Organizing Schools for Improvement

Research on Chicago school improvement indicates that improving elementary schools requires coherent, orchestrated action across five essential supports.

BY ANTHONY S. BRYK

Alexander Elementary School and Hancock Elementary School began the 1990s as two of the worst schools in Chicago in terms of math and reading achievement. Only two miles apart, the schools are in bordering neighborhoods and appear similar in many ways. Both enrolled nearly 100% minority students from families considered low income.

During the 1990s, both launched an array of initiatives aimed at boosting student achievement. Hancock moved impressively forward, while Alexander barely moved the needle on improvement. How did Hancock “beat the odds” while Alexander failed to do so?

This puzzle led us to undertake a systematic longitudinal investigation of hundreds of elementary schools in Chicago, just like Alexander and Hancock. Beginning in 1990, the Consortium on Chicago School Research initiated an intensive longitudinal study of the internal workings and external community conditions that distinguished improving elementary schools from those that failed to improve. That unique 15-year

ANTHONY S. BRYK is president of the Carnegie Foundation for the Advancement of Teaching, Stanford, Calif.
database allowed us to develop, test, and validate a framework of essential supports for school improvement. These data provided an extraordinary window to examine the complex interplay of how schools are organized and interact with the local community to alter dramatically the odds for improving student achievement. The lessons learned offer guidance for teachers, parents, principals, superintendents, and civic leaders in their efforts to improve schools across the country.

FIVE ESSENTIAL SUPPORTS FOR SCHOOL IMPROVEMENT

Students’ academic learning occurs principally in classrooms as students interact with teachers around subject matter. How we organize and operate a school has a major effect on the instructional exchanges in its classrooms. Put simply, whether classroom learning proceeds depends in large measure on how the school as a social context supports teaching and sustains student engagement. Through our research, we identified five organizational features of schools that interact with life inside classrooms and are essential to advancing student achievement. (See Figure 1.)

1. **Coherent instructional guidance system.**
   Schools in which student learning improves have coherent instructional guidance systems that articulate the what and how of instruction. The learning tasks posed for students are key here, as are the assessments that make manifest what students actually need to know and provide feedback to inform subsequent instruction. Coordinated with this are the materials, tools, and instructional routines shared across a faculty that scaffold instruction. Although individual teachers may have substantial discretion in how they use these resources, the efficacy of individual teacher efforts depends on the quality of the supports and the local community of practice that forms around their use and refinement.

2. **Professional capacity.** Schooling is a human-resource-intensive enterprise. Schools are only as good as the quality of faculty, the professional development that supports their learning, and the faculty’s capacity to work together to improve instruction. This support directs our attention to a school’s ability to recruit and retain capable staff, the efficacy of performance feedback and professional development, and the social resources within a staff to work together to solve local problems.

3. **Strong parent-community-school ties.** The disconnect between local school professionals and the parents and community that a school is intended to serve is a persistent concern in many urban contexts. The absence of vital ties
is a problem; their presence is a multifaceted resource for improvement. The quality of these ties links directly to students’ motivation and school participation and can provide a critical resource for classrooms.

4. Student-centered learning climate. All adults in a school community forge a climate that enables students to think of themselves as learners. At a minimum, improving schools establish a safe and orderly environment — the most basic prerequisite for learning. They endorse ambitious academic work coupled with support for each student. The combination allows students to believe in themselves, to persist, and ultimately to achieve.

5. Leadership drives change. Principals in improving schools engage in a dynamic interplay of instructional and inclusive-facilitative leadership. On the instructional side, school leaders influence local activity around core instructional programs, supplemental academic and social supports, and the hiring and development of staff. They establish strategic priorities for using resources and buffer externalities that might distract from coherent reform. Working in tandem with this, principals build relationships across the school community. Improving teaching and learning places demands on these relationships. In carrying out their daily activities, school leaders advance instrumental objectives while also trying to enlist teachers in the change effort. In the process, principals cultivate a growing cadre of leaders (teachers, parents, and community members) who can help expand the reach of this work and share overall responsibility for improvement.

Using extensive survey data collected by the consortium from teachers, principals, and students, we were able to develop school indicators for each of the five essential supports, chart changes in these indicators over time, and then relate these organizational conditions to subsequent changes in student attendance and learning gains in reading and mathematics. Among our findings:

- Schools with strong indicators on most supports were 10 times more likely to improve than schools with weak supports.
- Half of the schools strong on most supports improved substantially in reading.
- Not a single school weak on most supports improved in mathematics.
- A material weakness in any one support, sustained over several years, undermined other change efforts, and improvement rarely resulted.

This statistical evidence affords a strong warrant that how we organize schools is critical for student achievement. Improving schools entails coherent, orchestrated action across all five essential supports. Put simply, there is no one silver bullet.

DYNAMICS OF IMPROVEMENT

Schools are complex organizations consisting of multiple interacting subsystems (that is, the five essential organizational supports). Personal and social

ARTICLE AT A GLANCE

Why do some schools improve dramatically while similar schools fail? A study by the Consortium on Chicago School Research found that how schools are organized and how they interact with their communities can make the difference.

The researchers found five essential supports for school improvement. Those supports are:

- A coherent instructional guidance system;
- The school’s professional capacity;
- Strong parent-community-school ties;
- A student-centered learning climate; and
- Leadership that drives change.

Schools with strong indicators for these supports were much more likely to improve than were schools with weak indicators.
considerations mix deeply in the day-to-day workings of a school. These interactions are bound by various rules, roles, and prevailing practices that, in combination with technical resources, constitute schools as formal organizations. In a sense, almost everything interacts with everything else. That means that a true picture of what enables some schools to improve and others to stagnate requires identifying the critical interconnections among the five essential supports: 

How do these five essential supports function together to substantially change the odds for enhancing student engagement and academic learning?

Schools that improved student attendance over time strengthened their ties to parents and community and used these ties as a core resource for enhancing safety and order across the school. This growing sense of routine and security further combined with a better-aligned curriculum that continually exposed students to new tasks and ideas. Engaging pedagogy afforded students active learning roles in the classroom. High-quality professional development aimed to enhance teachers’ capacity to orchestrate such activity under the trying circumstances that most confront daily. When this combination of conditions existed, the basic recipe for improving student attendance was activated.

In terms of the organizational mechanisms influencing academic achievement, this can be told in two contrasting stories. Schools that stagnated — no learning improvement over several years — were characterized by clear weaknesses in their instructional guidance system. They had poor curriculum alignment coupled with relatively little emphasis on active student engagement in learning. These instructional weaknesses combined with weak faculty commitments to the school, to innovation, and to working together as a professional community. Undergirding all of this were anemic school-parent-community ties.

In contrast, schools in which student learning improved used high-quality professional development as a key instrument for change. They had maximum leverage when these opportunities for teachers occurred in a supportive environment (that is, a school-based professional community) and when teaching was guided by a common, coherent, and aligned instructional system. Undergirding all of this, in turn, was a solid base of parent-community-school ties.

There is a logic to reading Figure 1 from left to right — leadership drives change in the four other organizational supports — but the actual execution of improvement is more organic and dynamic. Good teachers advance high-quality instruction, but developing good teachers and retaining them in a particular school depends on supportive school leadership and positive work relations with colleagues. Meaningful parent and community involvement can be a resource for solving problems of safety and order; but, in a reciprocal fashion, these ties are likely to be stronger in safe and orderly schools. This reciprocity carries over to leadership as the driver for change. While a principal commands formal authority to effect changes in the four other organizational supports, a school with some strengths in these four supports is also easier to lead.

Arguing for the significance of one individual support over another is tempting, but we ultimately came to view the five supports as an organized system of elements in dynamic interaction with one another. As such, primary value lies in their integration and mutual reinforcement. In this sense, school development is much like baking a cake. By analogy, you need an appropriate mix of flour, sugar, eggs, oil, baking powder, and flavoring to produce a light, delicious cake. Without sugar, it will be tasteless. Without eggs or baking powder, the cake will be flat and chewy. Marginal changes in a single ingredient — for example, a bit more flour, large versus extra-large eggs — may not have noticeable effects. But, if one ingredient is absent, it is just not a cake.

Similarly, strong local leadership acting on the four other organizational elements constitutes the essential ingredients for spurring school development. Broad-based instructional change and improved student learning entail coordinated action
across these various domains. Correspondingly, student outcomes are likely to stagnate if a material weakness persists in any of the supports. The ensemble of supports is what’s essential for improvement. Taken together, they constitute the core organizational ingredients for advancing student engagement and achievement.

BUILDING TRUST

Affecting a coherent improvement plan across the essential supports can be a daunting challenge. Embracing a coherent improvement plan challenges longstanding norms about teacher autonomy in the classroom and a laissez-faire orientation toward professional development and innovative practice. Not surprisingly, cultivating teacher buy-in and commitment becomes a central concern in promoting the deep cultural changes required for such an initiative to be successful. At this juncture, concerns about building relational trust come forcefully into play.

Some of the most powerful relationships found in our data are associated with relational trust and how it operates as both a lubricant for organizational change and a moral resource for sustaining the hard work of local school improvement. Absent such trust, schools find it nearly impossible to strengthen parent-community ties, build professional capacity, and enable a student-centered learning climate. The reverse is also true: Low trust is linked to weaker developments across these organizational supports.

Given the asymmetry of power in urban school communities, principals play a key role in nurturing trust formation. Principals establish both respect and personal regard when they acknowledge the vulnerabilities of others, actively listen to their concerns, and eschew arbitrary actions. If principals couple this empathy with a compelling school vision, and if teachers see their behavior as advancing this vision, their personal integrity is also affirmed. Then, assuming principals are competent at managing routine school affairs, an overall ethos conducive to building trust is likely to emerge.

Such leadership uses power constructively to jump-start change. In the initial stages, school leaders cultivate low-risk collaborations among faculty members who are predisposed to working together. School-based professional development is designed to advance instructional improvement and enhance a sense of community and shared commitments among faculty. Similarly, principals engage parents and other community members in activities that en-
able participants to contribute to the school and advance the learning of their own children and thus experience a sense of efficacy. “Small wins” gradually build a school community’s capacity for the greater challenges (and higher-risk social exchanges) that may lie ahead.

On balance, as principals seek to initiate change in a school, not everyone is necessarily affirmed or afforded an equal voice. Relational trust can emerge only if participants show their commitment to engage in the hard work of reform and see others doing the same. Principals must take the lead and extend themselves by reaching out to others. On occasion, they may be called on to demonstrate trust in colleagues who may not fully reciprocate, at least initially. But in the end, principals also must be prepared to use their authority to reform the school community through professional norms. Interestingly, such authority may rarely be needed once new norms are firmly established.

UNRECOGNIZED CHALLENGES

In many recent discussions about school reform, ideas about parent involvement and school community contexts fade into the background. Some school reform advocates believe only instruction and instructional leadership matter. This perspective assumes that a school’s social and personal connections with local families and communities play a small role in reform. Our evidence, however, offers a strong challenge. To be sure, instruction matters—a lot. But social context matters too. We have documented that strength across all five essential supports, including parent-school-community ties, is critical for improvement to occur in all kinds of urban schools. Unfortunately, we have also learned that this organizational development is much harder to initiate and sustain in some community contexts than others.

As data accumulated in Chicago and school-by-school trends in attendance and student learning gains became clear, a complex pattern of results emerged. Improving schools could be found in all kinds of neighborhoods varying by socioeconomic and racial/ethnic composition. Stagnating schools, in contrast, piled up in very poor, racially isolated African-American neighborhoods. We became haunted by the question, “Why? What made reform so much more difficult to advance in some school communities?”

Our analyses led us to two different answers. First, the social capital of a neighborhood is a signif-
icant resource for improving its local school. We found that the latter was much more likely in neighborhoods where residents had a history of working together. In contrast, the absence of such collective efficacy in the surrounding community increased the likelihood that a troubled school would continue to stagnate. Correspondingly, communities with strong institutions, especially religious institutions, were more supportive contexts for school improvement. These institutions afford a network of social ties that can be appropriated for other purposes, such as improving schools. They also create connections that can bring new outside resources into isolated neighborhoods.

So, differences among neighborhoods in their bonding and bridging social capital help explain why the essential supports were more likely to develop in some neighborhoods than others. But this was only a partial answer for a subset of the school communities.

A second mechanism was also at work. We found that the proportion of children who were living under extraordinary circumstances — neglect and abuse, homeless, foster care, domestic violence — also created a significant barrier to improvement in some schools. To be clear, these students were learning at about the same rates as their classmates in whatever school they were enrolled. So, the learning gains for these particular students were not depressing the overall results for their schools. But the odds of school stagnation soared when a concentration of these students appeared in the same place. On balance, schools are principally about teaching and learning, not solving all of the social problems of a community. However, when palpable personal and social needs walk through doors every day, school staff can’t be expected to ignore those needs. Our evidence suggests that when the proportion of these needs remains high and pressing, the capacity of a school staff to sustain attention to developing the five essential supports falls by the wayside. A few schools managed to succeed under these circumstances, but most did not.

In sum, a nettlesome problem came into focus on improving student learning to truly disadvantaged communities where social capital is scarce and human need sometimes overwhelming. These schools face a “three-strike” problem. Not only are the schools highly stressed organizations, but they exist in challenged communities and confront an extraordinary density of human needs every day.

Our findings about schooling in truly disadvan-

---

Are you an Emerging Leader?

**PDK’s Emerging Leader** program recognizes top educators age 40 and under from around the world for their professional achievements, particularly those related to PDK’s tenets of leadership, research, and service. The award includes a travel stipend to attend the PDK conference, the opportunity to publish with PDK, access to grant opportunities, and invitations to participate in other PDK initiatives.

**Sound like you?**

Applications will be accepted February 15 through May 17, 2010. Find out more at [www.pdkemergingleaders.org](http://www.pdkemergingleaders.org).
taged communities offer a sobering antidote to a heady political rhetoric of “beating the odds” and “no excuses.” To be sure, we believe that all schools can and must improve. Such claims represent our highest, most noble aspirations for our children, our schools, and systems of schools. They are ideas worthy of our beliefs and action. But there are also facts, sometimes brutal facts. Not all school communities start out in the same place and confront the same problems. Unless we recognize this, unless we understand more deeply the dynamics of school stagnation, especially in our most neglected communities, we seem bound to repeat the failures of the past.

Our concluding point is straightforward — it is hard to improve what we do not understand.

We need more attention on how to improve schools in these specific contexts. All plausible ideas for educational improvement deserve serious consideration. Absent systematic analysis of not only where we succeed but also where and why we fail, we will continue to relegate many of our students and their teachers to a similar fate.

BELIEF AND DOUBT

Our work has been motivated by a deep belief that schools can and must do much better if we are to revitalize the American dream of opportunity for every child. A good education is now more important than ever in creating the pathway to this opportunity. Unfortunately, for far too many, this pathway is now closed, and opportunity dies early. Thomas Jefferson’s observation about America’s noble experiment in democracy — “If a nation expects to be ignorant and free, in a state of civilization, it expects what never was and never will be” — is truer today than ever before.

However, a belief in the power of schooling and in our ability to improve this institution must also coexist with a modicum of doubt — a critical perspective — about the wisdom of any particular reform effort. Virtually every initiative involves at least some zone of wishful thinking, and even good designs typically require executing a strategy for which there is no established game plan. We now know, for example, that some schools, especially in poorer African-American neighborhoods, were disproportionately left behind. This is a brutal fact that had to be told; our role as an agent informing reform meant bringing it to light. Absent our inquiry, this result could easily have remained hidden in a more casual accounting of the overall positive test score trends.

But we must also do more than just tell the facts. We must seek to understand, and we must also ask why. To see race and class differences in rates of improvement and to just stop there without probing deeper simply creates more fodder for conflict among critics and apologists of the current state of affairs. This dysfunctional discourse advances no common understandings and helps no children and no families. What is really going on in these school communities, and why are the important tasks of improving schools so difficult to advance? Asking these questions, bringing evidence to bear on them, and in the process advancing public discourse about the improvement of public education is a vital role that applied social inquiry can and should fill in a technically complex and politically diverse democratic society. In the end, melding strong, independent disciplined inquiry with a sustained commitment among civic leaders to improve schooling is the only long-term assurance that an education of value for all may finally emerge.