budgets or resource requests necessary for the execution of the plan. He advocated flexibility in planning that would allow management time to react to changes in circumstances. Fayol recognized that planning, as with the other functions of management, was "neither an exclusive privilege nor a particular responsibility of the head or senior members of an organization; it is an activity spread across all members of the 'corps social'" (p. 13). He advocated, however, the creation of a long-range planning group charged with setting directions for the next ten years and providing lower-level planning units with a broad set of assumptions, guiding principles, and long-range targets to be met through shorter-term, more focused plans (p. 22). Although written almost a century ago, many of Fayol's ideas on planning provide foundations for *best practice* in educational planning today (Lindahl, 1998).

WHAT IS THE STATUS OF EDUCATIONAL PLANNING TODAY?

Planning is clearly an essential management function in all schools, regardless of geographic location or grade levels served. Although principals may no longer be formally prepared with knowledge of planning models and practices (Beach & Lindahl, 2000), they utilize a variety of such models intuitively (Beach & McInerney, 1986; Cooper, 1990), with varying degrees of success. The reduction of principal preparation programs' attention to planning as a management function (Beach & Lindahl, 2004b) may well be attributed to the failures of past planning practices and the distaste left by the amount of time and resources that had been committed to those practices. During the 1960s and 1970s, educational planning was a highly formal, exhaustive, comprehensive process conducted by top level administrators and technicians. These processes typically produced voluminous plans, most of which were never implemented and did little more than collect dust on the school's, district's, and state department of education's collective shelves. In the subsequent two decades, one specific model of planning, *strategic planning*, dominated schools' planning agendas and practices; in many cases it was mandated by the state or by the school's accrediting agency (Beach & Lindahl, 2005a). It, too, was highly demanding

of time and resources, often without identifiable results. Consequently, it is not surprising that the word *planning* has taken on negative connotations in many school settings.

This failure in plan flexibility, excessive comprehensiveness, and the misunderstanding of the planning process itself has caused an apparent contradiction: planning is an essential managerial function in all schools, yet it is held in low regard. Why is this? Simply, planning is a highly complex managerial function that must be tailored to the specific circumstances of each school and must be properly integrated with the other management functions. To help orient the proper use of planning in schools, this article examines the circumstances under which it is appropriate to engage in planning, the various models of planning that should be considered, and how planning should be integrated into the overall school improvement process.

The perspective that was often held by planners tended to be one that viewed planning as the totality of the process of organizational improvement: if you plan it, it will be! The recognition that planning is only one aspect of a complex, highly interwoven set of processes was generally lacking. Developing a wonderful plan is one thing; implementing that plan—creating change, and seeing that that change is institutionalized and stable across the organization, and through time, is something else again. Concerns for implementation and institutionalization must be recognized in the planning process. As Figure 1 illustrates, planning is just the front end of the process of organizational improvement.

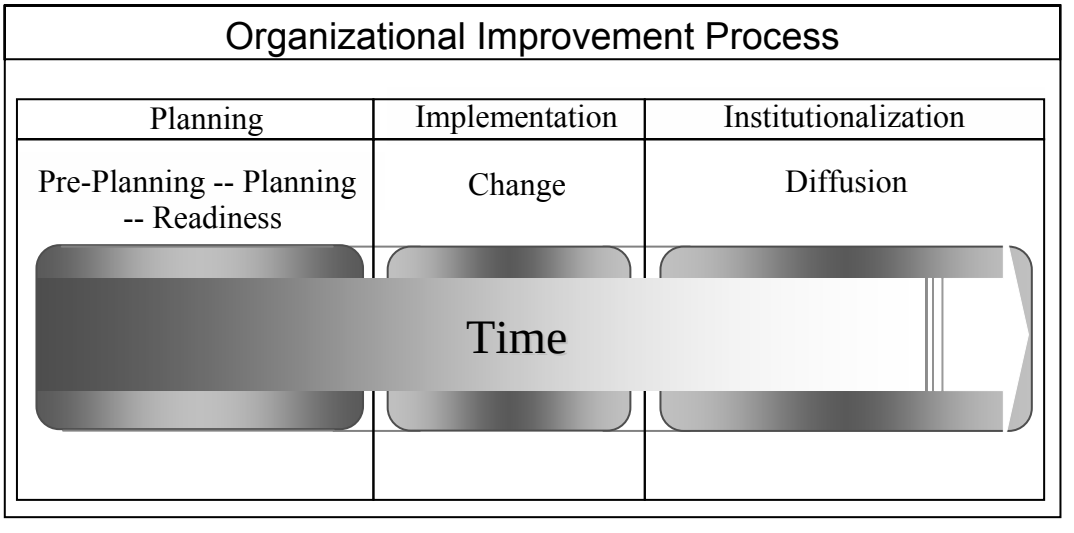

Figure 1. The organizational improvement process.

WHEN IS PLANNING NECESSARY?

Change and, hopefully, improvement are constants in schools; however, planning is not necessary for all changes or improvements to occur. For many of the more routine changes, schools already have a repertoire of strategies and processes established (Beach & Lindahl, 2004b). For example, few would argue that the classroom teacher is the single most crucial element in the educational process; consequently, the hiring of each new teacher represents an essential change in a school. Because this is a change that occurs with relative frequency, however, schools do not need to plan for it; they already have established policies and procedures in place to guide the process. Similarly, the selection of textbooks can represent a significant change for both curriculum and instruction for a grade level or subject area within a school. However, as with teacher selection, planning is not required because schools face this change with sufficient regularity to have established a repertoire of policies and procedures that are generally effective in guiding the changes.

Other changes in schools are handled through administrative decisions, either by the principal or a designated individual or team. When a hurricane rips the roof off two of the school's classrooms, a change is required; however, the urgency and relatively small scale of the situation calls for an administrative decision rather than a formal planning process.

On the other hand, external mandates from the district, state, or federal governments may require large-scale changes in the school curriculum and/or instruction. Certainly, some of the accountability measures of the *No Child Left Behind Act of 2001* and the move to further inclusion of special needs children into regular education classrooms promoted by the *Individuals with Disabilities Education Act of 1990* and its subsequent revisions required extensive changes in schools. Changing societal expectations, e.g., the integration of technology throughout the curriculum, required large-scale curricular, instructional, facilities, and resource changes. Other large-scale changes arise from the discernment of *best practice*; for example, many high schools have moved to block scheduling as a means of promoting student achievement, a change with significant effects on the school's curriculum, instruction, staff development, scheduling, policies, etc. Other schools have attempted to implement more prescribed reform programs, such as *Accelerated Schools* (Hopfenberg & Levin, 1993; Levin, 1987) or *Paideia Schools* (Adler, 1982, 1984). In yet other cases, internal scanning by a school may reveal significant changes in the demographics of the school's student body or the disaggregation of standardized test scores may reveal unacceptable variations in performance among groups of students. These, too, may imply the need for large-scale school improvement A depiction of several major alternatives available for implementing school change, and subsequently school improvement is, illustrated in Figure 2. In all these circumstances, some form of planning becomes necessary. Understanding the alternative planning models is essential if the school is to be effective and efficient in guiding change.

MODELS OF PLANNING

The broadest categorization of educational planning models separates them into three modalities: *rational, incremental,* and *developmental.* This by no means implies that *incremental* or *developmental* models are irrational. Rather, *rational* models are those that begin with the articulation of goals and the selection of a possible solution from the set of possible solutions that will lead to achieving the goal (Beneveniste, 1991; Brieve, Johnston, & Young, 1958; Kaufman, 1972; Simon 1955, 1957, 1982, 1997), whereas *incremental* models do not substantially challenge or expand existing goals and do not call for evaluation of and selection from extended lists of alternative means.

Developmental models are oriented to the overall improvement of the organization within its shared culture and focus on goals only later in the planning process (see Clark, 1981; Clark, Lotto, & Astuto, 1989; McCaskey, 1974). Developmental models focus more on identifying and institutionalizing commonly shared values, beliefs, and visions and then on encouraging and supporting individuals to pursue these in ways that capitalize on their own personal and professional abilities and strengths. Although there must be a clear, shared directional thrust, specific goals and prescribed actions yield in importance to developing and strengthening a healthy organizational culture. Obviously, with such different foci, these three basic categories of planning models offer distinctive strengths and weaknesses and are appropriate in significantly different organizations and circumstances. Even within the category of *rational* planning models, sufficient differences exist to warrant careful consideration as to the appropriateness for specific situations. The sections that follow explain each model briefly and give examples as to when it might be the appropriate or inappropriate choice for a school or district.

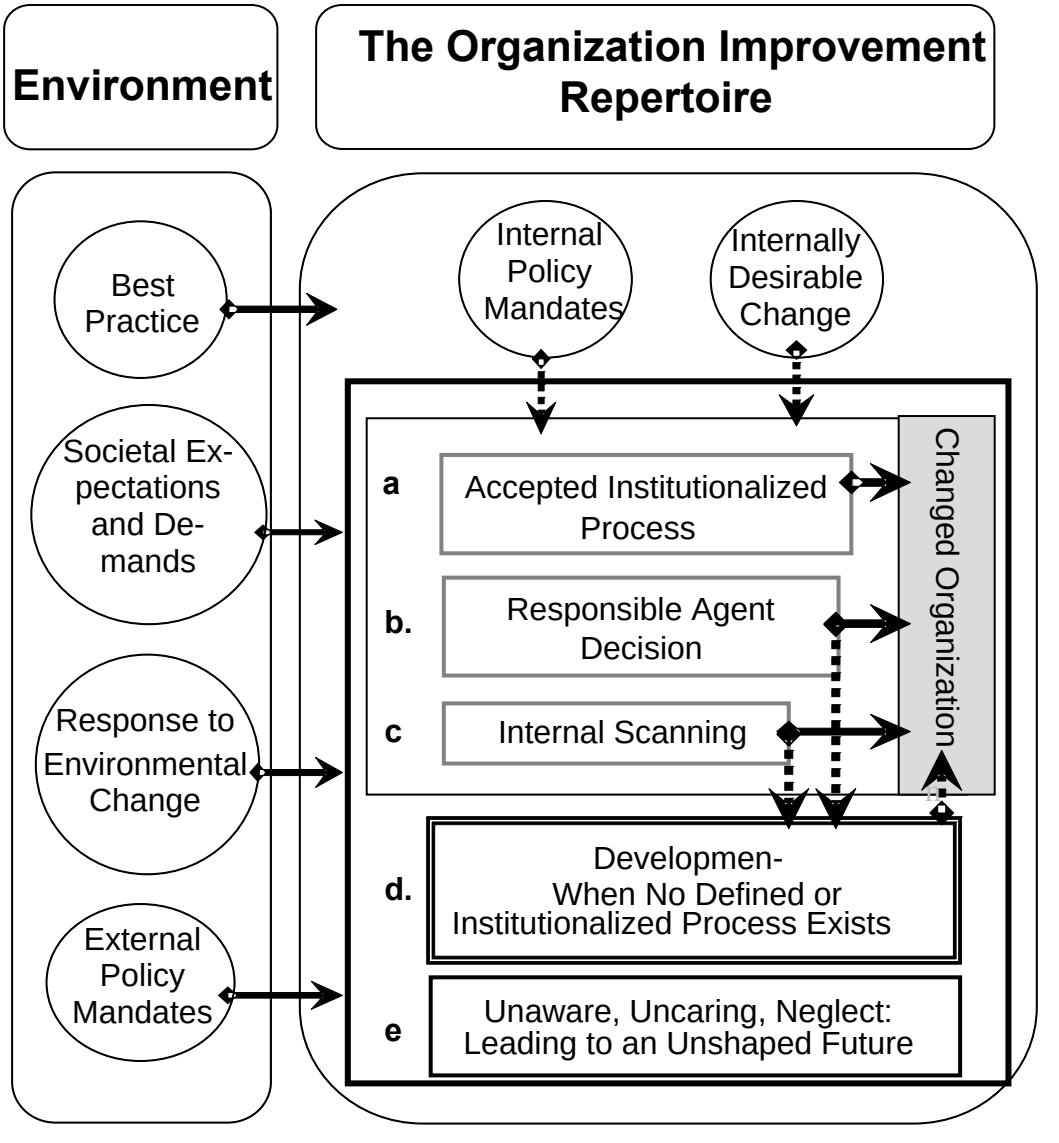

Figure 2. Organizational improvement repertoire.

Rational Planning Models

Rational models begin with one or more goals. These are just the desired outcomes of the change process. Goals are the purpose of the change. When the goals have been articulated, the process shifts toward a search for processes or set of activities that will achieve the goals. These are the set of alternatives from which one process will be selected. A classic rational planning process is illustrated in Figure 3.

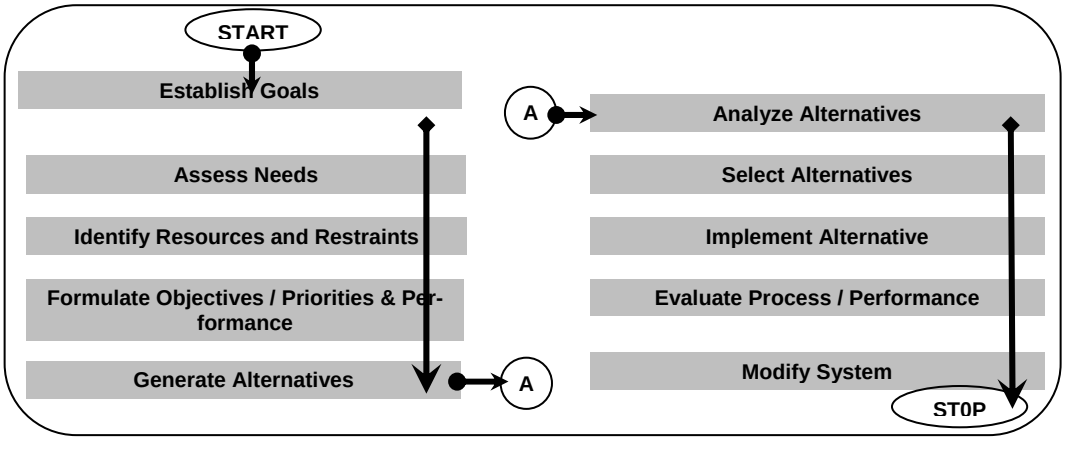

Figure 3. A typical rational planning process.

A range of models comprise the *rational* category. Although all call for the rational selection of goals and actions from among competing alternatives, they are differentiated primarily by the degree of comprehensiveness employed in identifying those alternatives and in making a rational selection from among those alternatives. Rationalism, as used here, relates to the search for alternatives that yield potentially positive outcomes; this is a process of generating rational consequences. As is illustrated in Figure 4, the more comprehensive an approach the model takes to identifying potential alternative goals and actions, the more resources, particularly time, data, and expertise, are needed for the planning process.

It is easiest to explain the three basic rational models (*comprehensive rational*, *mixed scanning*, and *bounded or limited rational*) by beginning with the most complex (comprehensive rational) model of the continuum. Because the comprehensive rational model represents the conceptual epitome of this category, it is useful to introduce it first.

The Comprehensive Rational Model. As discussed, the basic steps of this model are to: (a) identify appropriate goals for the organization, (b) identify appropriate alternative actions to attain these goals, and (c) make an appropriate, value-maximizing selection from among these alternatives in choosing a plan of action for the organization (Allison, 1969; Banfield, 1959). All three of these steps are couched in the concept of rationalism, which subsumes such factors as feasibility, effectiveness, and efficiency (see Benveniste, 1991; Brieve, Johnston, & Young, 1958; Campbell, Cunningham, Nystrand, & Usdan, 1980; Jacobson, Logsdon, & Wiegman, 1973; Kaufman, 1972; Kimbrough & Nunnery, 1976; Knezevich, 1984; Morphet, Johns, & Reller, 1974; Orlosky, McCleary, Shapiro, & Webb, 1984; Sergiovanni, Burlingame, Coombs, & Thurston, 1980; Simon 1955, 1957, 1982, 1997; Tanner & Williams, 1981).

At initial glance, this may appear to be a rather simple, straightforward process. In reality, the complexities of each school's changing environment, internal strengths and weaknesses, readiness for change, culture, needs, and stakeholders make this a vastly intricate process. It is further complicated by a need for broad participation; such participation allows for a wider range of perspectives and information to be brought to the analysis and promotes higher levels of commitment to decisions and outcomes.

Issues of both logistics and dynamics, however, quickly surface and expand geometrically as larger and larger groups of stakeholders are invited to participate.

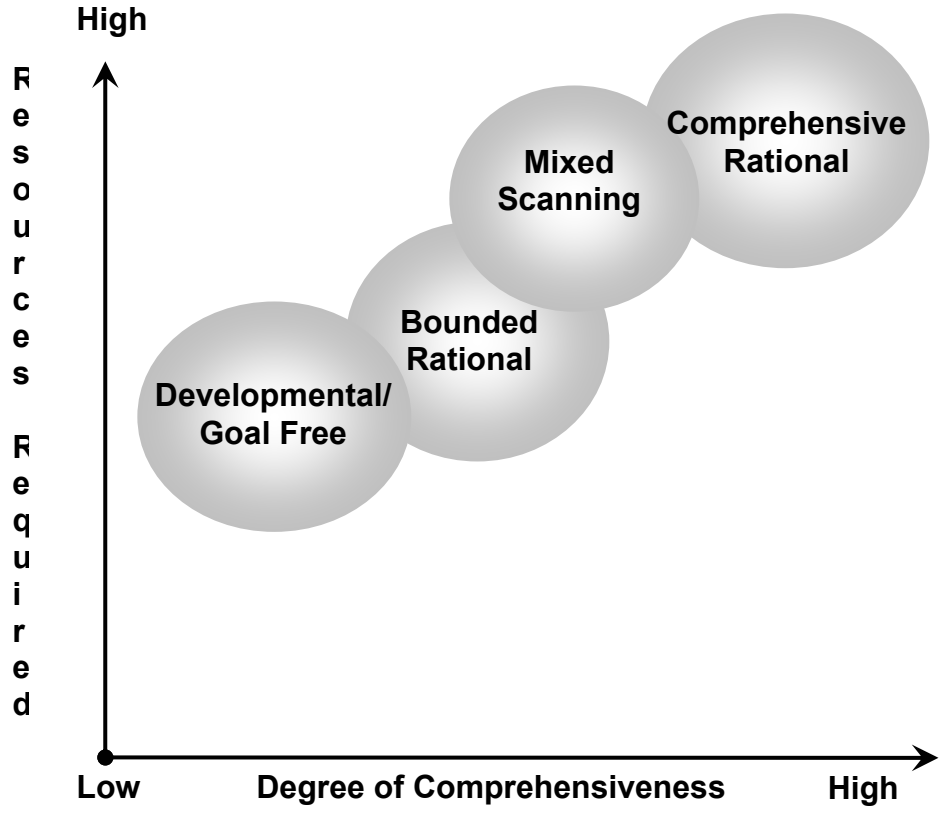

Figure 4. Rational planning models, by degree of comprehensiveness and amount of resources needed for the planning process.

The term *comprehensive* is applied to this planning model because of its underlying principle that it is essential to fully understand the environment and the organization and to consider and select from a maximum range of goals, strategies, and actions. To this end, the typical opening gambit of each phase of the model is some variant of *brainstorming*, a technique whose primary rules are that all ideas are equally valuable for consideration and that no attempt at censoring or limiting ideas should be made until all ideas have been brought forth. Once all ideas have been generated, the *rational* aspect of the model assumes a pre-eminent role. Criteria are established and decision-making tools, e.g., the *nominal group* or *q-sort* techniques, are employed to arrive at a criteria-based prioritization of those ideas.

Although there are many variations of the comprehensive rational model, over the past three decades the most common version has become known as *strategic planning* (see Beach & Lindahl, 2004a; Bryson, 1995, 1996, 1999a, 1999b; Cook, 1990; Mintzberg, 1994). Schools across the world use this model, some every three to five years, others annually, and others as the initial stage of a large-scale school reform or improvement process. Although considerable variations of the strategic planning model exist, the differences tend to be more in the exact number and nature of the steps explicated rather than in true conceptual issues.

Perhaps the most widely known version of the strategic planning model is that presented by Cook (1990). His simplified, step-by-step materials and widely attended workshops have facilitated the spread of the popularity of strategic planning in schools. The basic steps to his model are:

1. Identify shared beliefs
2. Define the school's mission
3. Establish the parameters for the plan
4. Conduct an internal analysis of the school
5. Conduct an external analysis of the school's environment
6. Define the objectives for the plan
7. Identify and select strategies for attaining the objectives.

The strengths of this model are its comprehensiveness and provision for the participation of a wide array of stakeholders; however, these very strengths can be debilitating weaknesses when time and resources are not abundant or when there is not a need for such a broad organizational and environmental scan. For example, how often do traditional public elementary schools really need to engage in profound reflection on their mission? Their missions are well-established and generally immutable; why devote time and resources to revisiting them? Even the goals of most schools tend not to vary extensively over time. Similarly, school resources tend to be so limited, federal and state regulations so restrictive, and parental and community expectations so fixed and powerful that brainstorming and consideration of alternatives beyond a restricted range can be more frustrating than fruitful.

When, then, can strategic planning be used most appropriately? Certainly, in designing the focus of schools with more flexibility to fill distinctive roles, e.g., alternative, magnet, charter, or private schools, strategic planning might offer considerable benefits. When there are tumultuous changes in communities, e.g., extremely rapid shifts in size, wealth, or composition, it can also be very useful. If little consideration has been given to the external and internal environments of a school for an extended period of time, e.g., a decade, it may be useful to engage in this more comprehensive process to renew understandings and commitments. However, in situations of relative stability, like those surrounding most public schools, the use of a comprehensive rational planning model may be akin to assembling the armies of Genghis Khan to repel a lone invader.

The comprehensive rational planning model, however, represents only one extreme of the rational planning model continuum. Other options exist for conditions that do not call for that degree of extremity. Today, most planners would consider Comprehensive Rationalism to be unusable and the term rationalism has come to mean Bounded Rationalism.

The Bounded (Limited) Rational Model. As Simon (1982) explained, true comprehensive rational planning or decision making is so complex that it exceeds the time, resources, or abilities of most individuals or organizations (see, also, March, 1994; March & Simon, 1959; Simon, 1997). He noted that, although rationality requires a complete knowledge and anticipation of the consequences that will follow each choice, knowledge of consequences is always fragmentary and, in many cases, unknowable. Second, because consequences lie in the future, imagination must replace experience in attaching values to them, but values can be only imperfectly anticipated. Third, rationality requires a choice between all possible solution alternatives, but in actual behavior only a few of these possible solution alternatives ever come to mind (Simon, 1957). Furthermore, it is very inefficient to brainstorm and to consider alternatives that clearly lie beyond the organization's reach. For example, although the Reading Recovery© program may yield positive results in improving the reading performance of a select group of students, its highly labor-intensive design might make it financially infeasible for most schools to consider as the primary delivery system for all reading instruction in the school. In other words, it lies well outside the financial boundaries of the school and does not merit the consideration that should be focused on alternatives that lie within those boundaries.

As a result of these constraints, March and Simon (1959) proposed modifications to comprehensive rationalism that have become known as *bounded or limited rationality*. Although bounded rationalism does not restrict choices to as limited a range of diversions from the status quo as the incremental model, neither does it promote the exemption from limitations inherent in the comprehensive rational model. Instead, it posits that, in most cases, attention is best focused on a restricted set of core issues, conditions, and alternatives that lie within the range of feasibility of the organization and its stakeholders. A school might well benefit from cutting its pupil/teacher ratio by 75%, but this is such a financially infeasible

alternative that exploring it merely frustrates participants and wastes time and effort that would be better allocated to exploring other alternatives. Although many forces may be interacting in the school's environment, from globalization to global warming, federal legislation (e.g., *No Child Left Behind*), state regulations (e.g., new high school exit exams), or shifts in the demographics of the school's student body may represent such immediate and potentially serious issues as to warrant excluding the more global issues from a school's planning discussion at a given point in time. Although imposing such boundaries or accepting intuitively self-imposed limitations may result in a less than optimal decision, the organization and its members may choose to *satisfice,* trading off savings in time, effort, and resources for a feasible and potentially reasonably effective plan rather than for an optimal one.

The bounded rational model would be least effective in a situation where a school is faced with dire consequences for failing to produce specific results after repeated planning efforts. Such a situation may require breaking boundaries or perceptions and limitations and seeking radical solutions that would normally lie outside the limits of bounded rational planning. For example, several large urban districts have surrendered control of their problematic public schools to privatization; others have placed individual schools under the direct control of a local community board rather than the district's school board. Other schools have closed, dismissing or re-assigning all faculty and staff, and then re-constituted themselves with entirely new faculties and staffs. Virtual high schools have been created that use computer-based distance education as their primary delivery system, with vastly different administrative structures and policies than traditional schools. It is unlikely that any of these alternatives would have been considered when using a tightly bounded rational model. For example, however, if the school reform effort is designed to increase the reading performance of a school's or district's students, bounded rational planning would be a highly feasible choice. It would allow the reform leaders to consider a variety of proven reform models designed to accomplish this one, specific goal, to compare and contrast their previous successes, resource demands, compatibility with the school's faculty and culture, etc., without considering the wider range of reform models that extend well beyond this focused reading improvement goal.

The Incremental Planning Model

The *incremental* planning model, which Lindblom (1959) termed Successive Limited Comparisons and which is commonly known as "the art of muddling through," minimizes the amount of information and decision making needed. Decision makers arrive at their choices after considering only a limited number of options. Basically, the incremental planning model accepts the status quo as the baseline and calls for small (incremental) advances in the direction of previously-established organizational goals (Chadwick, 1978; Lasserre, 1974; Mann, 1975; Swanson, 1974). Once general agreement is reached among the key stakeholders, the planning process proceeds to implementation. It actively strives to deviate only marginally from past practice (Beach & McInerney, 1986). A strong advantage of this planning model is that it requires relatively little participation, time, or resources for the planning process. Perhaps even more significantly, it is a model that preserves the vast majority of the status quo, thereby reducing the magnitude of change asked of organizational members at any given time. Because the majority of organizational members can be expected to resist large-scale change, and because large-scale changes present a far greater risk of chaos and failure than smaller, incremental change, this model offers certain intuitive levels of comfort. Superintendents frequently use this as a budget planning model, requesting an annual budget that presumes the previous year's budget as a baseline and calls for an incremental advance of X% to cover inflation, salary or fringe benefit increases, district growth, and new programming (see Wildavsky, 1975).

One great disadvantage of the incremental planning model is that it is incapable of producing rapid, large-scale change. If a school has been producing failing scores on state-mandated examinations and is about to suffer embarrassing corrective measures unless a sharp improvement occurs within the next school year, the *incremental* model would be an improper choice. Consequently, this model would likely not be an appropriate choice when initiating a large-scale school reform effort. It would, however, be a more appropriate choice for fine tuning the on-going action or operational planning during the implementation phase of such a school reform effort.

Other flaws of the incremental model center on its ability to maintain a focus on viable organizational goals. Organizational goals tend to change over time; because of the slow pace of change previewed by this model, it is possible that goals will change before being attained. Also, unless extreme care is taken to constantly focus on the goals of the organization, the slow pace of change can lead to a phenomenon similar to that of hikers in a desert who have no meaningful landmarks to steer their direction. Because one leg is typically marginally stronger than the other, hikers will tend to walk in an extended circle, rather than being able to follow a linear path. However, for schools in highly stable environments, for many planning tasks these flaws are not fatal, and incremental planning can be an excellent approach to annual budgeting for ongoing expenses, such as transportation, utilities, and insurance. In most schools, even departmental, grade level, or classroom budget planning is generally done on an incremental basis rather than on a more detailed rational basis, e.g., zero base budgeting.

Budgeting is not the only area for which *incremental* planning is an appropriate choice. Under stable conditions and when the school is in the late implementation or institutionalization phases of a specific reform effort, schools may elect not to revisit earlier planning decisions, but rather merely to seek an incremental increase in specific test scores, attendance rates, graduation rates, or similar output measures. This may imply only minor adjustments to existing curricular or instructional processes, with little or no change in school structures or policies.

The Mixed-Scanning Model

Etzioni (1967) saw the value of combining the concepts of the incremental and bounded rational models in an organization's overall planning process, capitalizing on the strengths of each. This *mixed-scanning* model reflects Etzioni's recognition that an organization's planning process need not be monolithic. There are aspects of the planning process that may best be served by the incremental model; however, there are other aspects that merit more extensive consideration and may require more than *incremental* change; for these, a bounded or comprehensive rational planning process is more appropriate. This combination is known as mixed-scanning. An example is illustrated when a district maintains a continuing survey of pending legislation (the scanning) and becomes very focused or comprehensive in dealing with concerns revealed when that scan uncovers legislation that can have a serious impact on the district.

Through frustrating episodes of trial-and-error, many school-based planning teams have discovered the efficacy of Etzioni's mixed-scanning model. After attempting to address all planning through even a bounded rational model, such teams often find themselves devoting seemingly limitless time and energy to issues that have not been previously problematic. This has often led them to the axiomatic conclusion, "If it isn't broken, don't fix it!" In other words, teams should use an incremental planning approach to those issues and reserve the more comprehensive or bounded rational approach for key issues that warrant greater attention and which the school-based planning teams feel are satisfying and useful to explore. As this model is essentially incorporates elements of two other rational models, some planning theorists no longer consider it a separate model, but rather a philosophy illustrating the wisdom of combining various planning models in order to capitalize on their unique strengths and weaknesses.

The planning models above are all essentially goal-based and rational in nature. A significantly different approach, one far more organizationally culture-based than goal-oriented planning, exists – the *developmental* planning model.

The Developmental Planning Model

The *developmental* planning model focuses less on identifying highly specific, quantifiable, organizational goals and taking unified actions to attain those goals than on identifying the shared positive values and beliefs of the organization and promoting a variety of individual and group efforts that are consonant with those values and beliefs (see Clark, 1981; Clark, Lotto, & Astuto, 1989; McCaskey, 1974; Senge, 1990). In an effort to distinguish developmental from rational planning, Clark (1981) referred to this model as *goal-free*; however, this term can be deceptive to school leaders not well versed in this model. Organizations that employ developmental planning have goals; they are just less specific than in those organizations using more rational planning models. To differentiate these broader goals

from their counterparts in rational planning models, McCaskey (1974) referred to them as *domains* or *directions* rather than goals. For example, as elementary schools might choose the direction of improving students' reading abilities while encouraging a love of reading, a middle school might choose to work in the domain of promoting students' integration of content across subject areas, or a high school might pursue the direction of student mastery of content at high levels of the cognitive taxonomy.

The developmental planning model recognizes that individual teachers, teachers from different subject areas or grade levels, or teams of teachers might well prefer to approach these directions or domains differently, yet each might be quite appropriate and potentially successful. Rather than using a rational approach in selecting from among these approaches or prioritizing among them, the developmental model would encourage all of them as long as each is faithful to the defined, shared, positive values and beliefs of the organization's culture.

For example, a school's culture may include a strong value for challenging each student to attain to the maximum of his or her individual ability level. As long as a teacher's efforts promote student inquiry at high cognitive levels, then such efforts would be supported as being consonant with the developmental plan. One group of teachers familiar with the development of higher level thinking skills might opt for an action research project as part of their staff development. The principal might select key readings on higher level thinking skills and lead, or appoint a teacher leader to guide, a group of less experienced teachers in discussions of those readings and how they might be applied in the classroom. Such attention to individual needs is a factor that tends to differentiate developmental from rational planning models.

Although the developmental planning model clearly arises from the field of organizational culture, it overlaps with the field of organizational development as well. For example, a school might have the shared values of promoting student participation across the full range of the school's curriculum and of providing individual, continuous teacher communication, encouragement, and feedback to each student. Planning discussions, however, might reveal that the school's structures do not currently align well with these values. As part of their developmental planning effort, the school might choose to pilot a structural change in which the student body and teacher corps are sub-divided into relatively independent teams, with teachers of each team sharing a common planning period to conduct staffing discussions on student performance and progress, to plan integrated lessons and assignments, and to plan for team teaching, etc. Essentially each group of students would remain together through all their classes, acting as a cohort within the larger school. They might be assigned an advisor from among the teachers serving their team. Each team might approach this restructuring somewhat differently, with the school's directional goals and value system providing the basic parameters within which they could operate. The principal would encourage experimentation within these parameters and provide opportunities for discussions among teams to share the successes and failures of ongoing faculty and organizational development.

Obviously, the developmental planning model is far less rigidly structured than its rational counterparts. It requires great professionalism on the part of organizational members and demands cultural insight and leadership skills on the part of school leaders. It is potentially most useful in stable school environments with capable and committed faculty and staff. It is also useful in situations where it is unlikely that a group of faculty could agree upon the goals of more rational planning model or on alternative actions or when time and resources do not favor more extensive, rational planning. Its focus is on the long-term *evolutionary* learning of the organization, what Senge (1990) termed *the learning organization.* As such, it is not a model that lends itself to situations in which there is great, immediate pressure from the environment or considerable pressure within the school itself. In short, it is perhaps better suited to situations calling for school improvement or evolution than to those calling for school reform. In healthy school cultures, it is a model that can be used continually for certain aspects of the school planning, in conjunction with rational planning models for other specific issues.

With three basic planning models, all of which are appropriate for schools to choose under specific circumstances, the question arises as to how to best choose among them, other than through the administrator's native intuition. The sections that follow attempt to provide a partial answer to that question, framing the planning function within the larger context of the school improvement process.

THE SCHOOL IMPROVEMENT PROCESS

For purposes of simplification, the school improvement process is presented in three phases: planning, implementation, and institutionalization, with cybernetic feedback loops linking all phases (see Figure 1). These phases correspond to Lewin's (1951, 1997) paradigm of *unfreezing* the organism from its current status, *moving* the organism to its desired status, and *refreezing* the organism at that status (see Figure 5). Clark, Lotto, and Astuto (1989) referred to these as *adoption, implementation,* and *institutionalization.*

Again for purposes of simplification, these three phases are presented as sequential; in practice, true linearity seldom occurs. Instead, because many of the challenges schools face are somewhat ambiguous and highly complex (Leithwood, 1994; Nir, 2000), have multiple correct solutions (Wagner, 1994), and must be solved in contexts that are highly variable (Leithwood & Steinbach, 1994), the school improvement process must be somewhat flexible (Lane, 1995). Consequently, there are often overlaps between the three phases and schools often find it necessary to return to the planning phase after implementation has begun, as new information or feedback from the formative evaluation of the implementation process (Scriven, 1991) become available. Also, because schools are open, organic systems (Burns & Stalker, 1961), they remain susceptible to external pressures and internal changes; such pressures or changes may occur in the midst of a planned school improvement process. When this occurs, it becomes necessary to revisit the planning phase to factor these changes into the plan.

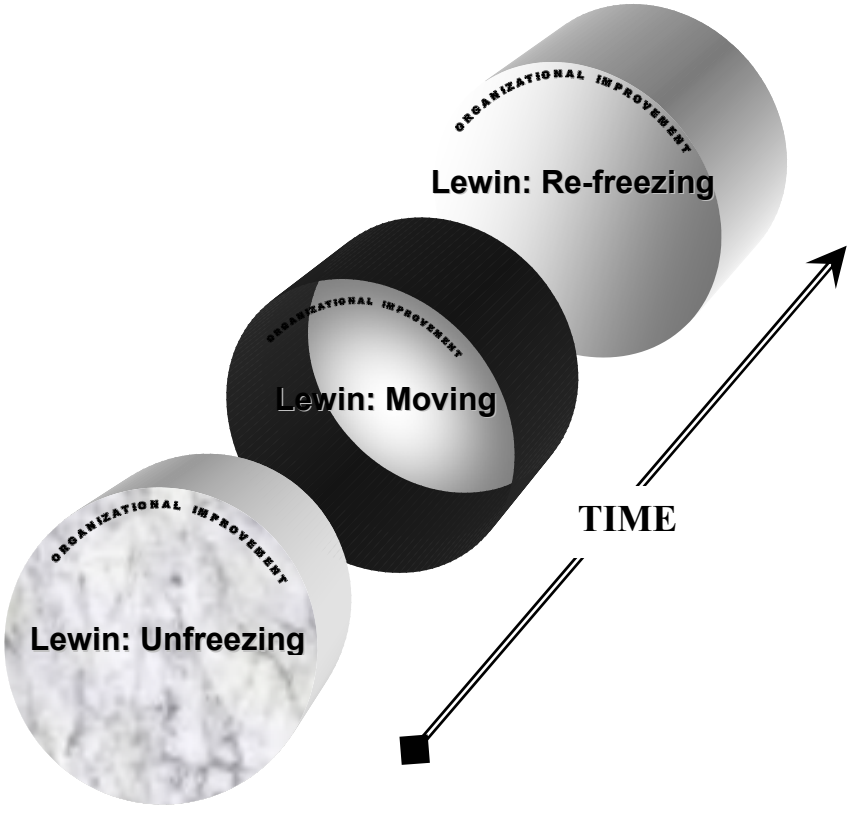

Figure 5. A depiction of Lewin's change phases.

The Planning Phase of the School Improvement Process

Typically, this phase begins when the school's leadership recognizes that a need exists for significant organizational change(s) and that the nature or scope of this change lies outside the school's standard

repertoire. In such a case the principal must then consider initiating a formal school improvement process. One of the earliest decisions that must be made is which planning model(s) would be most appropriate vis-à-vis the nature and urgency of the contemplated change(s) and the school's culture, climate, history, and current conditions.

For most large-scale school improvement processes, the use of a combination of bounded rational and developmental models is appropriate. The first step in the bounded rational planning process is for the principal to determine the membership of the planning team. Membership on this team should be based on a variety of factors, such as the individual's unique knowledge or expertise related to the planning process or to the contemplated change areas, the availability of the individual to participate in the planning process (e.g., teachers often do not have sufficient free time or flexibility in their schedules to permit their participation unless special accommodations can be made), the overall size of the team (sufficient to provide diversity of thought but not so large as to preclude each member's active participation), representation of divergent opinions and approaches (to avoid what Janis, 1982, termed *Groupthink*), and representation of the leadership of key stakeholder groups (to facilitate implementation and institutionalization).

The first determination to be made by this planning team is precisely what problem is being faced. It is essential in this process to clearly separate *means* from *ends* (Simon, 1957). This helps to avoid identifying an appealing solution and then framing a problem to justify implementing that solution.

Once the nature of the problem has been properly defined, the planning team can project the nature of the change that would need to be made to address the problem. This can lead to the establishment of goals for the school improvement process. However, before the planning team proceeds to the identification of alternative approaches to pursuing those goals, certain internal and external evaluations should be conducted. The first of these is a simple Force Field Analysis (FFA), based on the theoretical work of Kurt Lewin (1951, 1972, 1997).

Lewin's FFA has become accepted as a decision making tool for policy makers and administrators seeking systems approaches to increased efficiency in problem solving, change, program planning, or Total Quality Management (Brassard & Ritter, 1994; Caroselli, 1992, Chambers-Corkrum, 1998; Doyle & Straus, 1986; Higgins, 1994; Kayser, 1994; Moody, 1983; Perry, 1997; Phillips & Berquist, 1987; Quinlivan-Hall & Renner, 1990; Sanders, 1977; Stratton, 1991; Viability Corporate, 1994). The underlying premise of Lewin's theory is that needs keep a system in tension. As individuals' and groups' needs are satisfied, that tension is released (Lewin, 1951, pp. 5-6). Individuals or groups continually act to satisfy their needs; their behavior is determined by the tensions acting on them at each specific point in time (p. 19). Over time, the tensions change, as do behaviors.

To better analyze these tensions and behaviors at specific moments and across time, Lewin developed the FFA model, defining a force field as a "distribution of forces in space" (p. 39) and recognizing that each analysis should be confined to those forces oriented in relation to the same goal (p. 40). To examine social force fields, Lewin posited that it is necessary to ascertain the strength and direction of the forces relative to the needs and group's goal(s).

Lewin viewed all force fields as being in equilibrium or quasi-equilibrium at any given moment in time. He characterized this phenomenon as a series of opposing forces pushing toward a goal (driving forces) or inhibiting movement toward that goal (restraining forces)(p. 259). Figure 6 depicts these opposing forces.

Although it is possible to use FFA for snapshot analyses of an operating force field, it is particularly useful as a diagnostic tool for orienting planned change. Lewin wrote:

> This technical analysis makes it possible to formulate in a more exact way problems of planned social changes and of resistance to change. It permits general statements concerning some aspects of the problem of selecting specific objectives in bringing about change, concerning different methods of bringing about the same amount of change, and concerning differences in the secondary effects of these methods. (p. 234)

In analyzing force fields in the planning stage, Lewin advocated assigning numerical weightings to each set of opposing forces, to indicate the relative strengths of these forces in maintaining equilibrium at that level (as in Figure 6). These numbers, in turn, provide insight into which sets of forces might be

most significant in attempting to *unfreeze* the system. Lewin (1972, p. 67) noted that this change could be brought about by increasing the set of driving forces or reducing the restraining forces; however, he advocated the latter approach on that grounds that it would decrease tension within the system, whereas increasing the driving force would likely increase that tension. In Figure 6 the forces have been assigned an estimated strength. The sum of the driving forces is 14, while the total restraining force is 16. That is, the restraining forces are slightly stronger, raising questions about the ability to make effective change.

Brassard and Ritter (1994, p. 63) identified the strengths of FFA as its ability to present both positive and negative aspects of a situation in a manner that would allow comparison, thereby forcing people to think of all aspects of the desired change, encourage people to agree on relative priorities among factors, and to engage in honest reflection on the underlying roots of a problem and its solution. Chambers-Corkrum (1998, p. 114) recommended a basic rational approach to the use of FFA.

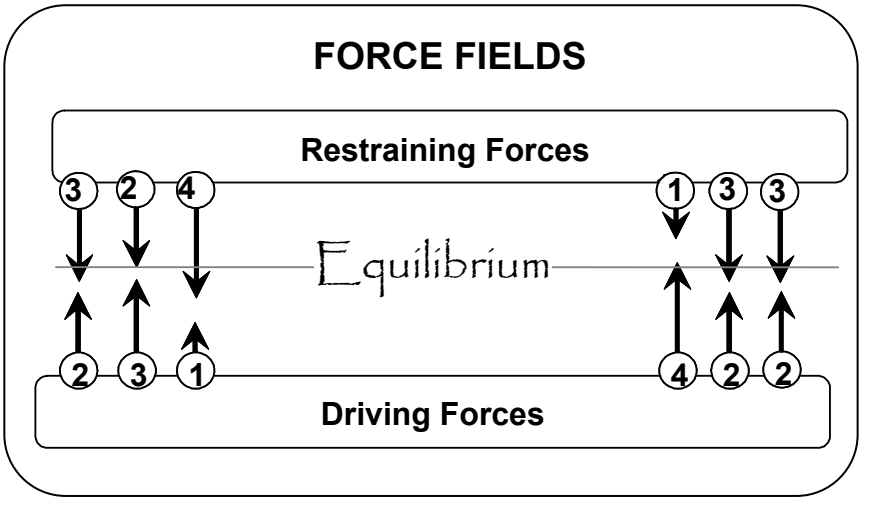

Figure 6. A depiction of Lewin's force-field concept, showing relative strengths of driving and restraining forces.

An internal evaluation that must be made at this point in the planning process is of the school's overall readiness for change (Armenakis, Harris, & Mossholder, 1993; Beach, 1983; Beckhard & Harris, 1987; Berman & McLaughlin, 1977; Bishop, 1977; Cunningham et al., 2002; Evans, 2001; Fullan, 1991; Hall & Hord, 2006; Hopkins, 1990; Huberman & Miles, 1984; Kotter, 1996; Louis & Miles, 1990; Pond Armenakis, & Green, 1984; Purkey & Smith, 1993; Rosenblum & Louis, 1979; Rossman, Corbett, & Firestone, 1988; Schmuck & Schmuck, 1988). The concept of organizational readiness for change has a direct link to Lewin's FFA model, as Lewin (1972), himself, noted: "The study of the conditions for change begins appropriately with an analysis of the conditions for 'no change,' that is, for the state of equilibrium" (p. 65).

Assessing an organization's readiness for change is generally considered an indispensable early step in any organizational improvement process (Armenakis et al., 1993; Beach, 1983; Beckhard & Harris, 1987; Cunningham et al., 2002; Fullan, 1991; Hall & Hord, 2006; Huberman & Miles, 1984; Louis & Miles, 1990; Pond et al., 1984; Prochaska et al., 1994; Prochaska et al., 1997). Beckhard and Harris (1987, p. 59) advocated that this assessment begin with the identification and establishment of priorities within the full constellation of possible change that might be undertaken, followed by an analysis of which organizational subsystems might be most affected by the change. The final step in this assessment process would be to evaluate the readiness and capability of those subsystems for the contemplated change.

Fullan (1991) examined schools' practical and conceptual capacity to initiate, develop, or adopt a given innovation and determined that such readiness was derived from both individual and organizational factors. On the individual level, Fullan found that people were most ready to accept change if they perceived that change to address a perceived need, found the change to be reasonable, possessed the knowledge and skills needed to implement the change successfully, and perceived that they had sufficient time in their work schedules to engage in the change. On the organizational level, he found that those organizations whose culture is compatible with change, and those who have sufficient facilities, equipment, materials, and supplies to implement the change, and those who are not undergoing other major change efforts or crises are most likely to be successful in implementing the desired change.

These findings are very similar to those of other researchers. For example, the demonstrable need for change was cited in Armenakis et al. (1993) and Cunningham et al. (2002). Fullan's individual factor of perceiving the change as being necessary ties closely to the Concerns-Based Adoption Model of Hall and Hord (2006) and to the models of Prochaska et al. (1994) and Prochaska et al. (1997). Armenakis et al. (1993) and Cunningham et al. (2002) also cited an organizational culture in which people participate in the change process, a sense of self-efficacy to accomplish the change (see, also, Pond et al., 1984), and a perceived positive benefit/risk ratio for implementing the change. These authors, as well as Huberman and Miles (1984) and Louis and Miles (1990), echoed Fullan's emphasis on participant competence to implement change and added the need for the organization to have good relationships among its members and a strong social support system, factors also cited by Beach (1983), who compiled the work of Bishop (1977), Hopkins (1990), Purkey and Smith (1993), Rosenblum and Louis (1979), and Schmuck and Schmuck (1988). Beach's list of organizational variables promoting successful change included leadership, staff stability, curriculum articulation and organization, staff development, district support for the change, organizational climate, institutional history with change efforts, collegial relationships, sense of community, clarity of goals and expectations, order and discipline, teacher demographics (age, gender, educational level), ability for participants to observe the innovation in other settings prior to implementation, and the flexibility of the planning process. Table 1 presents a summary of some of the major research findings on individual and organizational readiness for change.

If the planning team determines that the school is essentially ready to change, it may proceed with its planning process. If it determines that the school is not ready for change, it must decide whether to conduct some capacity-building interventions to increase the school's readiness prior to implementing the change(s), or to postpone or forego the changes, altogether. As an example, consider a district having problems in the area of reading. After a little scanning, a confirmation is made that the current reading methodology is not producing desired results. A change would seem to be in order. Yet, the literature offers few suggestions for improvement and the methodology used in other districts is similar to the one now in use. It will, therefore, be difficult for teachers to become familiar with the processes needed for improvement. The teachers, however, are reluctant to change in any case and have little understanding of more current approaches to reading. It would be problematic to proceed directly with the implementation of a new reading program. The district must decide against change (a problem in itself), or proceed with change in the face of probable failure. An alternative does exist. This is to build organizational capacity aimed at improving teachers' understanding of modern reading initiatives while reducing teacher concern. The Concerns Based Adoption Model of Hall and Hord (2006) offers an outstanding model for issues of this nature.

If the team decides to proceed with its planning process, the next step is to utilize the results of the FFA as a foundation for generating alternative means of attaining the goals, capitalizing on the driving forces and reducing the restraining forces as much as possible. As March and Simon (1959) noted, it is not necessary for this list to encompass all possible alternatives; it may focus on a more limited range of alternatives that appear to be capable of producing the desired changes, lie within the resource constraints of the school, and appear to be compatible with the deepest elements of the school's culture. The team may choose among these alternatives or bring them to the full faculty and staff of the school for their opinion. Again, the chosen alternative(s) need not be proven to be the absolutely best choice; it merely needs to satisfice.

Although the planning phase is by no means completed at this point, it is crucial for the team to

forecast the implementation and institutionalization phases before proceeding to build its operational or action plan for implementing the change. Much is known about the implementation and institutionalization processes, but failure to incorporate this knowledge into the action plan can readily doom the potential success of the school improvement process.

Table 1
Factors Influencing Organizational Readiness for Change

Factor	Supporting Knowledge Base
Scope and reasonableness of change	Armenakis et al., 1993; Berman & McLaughlin, 1977; Cunningham et al., 2003; Fullan, 1991
Commitment of organizational members to the change	Hall & Hord, 2006; Huberman & Miles; 1984; Louis & Miles, 1990; Prochaska et al., 1994; Prochaska et al., 1997
Leadership	Beach, 1983; Kotter, 1996
District and administrative support for the change	Beach, 1983; Huberman & Miles, 1984; Louis & Miles, 1990
Organizational culture and climate	Armenakis et al., 1993; Beach, 1983; Beckhard & Harris, 1987; Cunningham et al., 2002; Evans, 2001; Pond et al., 1984
Staff skills and staff development	Armenakis et al., 1993; Beach, 1983; Cunningham et al., 2002; Fullan, 1991; Huberman & Miles, 1984; Louis & Miles, 1990
Institutional history and current involvement with change efforts	Beach, 1983; Fullan, 1991; Louis & Miles, 1990
Collegial relationships and sense of community	Beach, 1983; Cunningham et al., 2002; Huberman & Miles, 1984
Clear vision, goals, and objectives	Beach, 1983; Beckhard & Harris, 1987; Cunningham et al., 2002; Kotter, 1996; Poza, 1985
Ability to observe innovation in other setting and access to consultants	Beach, 1983; Huberman & Miles, 1984
Adequate resources, facilities, equipment, materials, and supplies	Fullan, 1991; Huberman & Miles, 1984; Louis & Miles, 1990
Communication	Kotter, 1996; Louis & Miles, 1990; Poza, 1985
Adequate time to implement	Fullan, 1991; Rossman et al., 1988
Rewards for changing	Poza, 1985; Rossman et al., 1988
Flexibility of the plan	Beach, 1983

Order and discipline	Beach, 1983
Staff stability	Beach, 1983
Curriculum articulation and organization	Beach, 1983
Degree of conflict re: change	Louis & Miles, 1990
General organizational preparedness	Huberman & Miles, 1984
Jobs that empower	Cunningham et al., 2002

At the heart of the implementation and institutionalization phases is the fact that large-scale school improvements call for changes that will have pronounced effects on human beings. Because human beings are both emotional and cognitive in their reactions to change, it is crucial to preview how the change will affect the individuals and groups who comprise the school (Evans, 2001; Fullan, 1991; Louis & Miles, 1990). For example, as Hall and Hord (2006) explained, members of the school will not address the change uniformly; rather, they will experience the *stages of concern* at different times and in different strengths. The lowest stage of concern on Hall and Hord's hierarchy is *awareness.* At this stage, although the teacher is conscious of the proposed change, he or she has not made a personal commitment to become involved with the change. The next stage is *informational*; in this stage, the teacher expresses a general awareness of the change and an interest in learning more. This gives way to the *personal* stage, in which the teacher begins to experience some concerns about his or her ability to effect the change successfully. In the *management* phase, the teacher becomes more proficient with the new processes and tasks and begins both to gather and to utilize information and resources to become more proficient with the new challenges. During the *consequences* stage, the teacher focuses on the impact the changes are having on the students and their performance and seeks ways to employ the new processes to improve the benefits for the students. In the *collaboration stage,* the teacher goes beyond his or her personal implementation of the change and seeks collaboration with other teachers and administrators to enhance the effects of the new processes on the students, faculty, and school. Finally, in the *refocusing* stage, the teacher attempts to gain a comprehensive overview of the changes and their effects, so that this insight can guide future changes or actions.

The early pioneering work by Rogers on the implementation and diffusion of innovations developed much of the ground work for understanding how change unfolds. Rogers' (2003) work led to the finding that 2.5% of the individuals in organizations are the types of people who actively seek and promote new approaches; these are the *innovators*. Their lead is followed by a group (13.5%) of *early adopters*, who have a propensity to recognize the potential of the new ideas and to take the risk of being among the first to experiment with them. Together, these two vanguard groups provide the modeling and mentoring necessary to convince another 34% (the *early* majority) of the organization's members to implement the change(s). Over time, this half of the organization and the successes they have with the new approaches influence yet another 34% (the *late majority*) to join in the implementation, leaving only 16% (the *laggards*), who may not ever really implement the changes. Joyce and Showers (1988) found similar patterns but labeled their groups as *gourmet omnivores*, *active* and *passive consumers*, and *reticents*. The action plan developed by the team to close out the planning phase of the school improvement process must take into account these stages of concern and adoption and incorporate activities to encourage and inform progress accordingly. It must be flexible and cyclical enough to allow individuals or small groups to acquire the necessary information, skills, or staff development as they, personally, experience that stage of concern or begin to implement the change(s), rather than assuming that the school's members will all reach each stage together.

Similarly, much is known about the institutionalization process. For example, Datnow, Hubbard, and Mehan (2002) identified a variety of factors that influence the extent to which changes become

institutionalized in schools. These include: (a) the need for the change to be introduced authentically, rather than forced through top-down coercion; (b) the need to build commitment and ownership of the change(s) among the teachers; (c) the need to be flexible in implementing the change(s), rather than imposing one means for all teachers and students; (d) the need to ensure that sufficient resources, including the precious resource of time, are available to implement the reform effectively; (e) the need to ensure that the change(s) are compatible with and support the school's efforts to perform well on high-stakes accountability measures such as standardized testing; and (f) the need to align policies and procedures with the changes to be implemented. These are factors that can be incorporated into the operational or action plan, if the planning team is conscious of them and gives them the attention they demand.

With these forward-looking considerations in mind, the planning team is ready to convert into an actual document its decisions about which primary alternatives to pursue. This would include a discussion of the mission, goals, values, etc., that have been established, as well as an overview of the process(es) to be utilized and the specific outcomes expected. This would be followed by some form of task analysis, which would lead to the articulation in the plan of the specific steps or activities that must be undertaken to achieve the desired change. This tool utilizes a backward mapping approach in determining what tasks must be undertaken by starting with the final objective and working backward to the beginning. A simple example of this is represented in Figure 7. This process starts with the basic goal or objective, Level 1, and then *breaks* this objective down into a second level of basic components necessary to obtain the Level 1 objective. This is then repeated for each of the components in Level 2, etc., until the planner is comfortable that each of the final level's components can be considered in terms of the simple activity, or small set of activities that can be assigned to individuals for completion. Note that each level defines the totality of the objective. Therefore any single level, and only one level, can be used to define what is required for completing an action plan. The number of levels and the degree of detail in each is arbitrary and at the discretion of the planners. In this process the planner arrives, finally, at a sufficiently detailed set of activities that can be undertaken in creating the initial objective. This is a rational process that requires significant decision making as it progresses.

This process would create the information that flows into an action plan that details what steps must be taken, when, by whom, with what resources, and how their progress is to be measured (National Study of School Evaluation, 1997). Such planning tools as Gantt Charts, Budgets, and even PERT Charts can be very useful in laying out action plans, especially for large-scale, complex improvement initiatives. The task analysis itself would not generally be considered to be part of the plan. The action plan, however, is an integral part of the planning documentation.

An important part of the Action Plan is the provisions it contains to ensure timely formative evaluation throughout the implementation phase, as well as its provisions for the information gleaned from those evaluations to be incorporated into the revisions of that action plan, as necessary. As these actions occur during the implementation phase, it is appropriate to conclude the discussion of the planning phase of the school improvement process and move to the planning undertaken during the implementation and institutionalization phases of the change effort.

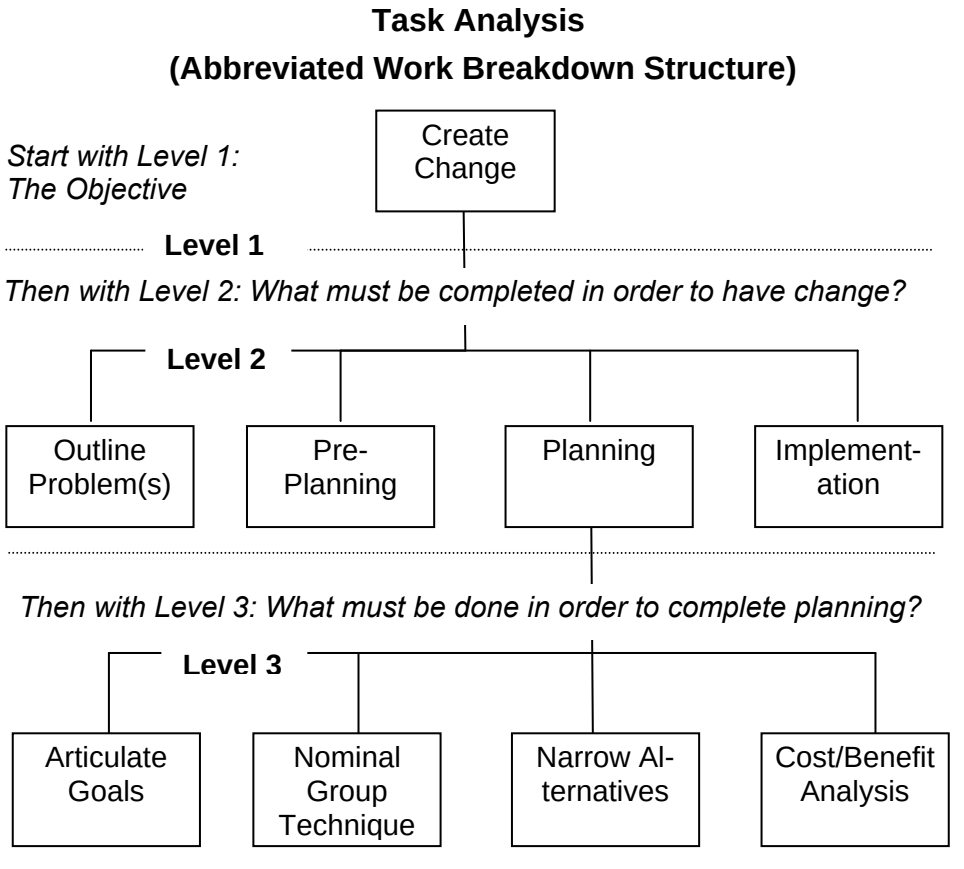

Figure 7. A basic task analysis.

Planning during the Implementation and Institutionalization Phases

As stated previously, the Action Plan developed during the planning phase of the school improvement process must be considered a living document, subject to change as new information becomes available or as significant changes occur within the system or its environment. To inform any changes in the action plan, it is essential that a solid formative evaluation system be designed during the planning phase and rigorously implemented throughout implementation and even periodically after the changes have become institutionalized. The National Study for School Evaluation (1997) recommended that monitoring of a plan be carried out as an ongoing process throughout implementation and that a formal review of progress be undertaken annually (p. 6-1). Because the improvement of student learning is the ultimate purpose of all school improvement planning, all data on student performance should be reviewed on an ongoing basis during implementation, to determine as soon as possible if there are trends in improvement or declines that might be associated with the planned interventions.

In addition, it is essential that the planning team gather qualitative information to guide any revisions in the action plan. The National Study for School Evaluation (1997) provided an excellent set of guiding questions for these formative evaluations:

1. Which action steps contained in the school improvement plan appear to have been successful? Does the effectiveness of these actions steps hold implications for other school improvement objectives? How can the school build on the success of these action steps?
2. Which action steps contained in the plan that originally appeared to be promising did not fulfill their expectations? How can these action steps be most appropriately modified without compromising the goal of achieving the objectives of the school improvement plan?

3. Are there any additional action steps that need to be incorporated in the school improvement plan to achieve the objectives for improvement?
4. Have there been any surprises? If so, what lessons have been learned?
5. What are the insights that have emerged thus far in the school improvement process? What is the school learning about its own capacity to improve?
6. How does the school plan to sustain the commitment to continuous improvement? What steps have been taken to support the ongoing process of school improvement?
7. Have any new or emerging targets for improving student performance been identified by the school? If so, how will these school improvement objectives be addressed in updating and refining the school improvement plan? (pp. 6-1 - 6-2)

The information gleaned from these evaluations must be utilized to refine or adjust the process (The National Study for School Evaluation, 1997) in as timely a manner as possible, yet the planning team must be realistic in its expectations of changes in student learning. Improvement takes time!

Complementary Developmental Planning

Parallel to the rational planning process, it is appropriate to conduct a complementary developmental planning process. Rather than focusing on the goals of the school improvement process, developmental planning seeks to resolve the tensions that naturally arise from school improvement efforts and that can readily inhibit the desired changes (Beach, 1993, pp. 651-652). In essence, developmental planning involves shaping the school improvement process to be maximally compatible with the healthy aspects of the school's climate and culture and improving the less healthy aspects of that climate and culture to be more supportive of the desired changes (Lindahl, 2006).

Although a few critics (e.g., Allen, 1985) question the importance of climate and culture in the school improvement process, some have questioned whether it is feasible to change an existing climate or culture (Quinn, 1980b; Sathe, 1985; Wilkins & Patterson, 1985). The majority of the authorities in the field, however, recognize the pivotal role that climate and culture assumes in large-scale organizational change and contend that climate and culture can be shaped through careful assessment, planning, and administrative actions (Berman & McLaughlin, 1978; Deal, 1985, 1993; Deal & Peterson, 1994; Hargreaves, 1994; Harris, 2002; Hopkins, 2001; Rosenholtz, 1989; Sarason, 1996; Stoll & Fink, 1999).

Even in healthy school cultures, some resistance to change can be anticipated, especially if the change requires changes in beliefs, assumptions, or core values (Connor & Lake, 1988; Wilkins & Patterson, 1985). Less functional school cultures, e.g., those with an inward focus, short-term focus, low morale, fragmentation, inconsistency, emotional outbursts, and subculture values that take precedence over shared organizational values (Deal & Kennedy, 1982; Deal & Peterson, 1994), can make successful large-scale organizational change virtually impossible. Although such organizational cultures can be changed over time, the more entrenched, dysfunctional, and widely shared the culture, the more time and effort required to accomplish this. In such cases, it is necessary to focus on the specific key values or assumptions most paradoxical to the proposed change(s), rather than attempting to modify the entire school culture (Harris, 2002). It is also important to recognize that school cultures are not necessarily monolithic; sub-cultures may well be present and have stronger allegiances than the overall school culture (Cooper, 1988; Louis, 1985; Thompson & Luthans, 1990).

Planned changes to the school's climate and/or culture can be brought about through revolutionary or evolutionary means, or through a combination of these approaches (Wilkins & Patterson, 1985). It is far easier to change the climate of a school than the culture, for the culture is much more deeply embedded, therefore making it more difficult to both diagnose and alter (Connor & Lake, 1988; Lindahl, 2006; Rousseau, 1990; Schein, 1984, 1985a, 1985b, 1992). Culture involves philosophies, ideologies, concepts, values, and norms (Connor & Lake, 1988; Kilmann, Saxton, & Sherpa, 1985; Wilkins & Patterson, 1985), all of which can be very deeply and tenaciously held by individuals, sub-groups, and the school as a whole. It is for this very reason that planned school improvements that contain elements in conflict with a school's culture are less likely to be successfully implemented or institutionalized than changes that resonate with that culture.

There are occasions, however, when the changes needed are not fully coherent with the school's culture. In such cases, developmental planning must accompany the rational planning, for the school leaders must shape the culture as part of the school improvement process. If new behaviors, attitudes, values, and/or beliefs are required, they must be planned for and actively shaped. Concurrently, such cultural changes may also require accompanying changes in the school's structures, reward system, technology, or tasks (Datnow et al., 2002).

To modify a school's climate and culture, leaders must help to clarify its shared beliefs and values and the extent to which these are consonant with the proposed changes (Leithwood, Jantzi, & Steinbeck, 1999). Leaders must consistently model any new beliefs and values associated with the proposed changes (Deal & Peterson, 1993; Schein, 1992). They must establish the conditions for teachers, staff, and students to experiment with the new processes without fear (Allen, 1985; Deal & Peterson, 1993; Harris, 2002; Leithwood et al., 1999; Maher & Buck, 1993). They can selectively choose specific stories to tell, highlighting heroes or heroines whose actions reflect the new values and beliefs and support the planned improvements (Deal, 1993; Deal & Peterson, 1993; Schein, 1992). They can also create new ceremonies or rituals to celebrate accomplishments with the new changes or to emphasize new values, assumptions, or beliefs (Deal, 1993; Deal & Kennedy, 1982; Deal & Peterson, 1993; Schein, 1992). In short, through constant interactions, modeling, and planned interventions, school leaders can support the rational planning process through developmental planning and interventions.

CONCLUSIONS

In retrospect, Henri Fayol's (1916) views on planning as a management function remain consistent with *best practice* in schools today. Although he described an essentially rational planning model, his observance of the need for management to help harmonize the organization's efforts to meet the plan's goals can well be interpreted as a tacit advocacy for complementing that rational planning process with a developmental planning counterpart. He clearly recognized the need for stakeholder groups to be represented in the planning process, a strategy that remains essential today for political, implementation, and institutionalization reasons. He also stressed the importance of ensuring that the operational aspects of the plan be specified in a detailed action plan, and that this action plan be grounded in broader-level, longer-term considerations. Integrating the planning function with Fayol's four other management functions (organizing, commanding, coordinating, and controlling) helps to ensure that the plan would lead to implementation and, hopefully, to institutionalization of the improvements into the school's culture and day-to-day activities.

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