IDENTIFYING THE KNOWLEDGE BASE FOR SCHOOL IMPROVEMENT

In 1983, a landmark event occurred in public education in the United States: the National Commission on Excellence in Education published its now famous report, *A Nation at Risk*. Although this report was not the first denunciation of the efficacy of America’s schools (see Coleman et al., 1966; Illich, 1971; Jencks, 1972; Kozol, 1967), it is generally regarded as the catalyst for decades of public and political pressure for large-scale school improvement or reform. This pressure continues today; furthermore, it shows no sign of abatement in the years ahead. Consequently, the role of leaders is not merely to administer schools; rather, it is to lead those schools to significant, large-scale improvement, while simultaneously meeting the daily and long-term learning and social needs of students they serve. This is a daunting challenge!

The purpose of this article is to identify a knowledge base available to inform the professional judgments and actions of school leaders as they attempt to meet this challenge. It focuses not on the pedagogical and curricular tenets of the improvements, but on the processes necessary to introduce these improvements successfully into the school. School improvement is an incredibly complex process, a process that varies from organization to organization and situation to situation. In the face of this complexity, no simplified “cookbook” approach can promise success or even provide solid guidelines for the process. Instead, leaders of school improvement efforts benefit from skills, knowledge, understanding, and dispositions from a wide range of areas, e.g., leadership, planning, policy, organizational change, and evaluation. The leadership team’s knowledge in these diverse areas, and their ability to see symbiotic relationships, may be related to the eventual success of a school improvement effort. Against this backdrop, the goal of this article is to begin the identification of an essential knowledge base that leaders may rely upon to facilitate school improvement and its planning/change/reform derivatives.

**Background to the Discussion**

Large-scale improvement has, to date, been an elusive goal. Seeking assistance, some schools (and/or districts) have turned to externally-developed “reform” models, e.g., *Success for All, The Coalition of Essential Schools, Accelerated Learning,* and *The Modern Red Schoolhouse*. The best of these “reform models” are well-grounded in research, trial-tested in a variety of environments, and assisted by ample amounts of materials, consultants, conferences, and support networks. They very likely hold many of the keys to improved practices (pedagogy and curriculum) that can lead to increased stu-
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However, to date no model or models have been so successful as to be viewed as a universal “solution.”

The most generally-accepted explanation for the difficulty experienced in transferring reform innovations throughout the U.S. is found in the words of Bailey (2000): “Change is a problem of the smallest unit” (p. 119). In other words, regardless of the level at which the change is initiated or mandated, the greatest challenges for implementation or institutionalization occur at the building (or even classroom) level. Although Leithwood, Jantzi, and Mascall (2002, p. 26) concluded that most large-scale reforms have failed to produce their intended student learning gains, Fullan and Earl (2002, p. 4) determined that large-scale change could be effective, but requires a “fair degree” of top-down initiative at the beginning, followed by greater attention to local conditions, including creativity, reflection, and networking. Similar thoughts on the need to customize improvement processes to each individual school are voiced by Clarke (2000), Harris (2003), and Leithwood et al. (2002). With this in mind, this article focuses on site-level improvement; however, its basic principles and underlying knowledge base apply equally well at the district level.

Identifying a fundamental knowledge base underlying the process of school improvement is not easy, despite the fact that planning for organizational change has been recognized as one of the key roles of the administrator since Fayol (1916/1949) first explicated “planning” as one of those roles. For many years, “planning” remained a fairly consistent keyword identified with deliberate efforts to improve organizations (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, 1980; Sears, 1950; Urwick, 1952). However, the literature on “planning” is no longer the most appropriate place to look for the evolving knowledge base underlying organizational improvement processes. This is not to imply that the role of “planning” has disappeared; it has morphed and appears within the popular guises of topics such as “organizational change” and “school reform.”

Unfortunately, the extensive literature base that underlies organizational improvement in all its forms has become fractioned, confusing to access, and difficult to integrate. Readers may compare the bibliographies of half a dozen well-referenced articles on “planning,” “reform,” “improvement,” or “change,” and find little to no overlap among the bodies of literature reviewed, yet considerable overlap among the processes, themselves. There has been a tendency for authors to both develop and focus on the separate literatures narrowly associated with each of these specific terms, almost to the point of failing to recognize each as only one element in the generalized pro-
cess of organizational improvement. While recognizing that various terminologies exist, the approach taken in this article is to outline a model that coalesces differing elements into a conceptual whole that perceives an “Organizational Improvement Process” as the basic, overarching model, with “planning,” “change,” “innovation diffusion,” etc. being components of a whole.

The Organizational Improvement Process

There are various means by which leaders recognize the need for and deal with change and improvement in their schools—their organization improvement repertoire (see Figure 1).

Figure 1. Organizational repertoire for managing the need for altered futures.

Indeed, much of school reform occurs in the mundane details of everyday life in schools and through means that are familiar to the school and its participants (Datnow, Hubbard, & Mehan, 2002). Although their effects may be substantive, some of these means are ongoing and require only a minor reconfiguration of existing organizational practices, norms, cultures, and climates. For example, while textbook and personnel selection processes often have a significant impact on student learning, these change processes are relatively well institutionalized and do not call for unusual district or schoolwide action. In these cases, the institutionalization of planning and change
processes has taken place in the past; the results and organizational learning from these processes have been accepted as “best practice” and have been institutionalized into organizational policies, processes, and behaviors. Other demands for organizational improvement, however, are less routinized and may necessitate the creation of a carefully defined, proactive process, as illustrated in item “d” of Figure 1. These processes are properly characterized as episodic until institutionalized, at which time they become ongoing, as noted by Astuto, Clark, Read, McGree, and Fernandez (1994) and Fullan (1993). It is on these types of processes that this article focuses.

A framework which captures most elements noted above and which is substitutable for the role of item “d” in Figure 1 is referred to in this article as the Organizational Improvement Process. This basic organizational improvement process becomes the means for dealing with the requirements of needed, non-routinized change and is presented in Figure 2. As Datnow and Stringfield (2000) note, these improvement processes are highly context-specific. Even with externally-developed reforms, there must be considerable variation in implementation, often due to local contextual issues (p. 40).

Figure 2. The Organizational Improvement Process and the knowledge bases underlying its core.

The Organizational Improvement Process outlines the general, comprehensive actions needed to bring about sustained, large-scale organizational improvement. Cuban (1990) and Mohrman et al. (1989) provide useful definitions and discussions on this level of change. The model presented posits that the process must follow the basic “unfreezing,” “moving,” and “refreezing” stages of Lewin’s (1951; 1997) paradigm. Consequently, the process is di-
vided into three broad phases: planning, implementation, and institutionalization. Clark, Lotto, and Astuto (1989) refer to these phases as “adoption,” “implementation,” and “continuation” or “institutionalization.”

The planning phase begins with some pre-planning activities, in which the leadership team recognizes that a need exists for organizational improvement and the decision is taken to explore proactively what would be involved in bringing about that improvement. The leadership team then determines the nature of the changes required and selects the planning approach(es) best suited to the school’s needs and conditions. This is the point at which the organization begins to define the more specific activities necessary to effect the desired improvement. As these activities and their implications for the school begin to take form, the leadership team must determine the school’s capacity and willingness to engage in those activities. The school’s readiness to engage in these processes and to confront the ensuing changes may determine whether it proceeds directly with the plan, undertakes modest organizational development to prepare better for the forthcoming change, or foregoes school improvement at this time.

The implementation phase is essentially viewed in terms of a classic organizational change process, where the activities necessary to effect the improvement are undertaken. The institutionalization phase is presented in the model with the cognizance that sustained organizational improvement often fails prior to this point and specific actions need to be taken to ensure success and “refreezing” of the organization at a more permanent level of improvement. Datnow et al. (2002) conclude that many fundamental school reforms fail to become institutionalized because of such factors as: (a) inauthentic beginnings of the reform within the organization; (b) failure to build commitment and ownership among teachers; (c) inflexibility of the reform; (d) resource demands of the reform; (e) high stakes accountability systems; or (f) policy misalignments (p. 117).

As presented in Figure 2, the Organizational Improvement Process appears to be highly linear; in reality, this is often not the case. As Datnow et al. (2002, p. 12) note, each school reform effort must be undertaken within its relational context and must be viewed as a co-constructed, conditional process. The precise overlaps in time among the three phases of this Organizational Improvement Process vary from situation to situation and in accordance with the particular organizational improvement system being followed. For example, the more rational the planning philosophy, the more linearly these phases would be addressed; the more adaptive/developmental the planning philosophy, the more juxtaposition would be found among them.

The improvement process described is founded upon specific knowledge bases associated with each of the three phases of the process. However,
it is also founded upon a body of knowledge that permeates the entire process. This overarching knowledge base defines the core of the overall improvement effort. Fullan (1993) notes that “educators must see themselves as experts in the dynamics of change” (p. 4). To become such experts, educational leaders should become familiar both with the knowledge bases underlying the Organizational Improvement Process as a whole and in its parts, and with those knowledge bases underlying each specific improvement effort or focus (e.g., whole language approach, inter-disciplinary curriculum, *The Modern Red Schoolhouse*, etc.). The remainder of this article treats solely the former.

**Knowledge Bases Underlying the Core of the Organizational Improvement Process**

As is depicted in Figure 2, several knowledge bases are associated with the core of the Organizational Improvement Process and form the conceptual foundation for understanding the generalized model as a whole. These include: planning philosophies, systems theory, leadership, and group dynamics. Other knowledge bases align more closely with specific phases of the process. For example, in the planning phase of the model, an understanding of the knowledge bases in planning models, data collection and analysis, decision making, policy, politics, readiness for change, and organizational culture and climate becomes essential (see Figure 3).

| Knowledge Bases: Organizational Improvement Process |
|-----------------|-----------------|-----------------|
| Planning        | Implementation   | Institutionalization |
| Planning Models | Change           | Diffusion        |
| Data Collection & Analysis | Motivation       | Organizational Theory |
| Decision Making | Staff Development Reform | Organizational Development |
| Policy | | |
| Politics | | Program Evaluation |
| Readiness | | |
| Culture and Climate | | |

*Figure 3.* Knowledge bases underlying the three phases of the Organizational Improvement Process.

The relationship of each of these knowledge bases to the Organizational Improvement Process along with references to several key works within each
knowledge base are presented in the sections that follow, beginning with those core knowledge bases that underlie the full process.

**Core Knowledge Base: Planning Philosophies**

For a leader to guide the organization through this Organizational Improvement Process, he or she would benefit from a familiarity with the primary knowledge base associated with the core, the literature on planning, itself. There are two related, yet somewhat distinct, knowledge bases often referred to as “planning.” One knowledge base concerns the major ways of thinking about planning, which Faludi (1973) termed “theories of planning” (p. 1). The other concerns more specific planning models within these general philosophies, which Faludi termed “theories in planning.” Examples of these latter planning models are discussed in a later section.

“Theories of planning” are really general philosophies of planning and include: comprehensive rationalism, bounded (or limited) rationalism, incrementalism, and the developmental or goal-free approach. It is the understanding of these broad philosophies of planning that is crucial throughout all phases of the generalized model. An overview of these philosophies of planning can be found in Beach’s (1993) article. Further information on each of the individual philosophies is also readily available, e.g., Simon’s (1955; 1957) works on rationalism, Etzioni’s (1967) and March’s (1994) works on mixed scanning or bounded rationalism, Lindblom’s (1959) article on incrementalism, and Clark’s (1981) article on goal-free planning.

Complementing these planning philosophies is other literature on specific issues related to the planning process. Key works from this extensive body of literature include Benveniste’s (1989) book on the politics of planning, Carlson and Awkerman’s (1991) edited book on a variety of aspects of planning, Faludi’s (1973) compilation of many of the seminal articles on planning theory, Forester’s (1989) treatment of the issue of power in planning, Hendler’s (1995) book on planning ethics, Inbar’s (1991) chapter on improvisation as part of the planning process, and both Morphet and Ryan’s (1967) and Sybouts’ (1992) books on using planning in schools.

**Core Knowledge Base: Systems Theory**

Only a grasp of the basic principles of systems theory is required, but that understanding is important for comprehending the process dynamics. An understanding of systems theory is crucial because of its emphasis on such concepts as inter-dependent sub systems, multiple causation, equifinality, open versus closed systems, homeostasis, and entropy. This conceptual back-
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ground helps the leadership team to envision the school as embedded within the overall district and environment and to understand how various sub-systems of the school affect and are affected by the organizational improvement effort (see Datnow et al., 2002).

A synopsis of systems theory that is useful and complete from the lay user’s perspective does not seem to exist. The field essentially begins with the work of von Bertalanffy (1969/1998), who approached systems theory from a biological perspective, and Weiner (1986), who moved this focus to human beings and organizations. These works, while interesting, are not particularly helpful for the practitioner. The best overview can be found in Chadwick’s (1971) *A systems view of planning*, but the book rapidly becomes more technical than most school leaders require. Some alternatives are Laslow’s (1972) book, another general treatise on systems theory from the natural and biological sciences viewpoint, and Montello and Wimberly’s (1975) book, which focuses primarily on systems analysis techniques rather than concepts.

**Core Knowledge Base: Leadership**

Knowledge of leadership theory and its principles is paramount to the process because leadership is needed throughout the process and the leadership approach must be consistent with organizational needs, approaches to planning, change, implementation, and institutionalization, and must be consonant with the leader’s effectiveness in employing that leadership approach.

The path-goal model of leadership offers a useful perspective on the leader’s need to analyze the characteristics, conditions, and needs of the organization’s members, as well as to determine the characteristics of the tasks they confront and of obstacles that might prevent them from reaching the organization’s goals. It gives particular attention to the issue of organizational members’ motivations, relying heavily on the expectancy theory of motivation (Porter & Lawler, 1968; Vroom, 1994). Further information on the path-goal model can be found in the works of Evans (1970), House (1971), and House and Mitchell (1974).

Heavily based on Fiedler’s (1964; 1967) contingency model, Hersey and Blanchard’s situational leadership model (2000) is sufficiently familiar and clear-cut to be useful in bringing leaders’ attention to the varying maturity levels (including such factors as knowledge, competence, comfort, and commitment) that organizational members may have in relation to the specific tasks that might be encountered in the implementation and institutionalization phases of the generalized model. It also gives some insight into the types of supervisory behaviors which might be supportive of those organizational members at various task maturity levels.
Similarly, the transformational leadership model brings attention to the leader’s role in raising followers’ understanding of, and commitment to, specific organizational goals or values, even beyond their own idiographic needs. The model focuses heavily on the significance that vision and culture play within the ongoing development of the organization. Although Burns’ 1978 book on transformational leadership won both the Pulitzer Prize and National Book Award, more organization-focused information on this model can be found in Bass and Avolio (1993) and Tichy and DeVanna (1990). Hargreaves and Fink (2000) note many of these transformational leadership qualities as being crucial to the implementation of school reform in one of their case studies.

More specifically, it is important for the school leader to understand how leadership interacts with change processes in pursuit of organizational improvement. Discussions on this interaction can be found in Connor (1998), Kotter (1996), Kouzes and Posner (2002), and Sergiovanni (2001). As specifically related to organizational change in schools, Datnow et al. (2002) provide a good explanation regarding the need for the leadership style in the organization to match the specific nature of the reform being contemplated.

Core Knowledge Base: Group Dynamics

The entire Organizational Improvement Process is based on facilitating change among stakeholders. Although some of this facilitation is carried out at the individual level, much of it must be accomplished at the group level. With definitions of leadership focusing on “getting the job accomplished through others,” group dynamics constitute a central knowledge base for this aspect of leaders’ efforts. As Astuto et al. (1994) conclude, “people are the reason for organizational failure, or people are the source of organizational success” (p. 49).

The improvement process is not short term. It often takes years, and sustaining groups of employees and stakeholders becomes central to the whole process. Without an understanding of how groups function and how to maintain healthy groups, the managers of an Organizational Improvement Process are simply “flying blind.”

Of interest in understanding group formation and development is Wheelan’s (1994) general survey book on group processes. For a more complete understanding of the dynamics of group behavior, leaders of organizational improvement are recommended to read Forsyth’s (1999) and Johnson and Johnson’s (1997) books on this subject.
Knowledge Bases Underlying Each of the Three Phases of the Organizational Improvement Process

As depicted in Figure 3, and in addition to the four core knowledge bases that provide the conceptual foundation for the overall process, other knowledge bases assume important roles during each of the three basic phases of the process. These are discussed in the sections that follow.

Knowledge Bases Underlying the Planning Phase of the Organizational Improvement Process

Planning models. While the more historic writings on planning philosophies, cited previously, serve as core knowledge for the overall improvement process, most recent planning literature tends to focus on the first phase of the process, the phase leading to implementation. This planning phase typically consists of: pre-planning, decision making, selection and implementation of a specific planning model, and assessment of organizational and individual readiness for the improvement. It is only after determining that a substantive change must be made and which planning model is best suited for guiding that change, and when decisions/plans are in place and the organization is ready to engage in school improvement that this initial phase of the process is complete. Literature on several such models is discussed below.

The initial planning philosophy that dominated the professional literature and practice was the comprehensive/rational approach (Simon, 1955), which was refined into the bounded (limited) rational model (Simon, 1957). Among others, Kaufman (1972) developed a planning model consonant with Simon’s philosophy. This model has strategic and tactical overtones and generally involves a process in which a vision and mission are discerned, some general alternative methods for implementation are examined, a set of required/desired actions for the selected alternative are developed, resources are allocated—including time as well as money—and an evaluation process is outlined. A far more planner-driven, yet not purely rational model was offered by Bennis, Benne, and Chin (1985). A good overview of rational planning models can be found in Carlson and Awkerman (1991).

Over time, the growth of one dominant rational planning model has become almost synonymous with “planning” in many organizations. This is “strategic planning.” Two classic references on this specific planning model are Bryson’s (1995) book on applying the strategic planning model to public and nonprofit organizations and Cook’s (1995) book relative to America’s public schools. However, despite its apparent popularity, the strategic planning model is not the only model and may not be the most appropriate, as
Mintzberg (1994) noted in his thoughtful and well-referenced critique. Beach and Lindahl (2004) address similar concerns as specifically related to P-12 public schools in the United States.

Lindblom (1959) offered an alternative to these rational philosophies, positing that circumstances are generally too complex to allow accurate accounting of all elements of a system that may impact future events. Instead, he proposed what he called successive limited comparisons, which has become known as incrementalism. Incrementalism advocates moving in minor ways from existing practice that require only modest resource adjustments. Etzioni (1967) combined the rational and incremental planning philosophies into his “mixed scanning” model, which called for a bounded rationality approach to be used in relation to those issues which would have the greatest organizational impact, with more mundane issues being addressed through an incremental approach.

The least rational or least comprehensive planning models are those falling under the goal-free, or developmental, philosophy. These models argued for organizational discernment of shared value systems and visions and then accepting, and even encouraging, individuals to pursue these values and visions in creative ways, as opposed to the more traditional planning models that sought unity of approach and goals. Typical are the developmental models discussed by Clark (1981) and Hamilton (1991).

Even in developmental models, the general organizational activities associated with the strategic theories would still be undertaken, but in less formal formats, and some activities would be added. One classic purpose of developmental planning is the professional development of personnel, where stakeholders undertake activities necessary for the improvement process, but which will also create greater understanding of the organization and the employee’s place within the organization (double-loop learning). Senge (1990) calls this the process of developing a “learning organization,” with the goal being not only the successful accomplishment of the current organizational improvement effort, but the further capacitation of the organization and its members to engage in future improvement efforts.

Data collection and analysis. One set of skills that is necessary in this initial phase of these planning models (with the possible exception of the incremental model) involves skills associated with data collection and data analysis, including both quantitative and qualitative data. These data will be related to the organization or to environmental factors that will potentially impact the organization. There are fine texts related to data collection and analysis. Babbie (2001) and Pagano (2004) provide general survey texts on data collection and analysis. Gay and Airasian (2003) also developed a similar text, but with a
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focus on educational settings. Majchrzak (1984) wrote a very concise booklet on specific data methods for examining policy data, and Fowler (1993) provided similar assistance specifically in the area of conducting surveys. Two simplified texts especially designed to assist P-12 school personnel with data collection and analysis are available from Bernhardt (1998) and Fitzpatrick (1997). Norusis' (2003) guide to using SPSS for quantitative data analysis is very user-friendly and hands-on, ideal for practitioners who have only minimal experience and knowledge with this data analysis tool. For information on the collection and analysis of qualitative data, such texts as Berg (2001), Creswell (1998), and Miles and Huberman (1994) furnish sufficient general overviews to orient practitioners.

Decision making. Planning—that is, what occurs during the first phase of the Organizational Improvement Process—is highly intertwined with decision making; e.g., choosing an alternative is, in fact, decision making. As Astuto et al. (1994) note, decision processes require administrators to seek advice, develop consensus, and select options consistent with the school’s goals, purposes, and processes or to facilitate the professional staff’s identification and selection of a range of options consistent with school values (p. 74). Several outstanding resources are available which provide a strong knowledge base on decision making. Two works support the understanding of the group dynamics associated with decision making. The first is Janis’ (1982) Groupthink, which, by illustrating a decision-making pathology, creates an understanding as to what one should and should not be doing. The companion work is Allison and Zelikow’s (1999) Essence of Decision, which presents a case study of how a good decision was made in a serious and confusing environment (the Cuban missile crisis) and how an understanding and perception of organizational output can shift with an expanding depth of focus. These two, when supported by the film Missiles of October (Brodkin, Berger, & Page, 1974), tie these concepts together well.

Policy. Depending on the latitude one allows in the definition of policy, all non-trivial planned organizational change can be viewed as arising from either formal or informal changes in policy. Issues of policy must be worked through inasmuch as any organizational improvement effort will require that policies be created and/or complied with and implemented. Changes effected in other parts of the system may well require changes to existing policies or addition of new policies (Datnow et al., 2002).

The literature here is truly vast. A basic and classic work is Dye’s (1992) Understanding Public Policy. Birkland (2001) also provides an appro-
A discussion of political decision making can be found in Stone (2002).

Other works of interest include Jones (1984), which offers a clear perspective on the policy making process, almost from an advocacy framework. The advocacy coalition framework, discussed by Sabatier (1999), provides an outstanding model of the formation of advocacy coalitions relative to core beliefs and values as well as to negotiation at the state/national level. Kingdon’s (1995) streams model considers three streams (problem, policy, politics) to be running parallel and independent through time until some focusing event creates a “window of opportunity” for change. Then streams coalesce and change can take place with the establishment of a new equilibrium. Baumgartner and Jones (1993) consider policy monopolies consisting of elements such as a current group providing services, the regulatory agencies for those services, and representatives of those receiving benefits, all of which enjoy a status quo and are resistant to change. As in Kingdon’s model, some concern or event shifts an indifferent public into one that challenges the actors in these monopolies and causes the equilibrium to be changed. Van Horn, Baumer, and Gormley (1992) also discuss the policy making process, but do so from a wide variety of frameworks of policy origin, e.g., boardroom, bureaucratic, cloakroom, chief executive, courtroom, and living room politics. Hargreaves and Fink (2000) give considerable importance to policy issues in their work on school reform.

Politics. As Datnow et al. (2002) note, “school change is an inherently political process” (p. 21). The acceptance of plans and policies, the negotiation for resources and the very purposes for organizational improvement are highly political activities. Astuto et al. (1994) note that school reform in the United States is largely supported by non-local, political intermediaries (e.g., state and federal government) that mandate reforms through policy to local education agencies. Legitimate political concerns related to planning and organizational improvement do exist. These are well discussed in three volumes: Benveniste’s (1989) Mastering the Politics of Planning; Datnow et al.’s (2002) Extending Reform; and Forester’s (1989) Planning in the Face of Power.

Readiness for change. After a planning model has been adopted and policy concerns have been addressed, the leadership team can assess the overall readiness of the school to deal with the proposed improvement. Here, attempts at improvement may be abandoned, or an attempt to improve the school’s readiness for the improvement can be made in situations where those variables amenable to change can be improved. For example, if the users (e.g., the
teachers and administrators) are not strongly committed, it may be possible to improve their commitment prior to engaging in the implementation process, e.g., through staff development (Clark et al., 1989, p. 170). However, as Weiss (1995) found in her study of shared decision making, without teacher readiness for change, it can be extremely difficult to secure the commitment and motivation needed to implement improvements or reforms effectively. Many factors contribute to an understanding of readiness and can be found in the literature cited here.

A starting point for understanding the issues associated with organizational readiness for change is Berman and McLaughlin’s (1978) Rand study on change associated with federal programs. This is a multi-volume work, but *Volume VIII: Implementing and Sustaining Innovations* is particularly helpful, if chilling. Important contributions to our understanding of readiness are made by Louis and Miles (1990), Huberman and Miles (1984), and Rossman, Corbett, and Firestone (1988).

*A focus on culture is particularly important when developmental planning models are employed. These can only be successful in healthy organizational cultures, whose members’ actions align consistently with the organization’s shared values and vision.* Further information on organizational culture in the P-12 school environment can be found in Cunningham and Gresso (1993) and Sarason (1996).

As a part of understanding the organization’s culture and that culture’s impact on the attempt to bring organizational improvement, there are specific issues that must be addressed. It is important to consider how various knowledge bases naturally integrate with a knowledge of organizational culture and help influence the success of the organization’s improvement process. For example, more formal, hierarchical organizational types, such as bureaucracies (Weber, 1947), organizations led by more autocratic leaders (Reddin, 1970) who may subscribe to mental models of motivation more highly fo-
cused on external motivation (e.g., McGregor’s Theory X, 1985), and/or organizations with less horizontally integrated communications structures and patterns would be more likely to choose or be successful with goal-oriented planning models. Other, less hierarchical organizations with more participative communication patterns (e.g., Ouchi, 1993), led by transformational leaders who focus on the organization’s shared values and vision (Burns, 1978; Tichy & DeVanna, 1990) and whose mental models of motivation may be focused on the higher levels of Maslow’s (1970) needs hierarchy, would be much more suitable candidates for developmental or goal-free planning processes.

Knowledge Bases Underlying the Implementation Phase of the Organizational Improvement Process

Change. Change is a process in and of itself. As viewed within the Organizational Improvement Process, it is the link between planning and institutionalization. The literature on change is more extensive than that which exists for any other component of the general model. There also has been a trend to view the change process as the overall school improvement process. This is, of course, a matter of individual interpretation. However, few of the change models proposed in the literature deal with the totality of improvement. This is not to say that the process of change is less significant. Considering the difficulty associated with this step, it is the part of the overall improvement process that requires the most effort to see through to completion. An early, research-oriented work specific to education and to the relationship of components in the school district is that of Rosenblum and Louis (1979).

A good general reference with a humanistic approach to change, focused on public education, is Evans’ (2001) The Human Side of School Change. Similar texts on the change process in schools include Fullan’s (with Stiegelbauer, 1991) well-known classic and Louis and Miles’ (1990) study on improving urban high schools. Hutton’s (1994) book provides an interesting set of guidelines for leaders of organizational change, although it is not focused on the school environment.

The change literature includes several models designed to articulate a detailed description as to how one should approach the change process in an organization. These are well researched and defined processes and are valuable from both a perceptual level and from the perspective of the change agent. Hall and Hord’s (2001) Concerns Based Adoption Model (CBAM) is perhaps the most well known example of this genre. As a comparison, Havelock and Zlotolow’s (1995) The Change Agent’s Guide presents the CREATE model for creating organizational change. Interesting companion pieces specifically focused on schools are Ellsworth’s (2000) Surviving Change: A
Motivation. As the improvement process enters the implementation phase, it becomes important that the leadership team be familiar with various aspects of motivation theory. Change can be very threatening to many organizational members; it can also be energizing. Either of these conditions can potentially affect motivation, e.g., by altering pre-potent need levels (Maslow, 1970). Admittedly, the rigidity of the pre-potency aspect of Maslow’s model is questionable and research has failed to find even consistent, moderate relationships between motivation and productivity. However, organization members’ feelings affect the organizational climate and culture and are reflected in variables such as absenteeism and attrition, and can either contribute to or detract from the pace, or even success, of the adoption and institutionalization of innovations and organizational improvement.

Perhaps the most useful motivation theory for analyzing the types of emotions individuals undergo in a change process is Vroom’s (1994) expectancy theory model. Certainly, as individuals are faced with new challenges, they may experience changes in their perceived ability to master the required new performances (which Vroom termed “expectancy”) or become uncertain as to the extent to which even the best executed performances will lead to desired rewards (which Vroom termed “instrumentality”). Discussion on human reactions to change can be found in Deal (1990) and Hall and Hord (2001).

Staff development. As cited earlier, “people are the reason for organizational failure, or people are the source of organizational success” (Astuto et al., 1994, p. 49). In order for the Organizational Improvement Process to be successful, it is essential for those responsible for implementing change to be knowledgeable, skilled, comfortable, and committed to the change. In many cases, this can only be accomplished by staff development efforts targeted to the specific improvements being implemented.

However, research on the effects of staff development (e.g., Baldwin & Ford, 1988; Broad & Newstrom, 1992; Joyce & Showers, 1980, 1988; Learning First Alliance, 2000; Showers, 1984; Sparks & Hirsh, 2000; Sparks & Loucks-Horsley, 1989) has clearly shown that not all staff development is effective, especially in regard to the transferal of training to real-world applications a year or more following the training. Collectively, those authors provide good insight into staff development practices that enhance the probability...
of transfer of training, including such practices as mentoring, coaching, peer coaching, team projects, lesson study, and collaborative action research.

**Reform.** The reform literature offers several views that are somewhat distinct from what has been discussed above. The first of these is a closer focus on what specifically occurs in the school and classroom. Excellent case studies exist which explore these ideas. These case studies can provide leaders with something other than an in vitro look at school improvement. Elmore, Peterson, and McCarthey’s (1996) *Restructuring in the Classroom* is an outstanding example of using case studies to advance the understanding of what works, why, and when. Bryk and Schneider’s (2002) *Trust in Schools* uses a quantitative approach to analyze case studies from Chicago as a means of exploring the impact of trust relationships on improvement.

An additional concern in the reform literature is the scalability of classroom/school reforms (Hargreaves & Fink, 2000). How can one transfer a successful reform to other settings, especially from classrooms to the school, to the district, to the state, and across the nation? Datnow et al. (2002) address this concern directly. Their book also contains a good description of many of the externally developed reform designs, such as *The Modern Red Schoolhouse*.

Cuban and Usdan (2003) examine district level reform in six large U.S. cities. In each district, the reform efforts undertaken were driven, top down, to the schools by a confluence of political actors—such as the superintendent, mayor, board, and CEOs—unique to each urban setting. The authors are neutral on the question of the success of the reforms initiated, recognizing that it is too early to answer the question. They note: “Our reflections, if anything, suggest that schools in our six cities require more than a one-size-fits-all strategy” (p. 166).

**Knowledge Bases Underlying the Institutionalization Phase of the Organizational Improvement Process**

**Diffusion.** As a successful Organizational Improvement Process moves into and through the later stages of the change process, implementation will be nearing completion. What constitutes implementation is largely undefined, but some percentage of possible users are engaged in the improved process, with some level of fidelity to the original improvement design, and with some likelihood of post-change-agent stability. However, to move the improvement to where it can be classified as an accepted or routine organizational process, as illustrated in item “a” of Figure 1 (i.e., institutionalized), becomes problematic. Berman and McLaughlin’s (1978) study found: “The
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net return to federal investment was the adoption of many innovations, the successful implementation of few, and the long-run continuation of still fewer” (p. vi).

Fink (2000) provides a longitudinal look at a reform initiative in the Lord Byron School and illustrates how an outstanding, creative, well planned and implemented reform effort can ultimately fail to be institutionalized. Over time, changing faculty, administrators, community, and students led to the erosion of implemented change at this school until “it is more similar than different from other schools in the district” (p. 43). Sustainability or institutionalization concerns are real and must be dealt with. Fink’s work provides a clear presentation of the complexities associated with institutionalization.

For these reasons, the Organizational Improvement Process views institutionalization as being a separable phase that arises from the continued diffusion of the implemented improvement until it becomes truly institutionalized/routinized within the organization. The implemented change must be able to sustain the entropic forces described by Fink (2000). A seminal work in this area is Rogers’ (2003) *Diffusion of Innovations*. While not a book oriented to education, but one that deals with the process as related to specific innovations, its relationship with the overall Organizational Improvement Process is close. The institutionalization phase is similar to Rogers’ Stage 5 (p. 392), which provides the groundwork for understanding diffusion issues. Hall and Hord (2001) provide a very brief discussion in this area and view the CBAM as having a place in this phase. A broader look at diffusion, one from a state perspective, is the Berry and Berry chapter in Sabatier (1999).

*Organizational theory.* As the process moves toward the institutionalization phase, the leadership team benefits from familiarity with general organizational theory, for organizations typically portray profiles that reveal vestiges of varying amounts of historic organizational philosophies, e.g., scientific management (Callahan, 1962; Taylor, 1911), bureaucracies (Weber, 1947) human relations/social systems (Etzioni, 1997; Getzels, 1958; Getzels & Guba, 1957), human resource or “learning organizations” (Senge, 1990). Understanding these various models and diagnosing the extent of their presence in the current school organization allows the leadership team to determine how best to work within, rather than against, the organizational paradigm and culture. Although the leadership team may desire eventually to alter the prevailing organizational profile vis-à-vis these philosophical models, this may or may not need to be part of any specific organizational improvement effort.

*Organizational development.* It is also beneficial to the institutionalization of innovations and improvements that the leadership team be well-
versed in organizational development, which is the operationalization of systems theory in organizations. French and Bell’s (1998) organizational systems model recognizes that a change in any aspect of an organization can require corresponding changes in other aspects, if that organization is to function effectively and efficiently. Their model classifies organizational functions into six basic subsystems: external interface, task, technological, goal, structural, and human-social (pp. 40-42).

Although the specific sub-systems of organizations vary from one organizational development model to another, the basic principles remain fairly constant. Further information on the principles of organizational development can be found in Burke (1993), French, Bell, and Zawacki (1999), and Tichy (1983). Discussion of how organizational development has been carried out in P-12 schools can be found in Fullan, Miles, and Taylor (1978). Datnow et al. (2002) provide a useful explanation of the interactions between organizational culture, organizational structure, and the actions of participants in the school reform process, with particular emphasis on how imbalances among these three dimensions lead to the failure of schools to institutionalize many of the reforms they attempt.

One specific approach to organizational development that has received considerable attention and which contains several meritorious principles for guiding organizational improvement is Deming’s (1988) Total Quality Management. A simplified presentation of its principles is provided by Walton (1988).

**Program evaluation.** Program evaluation is conceived of as cybernetic, requiring data collection, interpretation, and possible process revision as a continuous effort throughout all three phases. At some point, a more summative evaluation (see Scriven, 1967) may be necessary. The knowledge base on program evaluation is rich and presents a variety of approaches as to what types of evaluation questions are most crucial and what purposes the evaluations should serve. For example, Tyler (1942) proposed that evaluation focus exclusively on the stated objectives of the program, whereas Stufflebeam (1968) modified this focus to gather the information most needed by the decision-makers of the organization. Guba and Lincoln (1989) and Stake (1967) further modified this to include seeking data and questions from all stakeholders in the process. Similarly, there are significant differences among the theoretical models in the way data are collected. Some (e.g., Deming, 1988) call for highly quantitative data to be gathered throughout the process; others (e.g., Guba & Lincoln, 1989; Stake, 1969) call for qualitative data; yet others (e.g., Eisner, 1991) call for “experts” to exercise their highly subjective professional judgment in evaluating programs. Further information comparing and contrasting these models can be found in McLaughlin and Phillips (1991),
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Conclusions

The knowledge base for the Organizational Improvement Process presented in this article is by no means definitive or exhaustive. Three reasons for this exist. First, this attempt at codifying an improvement knowledge base is in its infancy and certainly somewhat idiosyncratic. Some important works are missing and other works probably should not have been included; much of what is presented is based on the authors’ subjective judgment. The second reason for not considering this effort as complete is because the task can never truly be completed. New knowledge is generated daily and understandings evolve. Works of past importance will fade, giving way to new understanding. This is as it should be. Finally, understanding an element leads to the necessity for understanding the foundation on which that element rests, which, in turn, leads to the discovery of additional and important other elements.

Following this are questions relative to an observation made by Kuhn (1996, p. 3) that science is a process where the continued accretion of knowledge does not necessarily lead to a better understanding of an appropriate framework for interpreting results. This applies equally to organizational improvement; new case studies, models, speculations, etc., will not, in and of themselves, lead to a better operational understanding of the improvement process. Appropriate frameworks must be created from which the literature base can be integrated, thereby providing lenses for evaluating new information.

Then there is an issue of practicality. As the authors began bringing together various pieces of the literature bases, it became apparent that whether this work evolves or is supplanted by different perspectives, the totality of relevant information will be overwhelming. As noted, organizational improvement is a process that encompasses a wide range of the knowledge and skills school leaders might be expected to hold. Weak knowledge or skills in any of the components of the general process may threaten the success of an overall improvement effort. The leadership team’s inability to integrate the various knowledge bases into a coherent conceptual and practical whole may also threaten that success.

At the same time, it is clear that the Organizational Improvement Process must be adapted to the uniqueness of each situation. As Elmore et al. (1996) observed in their case study, echoed by Hall and Hord (2001), this is a one-on-one business where the change agents must work on an individual basis. In most cases, the main change agent will be the organizational leader,
such as a principal or superintendent. But if authors such as Fink (2000) are correct and the Organizational Improvement Process extends for many years, a question is raised as to whether a typical school or district can engage an external change agent for an extended enough period of years. Organizational improvement is a very intimidating function for organizational leaders who have many administrative duties besides the Organizational Improvement Process, no matter how well that process is integrated into the every day life of the school.

The typical school leader holds a master’s degree from a preparation program based on approximately 36 semester hours of course work, of which six hours, at most, can be dedicated to organizational improvement. Certainly the authors of this paper would not suggest that any school leader must be familiar with the entire printed knowledge base. Much redundancy exists, both within each individual topic and across topics generally. But at the present time, the literature bases are fractured and difficult to bring together. If school improvement is to be led by knowledgeable professionals, a means of synthesizing what is known, in a way that facilitates an understanding of the field, must be made more accessible to the nation’s educational leaders.

Notes

1 It should be recognized that while the model presented here rests on the literature, it is an interpretation of the authors.
2 As used here, in relation to a specific planning philosophy, the term “rational” is not intended to differentiate between a “logical” and an “illogical” process. Rather, it refers to a philosophy of planning that is based on broad scanning of the organization’s internal and external environments, determination of specific organizational goals, and criteria-based selection from among alternative approaches for attaining those goals.
3 The process is presented in a linear form only as a means to assist in viewing the overall process and sub elements. The actual process is not highly linear under most planning philosophies.
4 In asserting that certain knowledge bases are associated more closely with a specific phase of the generalized model, the authors recognize that this is somewhat of an oversimplification. For example, while it is during the implementation phase that the greatest pressures on the school culture and climate may be manifested, the educational leader must call upon his or her knowledge of organizational culture and climate in the planning phase to anticipate and prepare for these challenges during implementation.
5 The second knowledge base on planning, Faludi’s “theories in planning,” is not core-related and assumes particular importance in the planning
phase of the model, which calls for familiarity with the various specific planning models that various authors have proposed within these basic philosophies. For example, the currently popular variations of strategic planning are specific models within the rational philosophy of planning. Further discussion of this literature base is presented in this article.

References


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