CONSORTIUM ON
CHICAGO SCHOOL RESEARCH
AT THE UNIVERSITY OF CHICAGO

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The Essential Supports for School Improvement
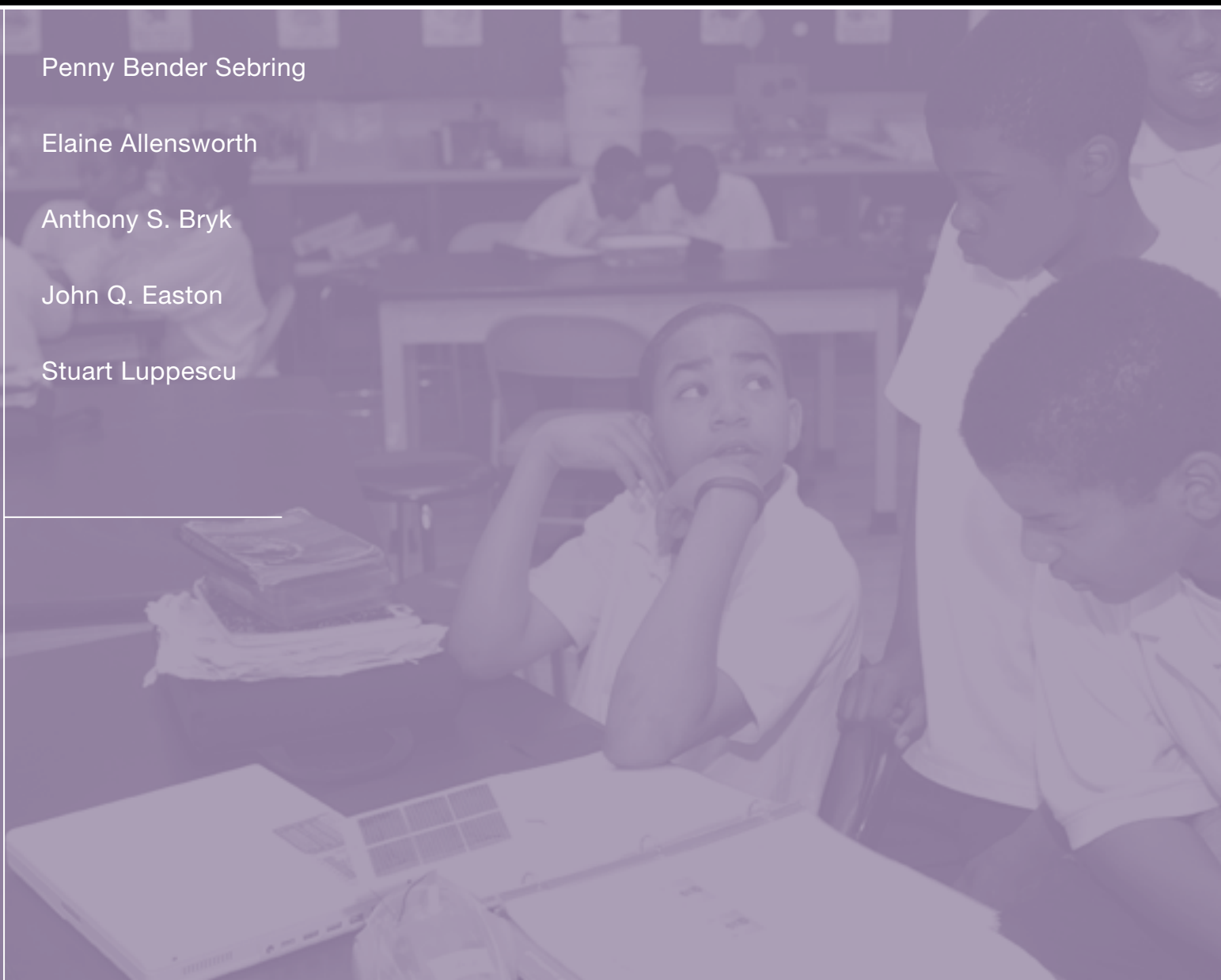
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Executive Summary

This report sets forth a framework of essential supports and contextual resources for school improvement, examines empirical evidence on its key elements and how they link to improvements in student learning, and investigates how a school's essential supports interact with community context to affect student learning. The purpose of this research is to establish a comprehensive, empirically grounded practice framework that principals, teachers, parents, and school-system leaders can draw on as they work to improve children's learning in Chicago and elsewhere. This publication is an abbreviated version of a larger study that will be published as a book.

The focus of this report is Chicago public elementary schools during the period of 1990 through 1996, an era when an extraordinary natural experiment in school change took place. Under the 1988 school reform law, local school councils selected principals who brought very different leadership styles to school-reform efforts and attacked a broad set of problems in highly diverse ways. The system as a whole made progress during this time, but there was substantial variation across school communities in achievement trends. Thus, conditions were favorable for exploring why some elementary schools were able to make substantial progress and others stagnated.

A Framework of the Essential Supports and Contextual Resources for School Improvement

The Five Essential Supports

Leadership, acting as a catalyst, is the first essential support for school improvement. Leadership is conceptualized broadly as being inclusive, with a focus on instruction and a strategic orientation. Deft leadership, in turn, stimulates and nourishes the development of the four other core

organizational supports: parent-community ties, professional capacity of the faculty and staff, a student-centered learning climate, and ambitious instruction.

Parent-community ties and professional capacity of the faculty and staff reflect the individual and collective capacities of the adult actors in the school community. Parents who support their children and reinforce learning expectations at home contribute significantly to school improvement. Through volunteer activity and participation in school decision making, parents also are critical partners of the school.

Professional capacity depends greatly on the knowledge, skills, and dispositions of the faculty and staff, and their ongoing learning and professional growth. Equally as important as the skills of individual teachers, though, is the presence of a school-based professional community focused on developing instructional capacity across the school. Partnership and cooperation among teachers, parents, and community members provide the social resources needed for broad-based work on conditions in the school and the challenges involved in improving student learning.

The work of adult actors, in turn, results in the conditions that directly affect student learning—learning climate and ambitious instruction. The most basic requirement is a safe and orderly environment that is conducive to academic work. Schools that are most effective will further create a climate where students feel motivated and pressed to work hard while knowing that adults will provide extensive academic and personal support. Ultimately classroom instruction is the single most direct factor that affects student learning. Ambitious, coherent instruction and a curriculum that is coordinated within and across grades are essential. It is when the other four supports are focused on supporting ambitious instruction that we should see improvements in student learning.

Contextual Resources

The development of the five essential supports depends in significant ways on features of local context. Previous studies have established the critical role of relational trust across a school community.[1] School size and the stability of the student body have also been linked to school improvement.[2] This report adds new findings about the linkage between the social context of school communities and their capacities to improve. In some schools, the cumulative stresses of poverty, crime, and other social problems make improvement efforts especially daunting. At the same time, because they contribute to safer, more viable communities, social resources in the community, such as churches and voluntary organizations, help to build a social foundation that facilitates stronger ties between the school and the community.

Evidence for the Framework

The Essential Supports

In this study we investigated the extent to which strength in the essential supports was linked to improvement in learning gains and the extent to which weakness was linked to stagnation in learning gains. To assess school improvement, we used scores on the Iowa Tests of Basic Skills (ITBS) to create a measure of academic productivity for each school in both reading and math. We calculated the amount students learned each year and whether these learning gains increased over time. Thus, improving schools showed larger learning gains at the end of our study, the 1995–96 academic year, than in the initial year, 1990–91.

To measure the essential supports in each elementary school, we drew on teacher and student surveys conducted by the Consortium on Chicago School Research (CCSR) in the spring of 1994. From these surveys we created a series of measures that capture the degree to which components of the essential supports existed in Chicago elementary schools.

Impact of the Essential Supports

We found that schools strong in most of the essential supports were at least ten times more likely than schools weak in most of the supports to show substantial gains in both reading and mathematics. These schools also were very unlikely to stagnate. In contrast, not a single school that was weak in most of the supports showed substantial improvements in mathematics. Schools demonstrating weakness on most of the core indicators were four to five times more likely to stagnate than schools with strong overall organizational capacity scores. Particular combinations of supports, such as curricular alignment, an orientation toward innovation,

and teacher commitment to the school, were decidedly beneficial. Moreover, subsequent analyses of more recent surveys and test-score trends further validate these findings, confirming the linkages between strength in the essential supports and subsequent improvements in learning gains.

Community Context

In general, we found that there were both improving and stagnating schools in all kinds of communities. However, there were disproportionately more improving schools among the predominantly Latino, racially diverse, and racially integrated schools. Stagnating schools were more common among predominantly African-American schools in low-income or very poor communities. Among African-American schools of moderate income, there were roughly equal numbers of substantially improved and stagnating schools.

To learn more about why these differences in school improvement rates occurred, we turned to a growing body of research in urban sociology on the quality of social relationships in communities and how these relationships influence the quality of everyday life and shape collective capacity to solve local problems. These relationships are often called "social capital."[3]

We obtained community-level data from other organizations and agencies to explore the potential influence of these community factors. School community social capital measures were developed from surveys collected by the Project on Human Development in Chicago Neighborhoods (PHDCN) and from crime statistics compiled by the Chicago Police Department. In addition, a further challenge for some Chicago elementary schools is the relatively large number of children who live under extraordinary circumstances and bring significant social or emotional problems with them to school. One such group of students is those who have been subject to abuse or neglect. For example, during the period of our study, on average 15 percent of students in the Chicago Public Schools (CPS) had been substantiated by social services as abused or neglected at some point in their elementary career. In almost 10 percent of schools, however, this number swelled to more than 25 percent of the students enrolled. This raises the question of whether the concentration of students living under such extraordinary circumstances

poses exceptional demands on schools that may make it more difficult to sustain attention on improvement efforts. To investigate this question, we obtained data from the Chapin Hall Center for Children on the percentage of students in each elementary school for whom there was a substantiated case of abuse or neglect at any time in their lives.

Impact of Community Context

We found that schools with strong essential supports were more likely to exist in school communities with strong social capital—active religious participation, collective efficacy, and extensive connections to outside neighborhoods. Schools with strong supports also were found more often in communities with a low crime rate, and they were far more likely to exist in school communities with a low density of abused or neglected children.

Communities with weak social capital—low levels of religious participation, collective efficacy, and few social connections beyond the neighborhood—were likely to have weak essential supports in their schools. Weak supports also were more typical in communities with high crime rates and relatively higher percentages of abused or neglected children. Taken together, these results suggest that positive school community conditions facilitate the development of the supports, while the presence of crime and a high density of students living under extraordinary circumstances inhibit them.

We also analyzed the combined influence of the essential supports and community context on the probability of improvement in reading and math. In general, the essential supports were important for schools in all types of communities. However, the structure of these relationships varied as a function of community factors. School communities with high levels of social capital and low densities of abused or neglected students could improve with average levels of the essential supports. In these contexts, even average levels of essential supports seemed to protect against stagnation and increased the odds of improvement in student learning.

In contrast, for schools in communities with low social capital and for those serving a high density of abused or neglected students, the essential supports needed to be exceptionally robust to result

in improvements. The probability of stagnation for this group of schools was high if they had weak *or* average essential supports. These patterns suggest that the school works in interaction with the community: if social capital is weak in the broader school context, the social organization inside the school must be strong enough to compensate.

It is encouraging that schools with strong essential supports located in communities with relatively low levels of social capital and high densities of abused or neglected children were able to improve and showed higher-than-average learning gains. The discouraging news is that schools with strong essential supports were relatively rare in these communities.

Interpretive Summary

It is significant that the greatest improvements occur when there is organizational strength in all the essential supports. Each support appears to facilitate the functioning of the other supports. For instance, even though the quality of instruction has the most direct effect on student learning, being able to provide such instruction requires strength in other areas, such as professional capacity and a student-centered learning climate.

The opposite is also true: a weakness in any organizational element can undermine strengths in other areas. A school can be doing a good job of communicating with parents and welcoming them to the school, but if parents see disciplinary problems increase or observe their children struggling in poorly organized classrooms, they will not continue to support the school.

The importance of strength in multiple essential supports suggests that narrow interventions will have limited success in improving student learning. For example, investments in integrating technology into the curriculum will have little effect if students do not feel safe coming to school and if there are frequent disruptions in their classrooms. Hence, the framework of essential supports and contextual resources embraces a holistic, coherent view of the processes of school development and raising student academic achievement.

We have also documented that it was very unlikely that we would find strong essential supports in schools with a relatively high concentration of children living under extraordinary circumstances. We suspect that teachers and administrators in these schools were so focused on the children and their needs that they had few resources remaining to sustain attention to the core processes of school improvement.

This research brings greater clarity to an enduring problem in Chicago. Schools located in communities with the least social capital are the most difficult to change for the better. This difficulty is intensified by the large proportion of students who come to school with extraordinary needs. The needs of these students divert staff resources away from building a school's essential supports. The resources necessary to achieve substantial improvement in the most extreme cases are formidable indeed.

We celebrate the substantial progress that Chicago's elementary schools made in the 1990s. We identified 95 schools that showed substantial improvement in academic productivity in reading and mathematics. Accumulated over the eight years of instruction that a child might receive (CPS elementary schools generally include eighth grade), we estimated that top-performing schools obtained an extra half year of learning in reading and over 1.25 years more learning in mathematics.[4] In addition, the evidence we have shown for the essential supports can serve as a useful guide and thus offers hope for strengthening urban elementary schools and improving students' learning opportunities.

At the same time, we worry about the socially isolated, crime-ridden communities where there is little social capital. While the school system must press forward to strengthen the essential supports in these schools, it also needs to build and support powerful partnerships at the community level, as well as the city, county, state, and federal levels to address the very serious challenges facing our city youth that go beyond the schoolyard.

Endnotes

1 Bryk and Schneider (2002).

2 Sebring, Bryk, Easton, Luppescu, Thum, Lopez, and Smith (1995); and Kerbow (1998).

3 Sampson, Raudenbush, and Earls (1997).

4 The average base learning gain (in grade equivalents) in CPS, averaged for 1990–91 and 1990–92, in reading and mathematics at all elementary grade levels was 0.87 and 0.82, respectively. Applying the percent improvements to these base gains and then accumulating these effects over eight grades results in the numbers reported here.