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Teachers Unions and Management Partnerships

How Working Together Improves Student Achievement

By Saul A. Rubinstein and John E. McCarthy

March 2014

Center for American Progress



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Introduction and summary

For more than a decade, the debate over public school reform has created friction between teachers unions, administrators, school boards, parents, policymakers, and other stakeholders in public education and has fueled disagreements over how to improve the quality of teaching and learning for children. While many factors make consensus elusive when it comes to school reform, a key obstacle to finding agreement around educational improvements and bringing such improvements to fruition is ideological policy divisions.¹

Yet within some districts and schools, union leaders and school administrators have found an alternate path to reform—one that is based on building strong relationships that facilitate collaboration among educators and is focused on teaching quality and educational improvement for students. This report explores the impact of school-level, union-management, institutional partnerships on teacher collaboration and student performance. Moreover, it offers strong evidence for this alternative direction to the policy debate on public school reform by analyzing the role of union-management relations in educational quality.

Tests can reveal deficiencies in student knowledge but can offer little more beyond alerting parents and teachers to a problem. Union-management partnerships, because they are problem focused, can take the critical next steps and help drive thinking about ways to increase student learning. These types of partnerships are designed to use collaboration among educators to find solutions to gaps in student achievement and then effectively implement those solutions because those closest to the problem—with tacit knowledge of it—are key stakeholders in the improvement process.

An earlier report for the Center for American Progress, “Reforming Public School Systems through Sustained Union-Management Collaboration,”² examined cases of school reform that resulted from collaborative partnerships between teachers unions and administrators working together in innovative ways to improve

teaching quality and student performance. That report analyzed these cases to identify the common elements that all districts with long-term union-management partnerships shared in common. This current report looks deeper into these partnerships to examine the patterns of collaboration that occur within schools between teachers and administrators to see how they affect student performance. This report takes an organizational perspective, looking at schools as systems and examining school governance, patterns of communication and collaboration, teacher participation in decision making, and industrial relations. Particular interest is paid to the way teachers work with each other and how union representatives work with principals at the school level.

This latest study finds that:

- **Formal partnerships help improve student performance.** The quality of formal partnerships between teachers unions, administrators, and teachers at the school level is a significant predictor of student performance, as well as performance improvement, after poverty and school type are taken into account.
- **Partnerships lead to more extensive communication between teachers.** Higher-quality, school-level teacher-administrator partnerships predicted more extensive school-level collaboration and communication around: student-performance data; curriculum development, cross-subject integration, or grade-to-grade integration; sharing, advising, or learning about instructional practices; and giving or receiving formal or informal mentoring.
- **More extensive communication improves student performance.** More extensive communications around: student-performance data; curriculum and integration; instructional practice; and mentoring all predicted large and significant gains in student performance or performance improvement.
- **Partnership leads to more frequent and informal communication between union representatives and principals.** Finally, the quality of partnerships predicted different communication patterns between union building representatives and principals, with the communication in high-partnership schools becoming more frequent and less formal than the communication in low-partnership schools.

This study contributes to our understanding of the value that union-management partnerships can bring to organizational performance by creating a positive climate for teacher collaboration, which leads to innovation and an infrastructure for problem solving. Over the past decade, education researchers have encouraged greater levels of professional collaboration among teachers as a means to improve student achievement.³ However, little is currently known about the institutional antecedents to professional collaboration, particularly in the context of public education. This report targets school-level union-management partnerships as potential catalysts for professional collaboration in public schools.

Furthermore, this research sheds light on the impact that school-level union-management partnerships and teacher collaboration can have on student performance. Based on the findings of this report, if policymakers and educators want to create and support more long-term partnership arrangements in U.S. school districts, they should undertake the following initiatives:

- Provide incentives for districts to establish union-management partnerships and collaborative approaches to the development of curriculum and instructional practice, teacher evaluation, professional development, mentoring, and peer review.
- Provide technical and financial support to districts that are willing to pilot partnerships and innovative collaborative approaches to improving teaching quality and student performance.
- Build learning networks of professional educators across districts with extensive experience in partnerships and collaborative approaches to school improvement, and link them with inexperienced districts that are looking for best-practice models and support.
- Create state-level institutions to offer leadership training and skill development in union-management partnerships and collaboration.
- Convene state and regional conferences to highlight best-practice partnerships and collaborative approaches to school improvement and provide technical assistance.
- Support research on collaborative school reform efforts that have produced results, and share the findings widely.

As unions, teachers, and administrators continue to see the value of collaboration and deepen their work together on the design and implementation of our education systems teaching and learning can be more effective and efficient.

Union-management partnerships and organizational performance

Research across a wide variety of industries has long established that as employees are increasingly included in managerial planning, problem solving, and decision making, performance and productivity increases.⁴ This increase in performance and productivity results from: directing more resources toward improvement efforts; cultivating solutions from employees who are closest to the problems; using better information to aid in the decision-making process; increasing effort and motivation; and providing greater support for the implementation of decisions to those involved in making them. This study extends these ideas to public school reform. An earlier CAP report on this issue found that schools that sustained high-quality union-management partnerships developed a culture of collaboration; these schools also established organizational structures that allowed for greater levels of teacher input into planning, problem solving, and decision making.⁵ This report builds on those earlier findings by investigating whether those schools with stronger partnerships also have higher levels of performance and performance improvement.

Partnerships and communication networks

Communications theory tells us that the structure and pattern of relationships between organizational members will have an impact on their behavior and decisions. Work systems that are more collaborative break down hierarchies and increase horizontal communication, information and knowledge sharing, and innovation. This results in greater responsiveness and flexibility, particularly in knowledge-intensive work.⁶ Networks within organizations are increasingly important for coordinating work when information is dispersed and when flexibility, responsiveness, and problem solving are important for improving performance.⁷ This is true across a variety of industries. For example, nurses and doctors need to share information about patients in hospitals, and teams of workers need to come together to solve quality problems in steel or automobile manufacturing.

Applying this framework to public schools, the authors project that improved educational quality will result from practitioners analyzing student performance and making adjustments to curriculum and instructional practice to improve learning.⁸ This, however, is not simply the work of individual teachers working alone but rather the result of teachers interacting with one another and with administrators—the social network within schools. This requires the input, cooperation, and coordination of teachers and administrators across classrooms and departments. In essence, it requires an extensive communications network that fosters educational effectiveness—this is referred to as the “density” of a communications network. When there is frequent and extensive communication between teachers and with administrators, the network is considered dense. Furthermore, the structure and character of the social network inside a school can be shaped by the relationship between management and the union.⁹

The earlier CAP report studied union-management partnerships in six school districts across the United States in order to determine how deep collaboration is created and sustained.¹⁰ The report identified a unique set of common characteristics across these districts that allowed them to change union-management relationships and foster collaboration between teachers and administrators at the school level. In the case of the ABC Unified School District—Artesia, Bloomfield, and Carmenita—in Southern California that is the basis for research in this report, the union-management relationship has fostered a partnership that emphasizes shared responsibility for decision making and school improvement. This study shows that schools with higher levels of union-management partnership also have higher levels of communication and collaboration. Moreover, schools with higher levels of collaboration also have higher levels of student performance and performance improvement.

Partnerships and union-management relations

Earlier research has shown that union-management partnerships can lead to fundamental changes in union structure and the structure of union-management communication.¹¹ Therefore, schools with stronger union-management partnerships are likely to have more extensive communications networks and exhibit different patterns of collaboration between principals and school union representatives. In schools where union leaders and principals talk frequently and informally about teaching and learning, performance is likely to improve. Schools with strong union-management partnerships should have better student outcomes than schools without good partnerships.

Furthermore, as local unions facilitate communication through their role in partnerships with management, they help create tremendous value in the school by engendering a greater level of employee trust in collaboration than management can create on its own. Teachers are more willing to engage in collaborative structures and processes because they have greater trust in their elected union leaders than they do in management.¹²

This report focuses specifically on the patterns of collaboration between teachers and administrators that take place under union-management partnership arrangements and their relationship to student performance. Social-network analysis is used to look within public schools in order to examine changes in the patterns of collaboration and student performance that occur in schools that have developed strong teacher-administration partnering arrangements. Social-network analysis allows researchers to measure the structure of relationships between teachers and principals rather than simply individual attributes or attitudes. Other studies have applied social-network analysis techniques to public schools to analyze these patterns empirically, but the authors of this study are not aware of any previous research that has examined the links between school reform, union-management partnership arrangements, school-level collaboration, and student performance.¹³

Research setting

The research setting for this study was the ABC Unified School District, which is 25 miles southeast of Los Angeles. Over the past two decades, a partnership has been sustained between the teachers union, or the ABC Federation of Teachers, and the district's administration that has resulted in extensive collaboration and innovation around instructional programs, curriculum development, textbook selection and adoption, recruiting and hiring of administrators and teachers, mentoring, teacher evaluation and support, and data-based decision making to improve student performance. This study used surveys, interviews, student-performance data, and social-network analysis, which analyzes the communication patterns within and across organizations, to examine the impact of this partnership on school-level teacher collaboration, student performance, and the structure of union-management relations. The district employs more than 1,100 educators serving almost 21,000 students and includes 30 schools, of which 19 are elementary schools, five are middle schools, five are high schools, and one school is an adult school

that offers remedial education and career development for older students. Fourteen of the schools are Title I schools, meaning they have high percentages of children from low-income families and receive federal funds to ensure these students receive extra support. Also, 25 percent of the district's students are English language learners, or ELL, and, as with many urban school districts in the United States, a high percentage of the students are financially disadvantaged—roughly 45.5 percent are eligible for the reduced-price or free lunch program. Yet the district has consistently scored above the state average for the California Academic Performance Index, or API, and has exceeded API targets for comparable districts set by the state. The API is a composite of tests and other measures that allow student achievement to be compared across schools and districts. Four of the district's schools were removed from the study sample because of either demographic peculiarities or low response rates. Therefore, the sample used for this analysis consisted of 26 schools, which together employ roughly 900 teachers.

How partnerships affect communication, networks, and student performance

Methods for analyzing social networks and school and student performance

The overarching question that drove this investigation was whether union-management partnerships influence how educators in a particular school collaborate and communicate and how this affects student performance. Thus, a way was needed to determine the level of partnership in a school. This was accomplished by measuring the quality of union-management partnerships using three questions from a district-wide survey administered in January 2011 that dealt with union-management communications, collaboration among staff, and openness to input from all educators. Schools that had higher partnership-quality measures were schools where there was more union-management communications; where teachers exhibited more collaboration; and where there were greater opportunities for teachers to have voice in decision making.

In a social-network survey conducted in April 2011, the researchers asked teachers and administrators with whom they communicated, and specifically, if those communications were for the following purposes: to discuss student-performance data; to discuss curriculum development and cross-subject integration and articulation; to share, advise, and learn about instructional practices; and to give or receive formal and informal mentoring. The overall response rate to the survey was 69 percent. Those data allowed for a detailed examination of the communications network among educators.

To determine the level of communication and collaboration in a school, the authors calculated “density,” which is the fraction of existing ties between educators in a school out of the total number of ties possible in the school. To determine a school’s density of communications, the authors measured the number of educators in a school

who were in communication with one another. They also calculated the total number of possible ties between educators in a school based on the total number of educators employed there. Finally, the authors determined the actual proportion of communications ties that existed in relation to the total number of possible ties. In this study, therefore, the higher the density value, the more educators in a school reported communicating with others in their building.

There was also interest in assessing the structure of school-level union-management partnerships—specifically, how frequently school-building union representatives reported communicating with their principals and whether this communication relationship was primarily formal or informal. To measure the frequency of communication, union representatives were asked to indicate their communication patterns with their principals—specifically, whether their communications with their principals occurred daily, weekly, monthly, or not at all. Representatives were also asked to indicate whether their communications with their principals occurred formally, informally, or both formally and informally.

As mentioned above, the authors also looked at student achievement to determine if stronger partnerships were related to higher achievement. They used the California Academic Performance Index, or API, as a composite performance measure that reflects students’ achievement in a variety of assessments, including the California Standards Tests, or CSTs; the California Alternate Performance Assessment, or CAPA; the California Modified Assessment; and for high school students, the California High School Exit Examination, or CAHSEE. Graduation and drop-out rates are also factored

into the scores. State officials in California have used API scores as a primary means to monitor and rank the relative performance of schools and school districts, and publicize district- and school-level scores, which they report online.¹⁴ API scores range from 200 to 1,000. This study examined API performance, or the overall API score a school received for the 2011-12 school year, as well as API performance improvement, which represents the overall change in a school's API score

from the 2010-11 school year to the 2011-12 school year.

The authors of this report also took into account variation in communication patterns by school type—elementary, middle, and high school—as well as the level of poverty in each school, by controlling for these differences when they measured the relationship between the strength of union-management partnerships, collaboration, and student achievement.

Partnerships lead to greater student achievement

This investigation of union-management partnerships showed that students achieve more when they attend schools with stronger partnerships. When comparing schools on the partnership-quality survey scale of one to four, a one-point increase in partnership quality in 2011 corresponded with roughly 25 more points in a school's API score in 2012 after controlling for poverty. Furthermore, partnership quality in 2011 has a positive and statistically significant association with performance improvement from the 2011 to 2012 school year. For instance, a one-point increase in partnership quality in 2011 corresponded to roughly a 15-point increase in student achievement as measured by API scores from 2011 to 2012, after controlling for the previous year's API score and poverty. (see Figure 1 below)

Furthermore, it was determined that strong partnerships can improve student learning even in schools with many disadvantaged students. On its own, poverty has a negative and statistically significant association with API scores in 2011 and improvement from 2011 to 2012. This shows that school-performance outcomes are impacted by the socioeconomic status of the school community. Since this study controlled for poverty, however, it was also demonstrated that those schools where management and unions have built strong partnerships are more likely to have higher achievement than similar schools with comparable poverty rates but without partnerships.

For purposes of illustration, the graph below tracks partnership quality against performance improvement for the 26 schools in this study. API improvement scores ranged from -18 points to 58 points. The graph shows that as the quality of partnerships increases, so does improvement of student performance. These results are statistically significant.

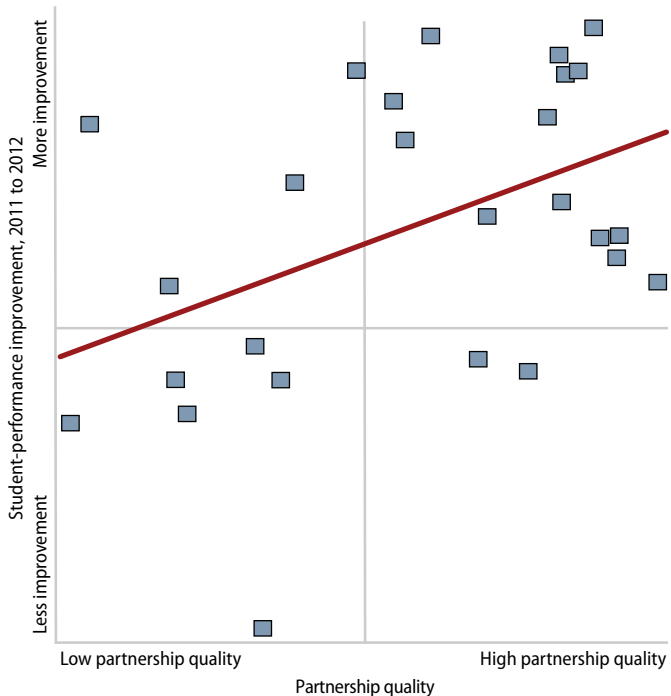
Figure 1 shows the association between partnership quality and student-achievement gains, controlling for poverty in each school.

The authors also examined the relationship between partnership quality and density of teachers communication in schools. They found that partnership quality was related to the amount of teacher communication around four topics: student-performance data; curriculum development, cross-subject integration or grade-to-grade integration; sharing, advising, and learning about instructional practices; and giving or receiving formal or informal mentoring. Since the pattern was the same across all four topics, the authors averaged them together in the bar chart below to illustrate the relationship. (see Figure 2) The chart shows that the schools with the highest levels of partnership had, on average, almost twice the communication density—30 percent—than did the schools with the lowest levels of partnership—17 percent. These findings strongly suggest that high-partnership schools are characterized by more widespread collaboration throughout the school as a whole.

In examining the relationship between these school communication densities and student achievement using the API student-performance measure, it was found that schools with denser communications around these same four topics—student performance, curriculum, instructional practices, and mentoring—had higher API performance scores and greater improvement in scores from the 2010-11 school year to the 2011-12 school year. The differences between schools with higher- and lower-density communications were statistically significant. For example, using the averages from the bar chart above (see Figure 2), a school with a communication density measure of 17 percent would have an API performance

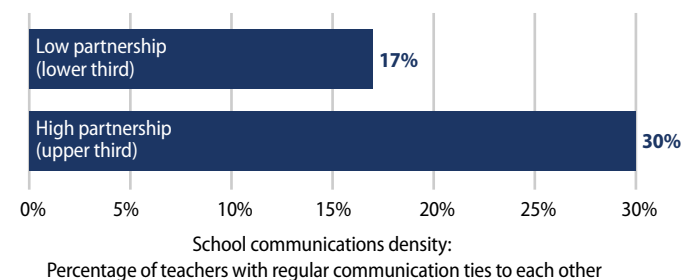
FIGURE 1
Partnership quality and student performance, 2011 to 2012

Association between partnership quality and student achievement gains, controlling for poverty in each school



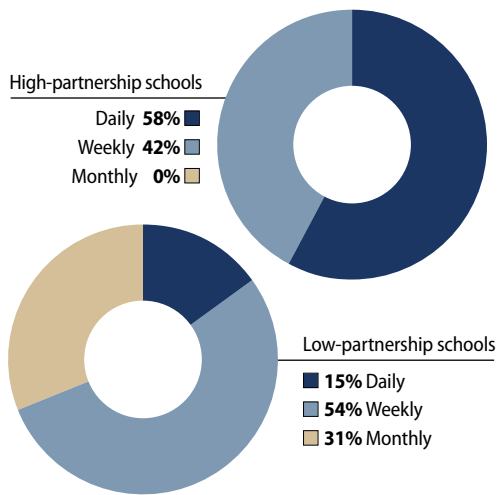
Source: Authors' calculations

FIGURE 2
Density of school communications



Source: Authors' calculations

FIGURE 3
Communication frequencies between principals and union school-building representatives by high- and low-partnership schools*



* High-partnership schools fell in the top half for partnership quality; low-partnership schools fell in the bottom half. Source: Authors' calculations

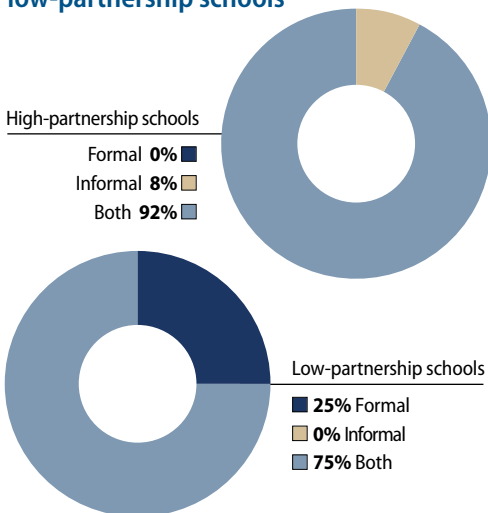
score 9 points lower than a school with a 30 percent density measure. This shows that increases in the density of school-level communications around these topics improve student performance.

Looking at changes in principal and union communications

This study also found that there was a relationship between partnership quality and the frequency of communication between union school-building representatives and principals: The higher the partnership quality, the greater the chance that principals and union representatives have frequent communication. In addition, in schools with high partnership quality, these communications are more informal than in schools with low partnership quality.

Figures 3 and 4 illustrate the relationship between the communication frequency and formality of union school-building representatives and principals.

FIGURE 4
Communication formality between principals and union school-building representatives by high- and low-partnership schools*



* High-partnership schools fell in the top half for partnership quality; low-partnership schools fell in the bottom half. Source: Authors' calculations

As shown in Figure 3, high-partnership schools are characterized by more frequent communications between principals and union school-building representatives—occurring daily and weekly—compared to low-partnership schools, where these communications are more likely to be less frequent, occurring weekly or monthly.

Figure 4 illustrates that the communications between principals and union school-building representatives in high-partnership schools are both formal and informal, while in low-partnership schools, these communications tend to be more formal. From these findings, the study concluded that there is a structural difference in the union-management relations in schools with stronger partnerships compared to the relations in schools with weaker partnerships.

What union-management partnerships mean for school collaboration and student performance

The results of this study show that the quality of union-management partnerships between teachers and administrators at the school level has had an important and significant association with educator collaboration and student achievement, as well as greater achievement gains from one year to the next. When partnerships are stronger, school-level collaboration is higher and so is student performance. While poverty remains a key predictor of student achievement, the data suggest that student performance can be improved by institutional union-management partnerships and the increased school-level collaboration that results from them. Nonetheless, the effect of poverty on student achievement cannot be ignored, yet some of the organizational solutions studied here focus attention on what teachers and administrators can uniquely do in high-poverty schools to improve learning.

These findings are important because they direct attention beyond the evaluation of individual teachers to the quality of the institutional relationship between the teachers union, its members, and the administration. This research demonstrates that unions can take a leading role in school reform by partnering with administrators to improve teaching and learning in a dramatic way. The degree to which unions and management help create and maintain these partnerships adds tremendous value to school districts seeking to improve and sustain high levels of student achievement.

Furthermore, the results of this study show that higher-quality union-management partnerships predict greater levels of communication among educators when it comes to the following:

- Evaluating student-performance data
- Developing curriculum, cross-subject integration, and grade-to-grade integration
- Sharing, advising, and learning about instructional practices
- Giving and receiving mentoring

In turn, the density of communication around these areas was a significant predictor of student performance and performance improvement in API scores. These results provide evidence that strong union-management partnerships at the school level help create an environment and structure for denser faculty communication and that this communication improves teaching quality and, therefore, student performance.

In schools with higher-quality union-management partnerships, union leaders at the building level had structurally different patterns of communication with their principals than did building-level union leaders in schools with lower-quality partnerships. This meant that there was more frequent and less formal communication in the high-partnership schools. These data suggest that strong partnerships enhance communication by creating a school climate in which union representatives and principals are more comfortable talking to each other frequently and informally—seeking each other out to talk rather than waiting for formal staff meetings to do so. This kind of communication allows union leaders and principals the ability to plan and work together, and it gives them the opportunity to resolve issues before they become larger problems.

Recommendations and conclusion

This research suggests that union-management partnerships can significantly improve collaboration in schools and student performance. More studies need to be done to confirm these results—and more schools and more districts, including those without partnership arrangements, need to be examined. While school reform policy initiatives, such as charter schools, and teacher evaluations based on student test scores have received a great deal of support, research to date has not shown that, on average, these approaches improve student performance in a consistent and systematic way. In contrast, the research presented in this report builds a strong case for efforts to expand collaborative partnerships as a vehicle for school reform and improvement that can directly impact student performance. However, it is unlikely that collaborative school reform can be sustained or institutionalized without widespread support from state and federal policy. If policy-makers and educators want to create and support more long-term partnership arrangements in U.S. school districts, the authors suggest the following initiatives:

- Provide incentives for districts to establish union-management partnerships and collaborative approaches to developing curriculum and instructional practice, teacher evaluation, professional development, mentoring, and peer review. School reform must not be just top down; ways must be found to build upon, support, and cultivate local district innovation as well. Research on union-management partnerships and collaborative reform in the U.S. steel industry in the 1990s, for example, showed that the most effective innovations benefited from policies and contract language that enabled innovation, rather than policies and contract language that were overly prescriptive.¹⁵ The lesson for public school reform is that innovation around collaborative partnerships should be developed locally around the needs and cultures of local school districts and local unions with support from the state and federal levels.
- Provide grants to districts that are willing to pilot partnerships and innovative collaborative approaches to improving teaching quality and student performance.

- Build dense learning networks of professional educators across districts with extensive experience in partnerships and collaborative approaches to reform, and link them with inexperienced districts that are looking for best-practice models and support.
- Create state-level institutions to offer leadership training and skill development in partnerships and collaborative management. These institutions can build capacity, facilitate organizational change and innovation, and provide multi-stakeholder oversight of school reform innovation and regulation.
- Convene state and regional conferences to highlight best-practice partnerships and collaborative approaches to school improvement and provide technical assistance across districts.
- Support research on collaborative school reform innovation that produces results, and share the findings widely.

The authors hope this study encourages more research on the impact of institutional union-management partnerships on teacher collaboration, teaching quality, and student performance and that it contributes in some way to broadening the debate on effective approaches to public school reform. At this moment, it is hard to imagine more important priorities for our economy and society.

About the authors

Saul A. Rubinstein holds a doctorate from the Massachusetts Institute of Technology and a master's degree in education and a master's degree in business administration from Harvard University. A professor at the School of Management and Labor Relations at Rutgers University, he is also the director of the Program on Collaborative School Reform. His research has focused on changes in firm governance, management, and local unions that have resulted from joint union-management efforts to transform industrial relations, work systems, and performance in a wide variety of industries. His work extends to union-management partnerships at the strategic level and studying the changes in patterns of coordination and communication as organizations adopt team-based work structures. His current research has focused on union-management collaborative efforts to reform public education and the impact of these partnerships on student performance. His work has been widely published and funded by the Bill and Melinda Gates Foundation, the National Science Foundation, the Alfred P. Sloan Foundation, and the Robert Wood Johnson Foundation.

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Acknowledgements

This report has benefited from the support of many people. The authors want to thank ABC Unified School District and the ABC Federation of Teachers for the extraordinary access that made this study possible. In particular, they want to thank Dr. Mary Sieu, Ray Gaer, Dr. Carol Hansen, Dr. Valencia Mayfield, Dr. Cheryl Bodger, Richard Saldana, Ruben Mancillas, JoAnn Goostree, Laura Rico, and Dr. Gary Smuts for their help, guidance, and insight. They also thank Thomas Kochan, Frits Pil, Charles Heckscher, Doug Kruse, Fran Lawrence, and Kathy Buzad for their thoughtful comments and suggestions on earlier drafts of this paper. Finally, they are grateful to the late Casey Ichniowski for his generosity and advice. The Bill and Melinda Gates Foundation provided funding for this research.

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