

Research Brief:

Organizing Schools for Improvement: Lessons from Chicago



“While it has been the practice of many districts and schools to concentrate reform efforts on just one or two elements within one or two of these subsystems (for example, improving the quality of teachers or mandating a common instructional curriculum), the evidence presented here attests that these systems stand in strong interaction with one another. As a consequence of this interactivity, meaningful improvement typically entails orchestrated initiatives across multiple domains.” – Bryk et al., p. 197



The *Framework for Great Schools* was developed to provide guidance for schools as they look to develop strategies to strengthen student achievement. Its aim is to meet schools’ demand for increased clarity on what the best research says about how schools improve in diverse contexts. While the *Framework* is based on a large body of research, there is one landmark study that was particularly influential in its development¹. This research brief summarizes that study in order to provide a deeper understanding of the *Framework* and how schools can apply its lessons.

The Essential Elements of School Improvement and Their Interplay

“More specifically, an adequate framework for conceptualizing school improvement demands an explanation of how the organization of a school and its day-to-day operations, including its connections to parents and community, interact with work inside its classrooms to advance student learning.” – Bryk et al., pp. 47–48

The five essential elements²:

- Effective School Leadership
- Rigorous Instruction
- Collaborative Teachers
- Supportive Environment
- Strong Family-Community Ties

The sixth element that enables the others:

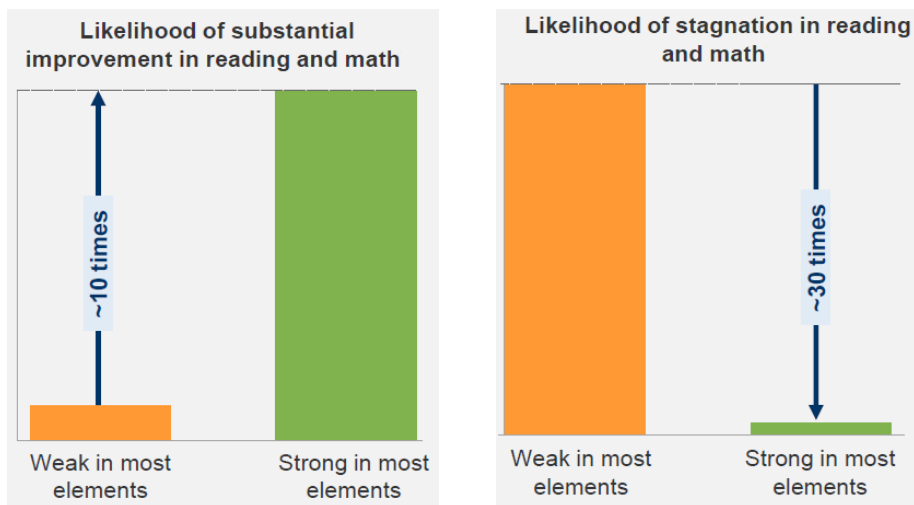
- Trust

¹ For a more thorough description of the research, see also: Bryk, Anthony S., Penny Bender Sebring, Elaine Allensworth, John Q. Easton, and Stuart Luppescu. *Organizing Schools for Improvement: Lessons from Chicago*. Chicago: University of Chicago Press, 2010, or: Sebring, Penny Bender, Elaine Allensworth, Anthony S. Bryk, John Q. Easton, and Stuart Luppescu. “The Essential Supports for School Improvement. Research Report.” Consortium on Chicago School Research (September 2006), <https://ccsr.uchicago.edu/sites/default/files/publications/EssentialSupports.pdf>.

² The original names of the five elements have been modified for the *Framework for Great Schools* in order to provide clarity and alignment with existing work in NYC. For a detailed look at connections, see the [Alignment across the NYCDOE: Linking Each Element of the Framework for Great Schools with NYCDOE Measures and Resources](#) document.

The five essential elements of school improvement emerged from a long and detailed research process. Researchers started by drawing upon the large body of existing research into school improvement, and from it created and validated 36 measures of school strength and support. When researchers looked at the impact of these measures on student achievement, they found that while measures of a single area of school strength or community support is predictive of student achievement, the combination of multiple measures is much more powerful. What's more, they found that individual areas of strength and weakness do not exist in isolation, but are highly interdependent. It became clear to researchers that one area of strength in schools and communities strengthens other areas, while even a single area of weakness undermines the others. **This powerful evidence of interplay among the areas of school and community support reminds us that no area can be ignored, and improvement in one area can be leveraged to create improvement others.**

In order to help communicate and apply these lessons in schools, the 36 measures were consolidated into five elements of sufficient predictive power to be defined as essential to school improvement. These five elements were found to be the most predictive indicators of improvement in student achievement to emerge from the research.



The Cake Analogy

A helpful comparison to emerge from stakeholder discussions in Chicago is the cake analogy. The importance of each of the elements to the whole and the interplay among them is similar to the ingredients of a cake. Flour, sugar, eggs, oil, baking powder, and flavoring are all necessary ingredients for baking a cake. While some changes in the amounts of each ingredient—say less sugar or an extra egg—may still result in a delicious cake, remove one ingredient entirely and you no longer have a cake. Without sugar, it will be bland. Without baking powder, it will be flat and chewy.

For schools it is similar. While some variation in the emphasis or approach to each of the elements can result in a good school, a school that is clearly weak in any of these elements will struggle. Likewise, trust, the sixth element in the *Framework*, can be considered the heat from the oven that allows the ingredients to combine into a coherent whole. Without it, none of the other elements can have the desired effect on student achievement.

As seen in the graphs above, schools that were strong in three or more elements were 10 times more likely to show sustained improvement than schools that were weak in three or more elements. The inverse was also true; schools weak in most elements were 30 times more likely to stagnate than schools that were strong in most elements.

Trust: The Sixth Essential Element

“... Our analyses document that in schools where the base level of trust was high, improvements occurred in subsequent years in teachers’ orientation toward innovation and commitment, parent involvement, and safety and order. The reverse was also true: low trust was linked to weaker developments across all organizational subsystems.” – Bryk et al., p. 207

In addition to the identification of the five essential elements, this research found that relational trust (defined as the level of trust within schools and between the school and the wider community) is an indispensable component of school improvement. Trust was found to be a critical school resource that has a strong reciprocal relationship with the five essential elements. Schools and communities with high levels of relational trust were much more likely to strengthen other elements over time, while schools with low levels of trust were more likely to weaken in the five elements. In addition, schools that made progress in strengthening the five elements also experienced improvements in measures of relational trust. In this way, sustained gains in achievement were often accomplished through improvement strategies that achieved “small wins,” generating buy-in from staff and the surrounding community that was then used to tackle larger challenges. This research finding supports the Chancellor’s goal of building trust within schools and with local communities, and led to the addition of trust as the sixth essential element within the *Framework for Great Schools*³.

Community Context

Also noteworthy was the finding that the essential elements are important in all communities, from the most advantaged contexts to the most disadvantaged. Schools in more challenging contexts required more robust support in each of the *Framework* elements, but when most elements were strong, the likelihood of sustaining improvement increased dramatically.

Origins of the Research

The foundation of the *Framework* is the powerful research into how schools, in the challenging contexts of a large urban school district, manage to create and sustain improvement. Published in 2006, this study focused on the

Research Methods

- Longitudinal study of 390 schools using mixed methods
- In-depth field observation of 22 schools:
 - Documented organizational goals, strategies, community involvement, and changes
 - Guided wider research and used to develop and validate surveys
- Extensive demographic and community data:
 - Micro-neighborhood data for socioeconomic and community resource data from the Project of Human Development in Chicago Neighborhoods
 - Administrative records on crime, census data, public aid, and public housing
 - Social service utilization from the Chaplin Hall Center for Children
- Survey data:
 - Total of approximately 100,000 teacher, principal, and student surveys containing multiple questions for each measure of school strength and support administered over six years
 - High response rate that was representative of Chicago Public Schools as a whole
- Measures of learning:
 - Iowa Test of Basic Skills (ELA and Math) and attendance records from 1990 to 1996
 - Standardized and scaled to measure growth over time

(See: Bryk et al., pp. 25, 225, 231, 245)

³ For further reading on trust in schools, see: Tschannen-Moran, Megan. *Trust Matters: Leadership for Successful Schools*. Hoboken, NJ: Jossey-Bass/John Wiley & Sons, 2014, or: Bryk, Anthony S., and Barbara Schneider. “Trust in Schools: A Core Resource for School Reform.” *Educational Leadership* 60, no. 6 (March 2003): 40–45, <http://www.ascd.org/publications/educational-leadership/mar03/vol60/num06/Trust-in-Schools@-A-Core-Resource-for-School-Reform.aspx>.

Chicago Public Schools as they underwent a large-scale change to empower democratic community participation in local school improvement. Chicago's 575 public schools⁴ developed their own plans for improving student achievement with support of the local community⁵. The result was a broad array of approaches implemented across a diversity of schools and contexts with varying degrees of intensity and community support. This variation created a "natural experiment" that provided researchers the rare opportunity to test and compare the influence of all of these factors on student achievement.

Anticipating the unique opportunity this large-scale reform afforded them, the Consortium on Chicago School Research conducted a highly detailed longitudinal study of Chicago Public Schools during the reform period of 1990 to 1996. They found that among all the schools involved, approximately one-third made significant and continuous improvement, one-third displayed some encouraging signs initially without sustaining their progress, and the final third stagnated. In order to understand why some schools had succeeded in their improvement efforts while others had not, the researchers drew on the six years of data to compare the schools and their approaches to improvement, implementation strategies, community resources, demographics, neighborhood economic profiles, and local crime rates. **The story that emerged from this data was that there was no single formula that explained sustained improvement, but rather five key elements whose strength or weakness strongly predicted a school's chances of improvement or stagnation in the long term.**

Additional Resources for the *Framework for Great Schools*

- [A Vision for School Improvement: Applying the *Framework for Great Schools*](#)
- [Alignment across the NYCDOE: Linking Each Element of the *Framework for Great Schools* with NYCDOE Measures and Resources](#)
- [Research brief: *Learning to Improve: How America's Schools Can Get Better at Getting Better*](#)
- [Guiding questions for schools](#)

⁴ The number of schools was not constant over the research period. The number 575 should be seen as an approximation to the number of schools at a given time.

⁵ Newly formed Local School Councils exercised authority over school policy. They were local elected bodies made up of two teachers, six parents, two community members, the principal, and, in the case of high schools, one student representative.