

Systems Thinking

The key work of school boards – student achievement and community engagement to promote student achievement – is becoming recognized nationally as the primary agenda for boards of education. Increasingly, as local boards face the challenges of providing effective governance, they are using their time and energy to focus on these twin imperatives. It is no longer either possible or credible for boards of education to serve as passive reviewers and judges of the work of others. This oversight role, assigned to local boards during the early years of this century as part of progressive efforts to ensure clean government, has been superceded.

In this new era, the role of education as a key broker of personal, social, and economic success has created a new sense of urgency and a realization that the knowledge formerly reserved for college-bound students must be acquired by all students. At the same time, the technological revolution, symbolized by the personal computer and the Internet, is fundamentally changing how we think, work, and play. Learning to work collaboratively with others rather than in competition requires students to learn to think and behave differently. It also requires schools to employ different strategies for teaching and organizing instruction.

Local boards of education should be the “up front” leaders of public education. They are charged with the responsibility to create the conditions within their school districts that will enable students to meet more rigorous knowledge and performance

standards. Creating optimum conditions for teaching and learning is a formidable challenge. It requires that boards understand issues deeply and align the resources and culture of the system to support the work of principals, teachers, and students. It means that boards take responsibility for results even as they hold others in the school district accountable as well. It means that boards articulate the educational mission of the district and garner the public support and resources needed to achieve that mission.

To help local boards carry out their work, the National School Boards Association has developed a framework called the Key Work of School Boards. This framework outlines 8 key areas that boards need to focus attention on:

- ◆ Vision
- ◆ Standards
- ◆ Assessment
- ◆ Accountability
- ◆ Alignment
- ◆ Climate
- ◆ Collaborative Relationships
- ◆ Continuous Improvement.

The Key Work of School Boards provides a framework for planning and acting that is based on systems thinking. Several frameworks drawn from systems thinking, including the Malcolm Baldrige Criteria, are being used to identify, assess, and benchmark quality organizations in business and industry and, more recently, in education and government as well. The Key Work of School Boards is a framework designed to enable school boards to provide the leadership through governance that will create the conditions under which excellent teaching and accelerated student performance will take place. It is based on the premise that excellence in the classroom begins with excellence in the boardroom.

Through NSBA's on-line Resource Exchange Network (<http://www.nsba.org/keyword/>) and through state school board associations, every board member has access to useful questions, practical strategies, and resources for implementing the key work.

The rest of this chapter provides a brief explanation of each of the key actions and the role it plays in empowering local boards to create quality, results-driven school systems. As you read, keep in mind that "systems thinking" means just that. The key actions do not represent a "laundry list" of items for boards to check off one by one; in fact, the opposite is true. To be a systems thinker is to realize that it is the whole, not its several parts, that makes the difference; these key actions are both linking and inter-weaving. Peter Senge, author of *The Fifth Discipline*, explains this concept by observing that it is impossible to cut an elephant in half and get two smaller elephants!

VISION AND MISSION

Vision is not about what we are, but about what we want to be. Vision captures a critical dimension of dynamic systems. For school boards, it is about where we are going and what kind of school systems we are trying to create now and for the future. A positive vision is future-focused and seeks to shape events rather than simply to let them happen. At this turn of the millennium, we hear much about the need for visionary leaders, leaders who are willing to take risks and who call us to larger purposes. In the same way, public education needs visionary school boards that can articulate the goals of public education and engage the community in support of excellent public schools for all children.

Our history as a nation is replete with examples of powerful visions that continue

to shape our thinking and actions. The Declaration of Independence is perhaps our most famous example of a powerful and positive vision statement. When the Declaration was penned in 1776, the notion that all men are created equal was itself revolutionary, for it envisioned a social state that did not exist anywhere in the world. Martin Luther King's "I Have a Dream" speech presented a powerful vision of a societal viewpoint that did not exist in these United States. John F. Kennedy's vision of space exploration – landing a man on the moon, and bringing him back to earth safely—captured the imagination of the American people. It spawned an era of space exploration that simply could not have been imagined 40 years ago except as science fiction. In modest as well as in these grander contexts, vision is a critical dimension of effective enterprises.

Positive and inspiring visions require the widespread involvement of those whose lives will be influenced and even shaped by the vision. Powerful visions are the product of endless hours of discussion and dialogue among key stakeholders. Not too many years ago, boards were advised to go behind closed doors, hammer out a vision and mission for the school district, and submit it to the community for reaction and review. Today we know better. We know that without involvement there is unlikely to be much commitment on the part of those who must be enlisted to achieve the vision. Compliance and commitment represent two very different levels of engagement.

Closely related to vision is mission. At one level, the mission of an organization is what it is created to do. In effective organizations, the mission statement also captures and reflects the core values and beliefs that guide the organization and its members in pursuit of stated aims and goals. Here is one example of a mission

statement developed by a school district under the leadership of its elected board: “To shape the future, one child at a time, through a community partnership dedicated to excellence in teaching and learning.” A major automobile company talks about its dedication to quality as a primary focus – “At Ford, quality is job one; the quality goes in before the name goes on.” In both examples, core values and beliefs and the flavor of the vision are woven into the mission statement. Each also highlights other important features of powerful mission statements: short, succinct, and memorable.

STANDARDS

Another major component of a systems approach is the establishment of standards for performance. This is as important for schools as it is for other enterprises. In systems thinking, major emphasis is given to quality of performance and product. In order to know whether we are performing in accordance with expectations, we need to establish specific and clearly delineated standards. Those standards need to be tied in realistic ways to the expectations of the community and, just as importantly, to our best intelligence about what knowledge, and skills will be needed by future generations as they respond to the challenges of a rapidly changing social and economic landscape.

For school boards, establishing standards for students and teachers that meet these two criteria presents a unique and critical challenge. For one thing, many states have established curriculum content and student performance standards that apply to all public school students. Boards must know what these standards are and how they impact on the decisions the board makes. Secondly, many states are implementing new graduation requirements that include satisfactory performance on “high stakes” exit examinations. Local boards need to

understand what these tests will require, how they are linked to state-established performance standards, and what the impact will be on students who do not perform satisfactorily.

When the board understands what standards are already in place and how they affect students, teachers, and the community, they can incorporate those standards into district-level standards. These district standards will in most instances need to be more broadly focused to include the social and personal skills that students will need to acquire in addition to academic knowledge.

One way that organizations establish quality performance standards is through benchmarking. Benchmarking involves finding and analyzing the “best practices” with respect to standards and then developing standards that meet or exceed those benchmarks. For example, if the task facing system leaders is to establish mathematics standards for students at each grade level, a critical step would be to identify a district or districts (or national association) that have established mathematics standards with outstanding results. This “exemplary” work becomes the starting point for the standards setting process in the local district. Benchmarking helps the board by giving it a base for action and helps it avoid reinventing the proverbial wheel.

Establishing standards is one of the board’s most important responsibilities. Once standards are in place, the superintendent, working with principals, teachers, and others, is responsible for developing the curricula and identifying and using instructional strategies that will enable students to meet the new standards.

ASSESSMENT AND CONTINUOUS IMPROVEMENT

Promoting outstanding student performance based on clearly delineated standards is central to the key work of school boards. The next step is to determine how well students are doing in meeting those standards. Effective organizations emphasize assessment for two major reasons. What are these reasons, and how do they apply to the Key Work of School Boards?

Margaret Wheatley, a student of effective organizations, argues that information informs and forms the individual and the organization. School boards need information in order to make decisions, not only about how well they are doing, but also about what may be needed in order to ensure that system goals will be met. Without that kind of information, boards can end up making decisions that are based on conventional wisdom, hunches, and what worked in the past. In addition, having accurate information about how well students are doing creates the opportunity for the school system to establish a basis for continuous improvement. When school boards have accurate information in usable formats, they have a powerful tool to ensure that the superintendent and staff are using information to improve the delivery of services. When teachers have access to reliable data about how students are doing, those data inform and empower their work with students. They are able to make instructional decisions with far greater precision and effect.

This process amounts to using information as feedback and guide. When Peter Senge refers to the “learning organization,” he is talking not about schools but about organizations that are so attuned to their environments that they constantly receive information about how they are doing and use that information to

survive and thrive in changing circumstances.

ACCOUNTABILITY

Increasingly, local school districts are being held accountable for what happens to students and how well they perform on a variety of assessment measures. Local school boards, similarly, are being held accountable for student performance. Thirty years ago, most school boards did not pay much attention to student achievement, and it was not really expected that they would. Performance of students was the responsibility of the superintendent and staff—students were routinely tested and placed in programs (sometimes called tracks) that would enable them to be successful. School boards were oversight bodies whose role was to hire the superintendent and ensure that the management of the school district was efficient and effective.

This demarcation of roles worked reasonably well in the Industrial Age, but it fell rapidly from grace in the Information Age. No longer is it credible for a school system to prepare 25 percent of its students for college and the rest for jobs in factories, the world of business and commerce, and agriculture. In the Information Age, successful workers need the same knowledge and competencies formerly reserved for the college preparatory program. Other factors, including the civil rights movement, also militated against the old arrangement. Fundamental changes in society and the workplace forced a redefinition of the educational requirements for students graduating from high school.

In the last 20 years, increasingly rigorous graduation requirements and performance standards have turned the spotlight on accountability and those who lead. One result is that school boards are being called upon to take responsibility for

creating the conditions under which excellent teaching and learning can take place, and to be accountable. This means reporting to state authorities and to the community about how well students are doing and what actions are being taken to address perceived deficiencies. It also means taking steps through governance to ensure that commitments to the state and community are kept.

Accountability is not unique to schools; other organizations have their own accountability imperatives. In business, it is the bottom line. In manufacturing, it is the quantity and quality of production. In the public sector, it is how well services are being provided. In education, it is student achievement.

Effective school boards take accountability very seriously, and they dedicate themselves to being responsible stewards and leaders of public education. They address the critics of public education with solid performance results and take steps to correct deficiencies.

ALIGNMENT

Alignment is another key component of a systems approach to school board leadership. A critical role of the board is to establish quality standards and system priorities focused on enhancing student achievement. But if the work of the board stops there, it will not be enough. The board is responsible to create the conditions under which excellent teaching and student performance will take place.

Effective system leaders understand that standards will not be met nor priorities achieved unless the needed resources and support are in place to get the job done. The next critical step is to align the organization by harnessing the system's resources to the achievement of the system's standards and priorities. Without deliberate attention to alignment issues, the

system is highly susceptible to organizational drift.

Alignment begins with the budget-setting process, but it does not stop there. The school system's budget, approved and adopted by the board, is the key instrument that a board has to ensure alignment. Effective boards ask many questions during the budget-setting process, but they also establish in advance expectations for the allocation of scarce resources. If the board has decided that improving reading performance in the early years is a priority, it must make sure that sufficient resources are provided for staff to achieve that priority. Sometimes it means eliminating programs and initiatives that are less important or have not lived up to expectation; sometimes it means convincing the community or other funding agency that additional resources are critically needed.

Alignment, though, is not confined to resources. Some of the most important aspects of real alignment have less to do with resources and much more to do with mental models, established ways of thinking and acting that get in the way of real progress. For example, the board may believe and espouse that all students can learn complex mathematical concepts; but if only 45% of students take mathematics courses beyond Algebra I, the system is not aligned. The board must play a pivotal role in examining prevailing practices and challenging those that do not support progress toward system goals. This means asking the right questions, requiring data in usable formats, and challenging prevailing aspects of the school system's culture and operating norms.

CLIMATE AND CULTURE

Climate is a key aspect of system culture. Terrance Deal describes culture as "the way we do things around here."

Climate is a byproduct of culture and is dependent on it. Leading-edge organizations are very conscious of climate because of its powerful effect on behavior. In one such organization, a bell rings every time a major initiative experiences a problem. The ringing of the bell reminds everyone that taking risks is fundamental to creating new products and more effective ways of operating. What is celebrated is not the failure but the human spirit of adventure. In such a climate, individuals are empowered to act boldly and think “out of the box.”

Effective school boards give priority attention to climate as well, because it factors importantly in what students and teachers are able to accomplish. Climate also is a critical determinant of how parents and others in the community view schools. For example, if the principal and faculty of a school believe that parents should be seen but not heard, parents who express concerns, make suggestions for improvement, or question their child’s progress will be viewed with suspicion. They may be labeled as troublemakers and their voices discounted. In fact, in too many schools, parents are told implicitly and sometimes explicitly that school matters belong to the professionals and that the role of parents is to make sure their children are in school and doing what they are asked to do.

The problem with that way of thinking is that it alienates parents and others. Many of them recall only the bad experiences their children had in school and the frustration they felt when efforts to address such issues were met with what they perceived as stonewalling and inaction. When schools are subsequently criticized, these parents frequently join the chorus of critics.

School boards need to pay attention to climate and culture and take steps to assure

that the values espoused by the school system are in fact driving and shaping the climate of schools. Most school systems say that they value parents as partners but the climate of individual schools does not always reflect that value. School systems often proclaim that all children can be successful learners, but the climate of schools can give some children a very different, less inclusive impression. When that happens, students’ feelings of competence and self-worth suffer, and with them, their ability to perform.

School boards that understand the powerful effect that climate has on the behavior and performance of teachers and students, as well as on the perceptions of the community, pay attention to the human dimension of the organization. They articulate values such as respect for others, civility, integrity, and inclusion. And they model the behavior they expect from others.

COLLABORATIVE RELATIONSHIPS

Relationships are a critical dimension of effective organizations. That is one reason why students who graduate from high school today need to be skillful in working with others in team situations. Not too many years ago, the dominant metaphor of success for most Americans was competition. We expressed that metaphor in many ways: “to the victor belong the spoils;” “winning isn’t everything, it’s the only thing;” “if you can’t break a record, make the person in front of you do so;” “paddle your own canoe;” “survival of the fittest.” Today, that metaphor has been given a new dimension - competition is still important, but it is not competition among individuals that is emphasized, but competition among teams. We know that when individuals work together effectively, the product of their efforts will almost always be superior to the efforts of any single individual. It is a principle we have known for some time; most breakthrough

research is the product of team effort, not individual performance. The same can be said for successful basketball and football teams as well. What set Michael Jordan apart from most basketball players was not only his incredible physical talents but also his unselfishness on the court – feeding the ball to someone else for the basket, rather than setting himself up to take the shot.

In the Information Age, relationships are not just important, they are critical. The quality of relationships in an organization will largely determine how well that organization produces. Helping to create the conditions that make it possible for teachers to teach well and students to perform excellently is one of the critical challenges of school boards. That means that school boards must have an accurate gauge of the quality of relationships. In addition, they must be prepared to take affirmative action to promote better relationships where immediate improvement is needed. Finally, they must commit to fostering long-term collaborative relationships, inside and outside the school system.

Other stakeholders that boards should strive for collaboration with are the business and political leaders in the community. These people sometimes are perceived as being disinterested in school governance issues or as resisting schools' efforts because of financial or political implications of board actions. But many successful school boards have demonstrated that establishing positive, outreaching relationships with these highly relevant community constituents creates productive partnerships for student success as well as an increase in willingness to make political and financial decisions favorable to enabling successful schools.

Collaboration occurs when people come together and contribute to the solution to a problem or to the creation of new and better

ways of achieving desired results. Collaboration is based on trust and mutual respect. It can be encouraged but it cannot be legislated. It means paying attention to the conditions under which students and teachers work and seeking practical ways to improve those conditions. Working conditions are important, but even more important is the way people are treated in schools and by schools. It also means taking the initiative to keep political leaders informed about school successes and shortcomings, and it means giving them the recognition they deserve when they act in ways that are supportive of the schools system's vision for student achievement. It means earnestly seeking advice from business leaders about what students need to know and be able to do to be successful in the workplace. It also means seeking advice and review of school system business and financial management practices in order to promote greater efficiencies.

Boards who understand systems thinking know that promoting collaboration and cooperation requires bringing teachers, parents, students, and community members into the decision-making process. It is hard work but it is important work! It is work that boards must be willing to do if improving student achievement is the goal. The network of collaboration must include the business community, higher education, community leaders, and all those who have a stake in promoting excellent public schools.

CONTINUOUS IMPROVEMENT

Continuous improvement is perhaps the single orientation that most clearly defines the effective modern organization. Continuous improvement is about paying attention to the quality of what we do. As one continuous improvement advocate expressed it, the goal is not to be ten percent better in any one area of the

operation, it is to be 1 percent better in ten areas of the operation. The Japanese have a word for continuous improvement: *kaizen*. It means taking whatever the product or process is and making it better. It is a way of thinking and acting that is never satisfied with the status quo; it is an objective that is never accomplished.

Boards that believe in continuous improvement ask probing questions about existing practices, not to micromanage but to promote improved practices. The questions are not hostile but affirming. They are the means by which the board can encourage the superintendent and staff to develop the habit of continuously seeking ways to improve existing operations and results.

Finally, effective organizations adopt a customer focus. For many educators, the notion of customer applied to students, parents, and others is alien and offensive. It has an air of commercialism about it that is contrary to the educators' worldview. In this context, however, adopting a customer focus means understanding what we do and for whom.

W. Edwards Deming, one of the architects of quality management, teaches that everyone in the organization is a customer – and has customers. (For extensive information on Deming's ideas, see the web site <http://www.deming.org>.) The central question for each individual is this: whom do I serve and who serves me? Answering this question brings focus and purpose to the work we do.

In school systems, lots of people are doing lots of things, carrying out endless daily routines, without ever consciously considering how what they do can and does contribute to achieving the district's mission and goals. Bus drivers need to understand, for example, that merely transporting students is not their job; the real challenge is to transport them in such a way that they arrive at school ready to learn, not frustrated and anxious. The third-grade teacher serves the fourth-grade teacher by preparing her students to be successful in the next grade, and so forth.

What is true for bus drivers and classroom teachers is even truer for school district leaders. School boards must learn to be customer-focused, to understand whom they serve and who serves them. Doing so builds collaborative relationships and fosters a climate where high achievement is fostered and valued.

In the chapters that follow, each of these key concepts will be explored in greater depth with examples and suggested strategies that boards can use to bring systems thinking into their own school districts.

