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Teaching and Learning Conditions Matter

Key Considerations for Policymakers

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EXECUTIVE SUMMARY

Teaching and Learning Conditions Matter in Public Schools and Classrooms: Key Considerations for Policymakers

Both policymakers and educators view closing the student achievement gap a pressing matter in our public schools, particularly for students in struggling schools. Teachers, as significant contributors to student learning, have an important role in closing that gap. But what makes some teachers more effective at improving student achievement than others, and why do some schools produce better learning outcomes for students than other schools? Over the last decade a number of research studies, described herein, have examined states' and school districts' efforts to collect and analyze survey data from teachers and principals about the presence of positive teaching and learning conditions in their schools. Based on analysis of this rich new data source, compelling evidence shows that teachers who work in schools with positive conditions are more effective at raising student achievement. This paper helps policymakers better understand the powerful influences the school environment and working conditions have on teachers' effectiveness, their growth and development, and efforts to improve student achievement.

This paper provides a brief description of teaching and learning conditions and reviews of recent research studies that describe how these conditions impact teacher effectiveness, retention and student learning. The paper underscores how school leadership and other social conditions have a more significant impact on teacher effectiveness and retention than other conditions, such as planning time, school facilities and instruction resources. School leadership is particularly important since school leaders are responsible for creating the conditions for teachers and students to succeed. Social conditions include collegial relationships with their peers and the extent to which teachers feel school leaders are supportive and helping to create school environments conducive to learning.

As noted by several studies, teachers and principals view the perceptions of conditions differently. Principals often overlook or do not address critical factors or conditions that teachers believe are important. Failing to appropriately address these differences affects school improvement progress.

The paper shares examples of how states and school districts have used teaching and learning conditions survey data and analysis to guide school improvement efforts and the important role labor/management collaboration serves as a predictor of student performance. NYSUT's Innovation Initiative school districts used survey data to establish grade level meeting time, and a Principals Advisory Council to improve dialogue between educators and administrators.

The paper concludes with a set of recommendations to guide policymakers in establishing a statewide initiative to access and improve the conditions for successful teaching and learning in New York state's public schools.

Teaching and learning conditions impact teacher effectiveness, retention and student learning.

Teaching and Learning Conditions Matter in Our Public Schools and Classrooms

Purpose: Educators are repeatedly recognized in research as significant contributors to student learning. Research also indicates that educators need supportive learning environments to optimize their teaching and student learning potential. To do their jobs well, educators need to feel valued, trusted and allowed to collaborate to improve their instructional practices. The findings of this research can no longer be ignored and must be seriously considered by policymakers if states and schools are to attain and sustain a goal of universal good teaching practices, which ultimately leads to enhanced student learning. This paper examines the importance of supportive school environments and the conditions inherent in such an environment. Additionally, this paper addresses how an assessment of teaching and learning conditions serves as a useful tool to improve school performance. It concludes with recommendations educational policymakers should consider in establishing a process for periodically surveying factors in the school environment that are essential for successful teaching and learning.

The New Teacher Center (NTC) has been a leader in the effort to better understand, document and improve the conditions that teachers and principals need to be effective at raising student achievement. The NTC has conducted the TELL (Teaching, Empowering, Leading and Learning) survey in more than 20 states and school districts to assess teaching and conditions.

Generally, teaching and learning conditions refer to the school's systems, relationships, resources, environments and personnel that affect a teacher's ability to achieve instructional success with their students and a principal's ability to create the supportive conditions needed for teachers and students to succeed. The NTC survey assesses the following constructs derived from research about what impacts teaching and learning:

TEACHING AND LEARNING CONSTRUCTS	
Construct	Definition of Construct
Time	Available time to plan, collaborate and provide instruction and eliminating barriers to maximize instructional time during the school day.
Facilities and Resources	Availability of instructional, technology, office, communication, and school resources to teachers.
Community Support and Involvement	Community and parent/guardian communication and influence in the school.
Managing Student Conduct	Policies and practices to address student conduct issues and ensure a safe school environment.
Teacher Leadership	Teacher involvement in decisions that impact classroom and school practices.
School Leadership	The ability of school leadership to create trusting, supportive environments and address teacher concerns.
Professional Development	Availability and quality of learning opportunities for educators to enhance their teaching.
Instructional Practices and Support	Data and support available to teachers to improve instruction and student learning.

Research Supporting the Assessment of Teaching and Learning Conditions

During the past decade, a number of studies using data collected from statewide and district surveys of teaching and learning conditions have led to a better understanding of how school conditions impact teachers' and principals' abilities to improve student achievement. The NTC has been a leader in this effort and has conducted its TELL surveys in more than 20 states and school districts to assess teaching and conditions. North Carolina was the first state to conduct the survey under the leadership of Governor Easley, who believed "teacher working conditions are student learning conditions."

A growing number of states including Tennessee, Maryland, Delaware, Colorado, Massachusetts, Kentucky, Oregon and Vermont are conducting annual or biennial surveys as a way to generate a valid and reliable source of data on teachers' and principals' perceptions of their teaching and learning conditions.

Through the NTC survey, more than one million educators have provided input about the teaching and learning conditions and supports educators need in their schools. NTP has provided data and training to help guide professional development, new policy initiatives and school improvement efforts in more than 19,000 schools nationwide.

States are using the survey data in a variety of ways to improve the social context and teaching and learning conditions that exist in schools that impede the ability of educators to succeed. For example, North Carolina, Tennessee, Maryland and Kentucky require use of data in school district improvement plans, while Maryland also requires the data be used to create data-driven professional development to differentiate the development needs of educators. North Carolina, Tennessee and Kentucky adopted legislation requiring the data be used in providing assistance to persistently low performing schools. Colorado and Maryland use the data in the assessment of new teacher support.

Conditions Impact Teacher Retention, Effectiveness and Student Achievement

When examining data generated from TELL surveys, for instance in Kentucky and North Carolina, researchers found that schools with better teaching conditions were more likely to have higher levels of student achievement, more academic growth and higher retention compared to schools where teachers rated the teaching and learning conditions as poor. Recent findings from a growing body of research, as described below, deepen understanding about why teaching and learning conditions matter for teacher retention, effectiveness and development, and student achievement.

Susan Moore-Johnson, Matthew A. Kraft, & John P. Papay, J. P. (2012) examined how context matters in high-need schools, especially in light of the effects of teachers' working conditions on their professional satisfaction and their students' achievement. Specifically, this study examined how working conditions predict teachers' job satisfaction and influence their decisions to stay in the schools. Drawing on TELL survey data collected from teachers and principals in Massachusetts, the researchers asked three research questions.

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Favorable conditions for teachers predict higher rates of student academic growth even when comparing schools serving demographically similar groups of students.

1. Do the conditions of work in Massachusetts public schools affect teachers' satisfaction with their jobs and their career plans?
2. Are schools with better conditions of work more successful in raising student performance than schools with less supportive working conditions?
3. If the conditions of work are important, what elements of the work environment matter the most?

The professional context “appears to contribute to improved student achievement” since teaching conditions are closely related to learning conditions for students. The researchers found that “favorable conditions for teachers predict higher rates of student academic growth even when comparing schools serving demographically similar groups of students.” The study also found that:

- Teachers are more satisfied and plan to stay longer in schools that have a positive work context, independent of the school’s student demographic characteristics.
- High turnover rates of teachers in schools with high populations of low-income students and students of color are “driven largely by teachers fleeing the dysfunctional and unsupportive work environments in the schools to which low-income and minority students are most likely to be assigned.”
- The social conditions, (school culture, principal leadership, and relationships among colleagues as evidenced by time to collaborate, for example) are better predictors of a teacher’s willingness to stay and make career plans, compared to other “narrowly conceived” working conditions such as clean and well-maintained facilities or access to modern instructional technology.

The researchers concluded, “A school environment that allows teachers to do a good job will automatically improve the learning conditions of the students.” The bottom line — positive working conditions matter a great deal to both teachers and students.

Conditions Impact Teacher Effectiveness

Mathew Kraft and John Papay (2014) investigated how school context influences the degree to which teachers become more effective over time, or what is referred to as “returns to teaching experience.” The research focused on teachers with one to 10 years’ experience in the Charlotte-Mecklenburg Schools to determine the impact of the school context on teacher development and effectiveness. Previous studies found that “on average, teachers make rapid gains in effectiveness early in their careers, however, additional experience is associated with more modest improvements (e.g., Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2008; Harris & Sass, 2011; Papay & Kraft, 2013; Rockoff, 2004; Wiswall, 2013). Therefore, efforts to improve student outcomes have focused on the individual efforts of teachers, while negating the extent organizational context influences teachers’ ability to improve student achievement.

The Kraft and Papay study also found that teachers working in more supportive professional environments improve their effectiveness more over time than teachers working in less supportive contexts do. “On average, teachers working in schools at the 75th percentile of professional environment ratings improved 38 percent more than teachers in schools at the 25th percentile after 10 years. After 10 years, teachers at a school with a

more supportive professional environment moved upwards in the distribution of overall teacher effectiveness by approximately one-fifth of a standard deviation *more* than teachers who work in less supportive professional environments.” The researchers concluded that “failure to leverage the potential importance of school context in promoting teacher development” hinders teachers’ ability to accelerate gains in student achievement.

While the researchers acknowledge that the increase in teacher effectiveness cannot be attributed solely to the environment, their findings support that:

- Teachers and students benefit from such environments systematically. For example, teachers who feel more successful are more likely to remain in their schools.
- Teachers who work in more supportive environments become more effective at raising student achievement on standardized tests over time, versus teachers who work in less supportive environments.
- The most effective professional development provides teachers with active learning opportunities that are intensive, focused, differentiated and aligned with instructional needs.
- Coaching programs result in measurable improvements in teaching practice.

The fact that “teachers develop at different rates is not surprising; however studies are now documenting the extent to which organizational structures either facilitate and contribute to or limit teachers’ professional learning.” The study by Kraft and Papay (2014) speaks to the benefits of engaging teachers in learning opportunities that include actionable feedback, meaningful peer collaboration, coaching, and differentiated professional development. Learning from peers in a supportive professional environment should be a daily occurrence instead of the one shot professional development events that are the norm for teachers.

Conditions Influence Teaching Quality and Student Achievement

Not many large-scale empirical studies have explored the link between teaching and learning conditions and student achievement. However, there are studies supporting that conditions influence student achievement outcomes. These studies draw on TELL survey data from various states to estimate the impact of teaching and learning conditions on student learning.

An analysis by Ladd (2009) revealed that teaching and learning conditions are predictive of student achievement in mathematics, and to some extent, in reading. Research by Johnson, Kraft and Papay indicate that positive conditions contribute to improved student achievement. Additional work by Kraft and Papay (2014) also used student-teacher linked data and school-level teaching conditions as measured by the TELL survey. That study found that teachers who work in more supportive environments become more effective at raising student achievement on standardized tests over time than do teachers who work in less supportive environments, after controlling for student characteristics, prior test scores, and teacher and school characteristics.

A study by Ferguson and Hirsch (2014), entitled, *How Working Conditions Predict Teaching Quality and Student Outcomes*, describes conditions under which “good teaching is both possible and likely” and why some schools are better able to produce

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Research also indicates an empirical link between school leadership and improved student achievement.

high quality teaching and learning outcomes. This study draws on three sources of data including data from the Measures of Effective Teaching (MET) project, teaching and learning conditions data from New Teacher Center and student perception data from the Tripod student survey, developed by researcher Ronald Ferguson, Harvard School of Education. Findings from this study help explain how teachers' working conditions influence professional learning, teacher expectations, teaching quality and student outcomes, and contain some implications for school leaders. The researchers hypothesize that some teaching and learning conditions are *more directly enabling of teaching* than others and have a *more direct impact* on the ways that teachers do their jobs, for example, professional development. They categorize teaching and learning conditions into two groups: base conditions, those that *play central roles* in making good teaching more possible and more successful, and enabler conditions that *more directly* affect and *enable* the teacher "to do their job effectively and the teacher's ability and willingness to do their job with skill and enthusiasm." The researchers also suggest that school leadership is both a *base* condition and *teaching enabler* because "school leadership matters in multiple ways across multiple conditions and influences teacher effectiveness, teacher quality and student outcomes." Teaching enablers also include such things as:

- making sure demands on their time are manageable;
- having effective procedures and policies in place to manage student behavior;
- providing professional development that will enhance teacher skillfulness;
- ensuring teachers have sufficient autonomy to make instructional decisions; and
- supporting differentiated teacher growth opportunities and development over time.

The Condition of School Leadership Matters

Research also indicates an empirical link between school leadership and improved student achievement. Since 2000, The Wallace Foundation has supported several research studies and projects on school leadership, focused on highlighting the needs of school leadership, understanding the complexities of their roles and identifying systems of support given their critical role in schools. In a 2011 report by the Wallace Foundation, the authors cited "a particularly noteworthy finding, reinforced in a major study by researchers at the University of Minnesota and University of Toronto, that there is an empirical link between school leadership and improved student achievement."

Creating the conditions under which teacher and teaching effectiveness can occur, according to the Wallace report, is the job of the principal. The report goes on to state that teachers must have productive and collaborative working relationships with colleagues *and* effective school leadership. Principal leadership must be characterized by their ability to create a supportive school environment characterized by trust, respect, communication, and collaboration, and focused on student learning (Bryk & Schneider, 2002). School leaders also impact teaching and learning "indirectly and most powerfully through their influence on staff motivation, commitment, and working conditions." (Leithwood, Day, Sammons, Harris, & Hopkins, 2006, p. 5).

Examining teaching and learning conditions data from other states, for example, North Carolina, which has been collecting and analyzing TELL survey data since 2002,

confirms, “leadership is a powerful predictor of whether or not a school had high student achievement at the high school level. High schools were 48 times more likely to be included in one of the top three performance designations for every one point increase on the leadership domain average.”

Research by Johnson, Kraft and Papay (2011) also found that the condition of school leadership matters a great deal compared to other conditions. The study examined, *“If the conditions of work are important, what elements of the work environment matter the most?”* It found that social conditions have a greater impact on teacher effectiveness and retention than planning time, school facilities or instructional resources. The social conditions include: collegial relationships, in which teachers have productive working relationships with their colleagues; the principal’s leadership, or the extent to which teachers feel school leaders are supportive and create school environments conducive to learning; and school culture, or the extent to which school environments are characterized by mutual trust, respect, openness and commitment to student achievement. The study concluded that the “magnitudes of their [principals] effects are almost twice as large as having positive conditions related to school resources and facilities.”

Improving school leadership is a key component of a successful school improvement effort. Unfortunately, there is little research about how school leaders continue their professional learning over the span of their careers. Data collected from the principal survey of teaching and learning conditions surveys may yield some information that may be helpful. Some states, such as North Carolina, require use of the data to inform training of principals and evaluation of how the data is used to improve conditions in their school.

Teachers and Principals View Conditions Differently

Principals and teachers have very different perceptions of teaching and learning conditions. Interestingly, these differences are consistent across state and district analyses of teaching and learning conditions data. For example:

- Pittsburgh’s 2013 data found that on most survey items, “principals reported higher rates of agreement than teachers with the largest gaps in the areas of student conduct and school leadership.”
- Comparing North Carolina’s 2002 data with their 2014 data, found that “principals were still more positive about working conditions in most areas, particularly about the amount of time teachers have and how empowered they are to make decisions on education issues.”
- Colorado’s 2013 survey data also found that almost all principals (96 percent) indicated that teachers feel comfortable raising issues and concerns that are important to them while less than two-thirds of teachers agreed. The data also revealed that principals reported higher rates of agreement across almost all survey items compared to teachers. The questions with the greatest disparity between principals and teachers addressed the need to minimize routine paperwork teachers are required to do; provide follow-up after professional development, and make teachers feel comfortable raising issues and concerns that are important to them.

Improving school leadership is a key component of a successful school improvement effort.



Some disparity in the perceptions of principals and teachers about teaching and learning conditions should be expected given differences in roles, responsibilities and accountability. However, the consistency of results across states and state contexts, highlight critical factors and conditions that teachers believe are important, but are too often overlooked or not addressed by school leaders. For school improvement efforts to be effective, there must be a shared understanding of the most pressing concerns and needs. Acknowledging the consistent differences between teachers and principals is an important first step in the school improvement process. Teaching and learning conditions data presents an opportunity to facilitate discussions around these differences supported by evidence the data yields.

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States and School Districts Use Teaching and Learning Conditions Data for School Improvement

Schools with a record of improving student achievement regularly use data to guide decision-making and actions related to instruction, teacher retention and induction, and professional development. Here are specific examples of how states and local school districts used the TLC survey data for school improvement.

The Delaware State Education Department used the data to:

- guide the implementation of Professional Learning Communities (PLCs) by establishing advisory councils to adopt recommendations to strengthen PLCs and teacher evaluation systems;
- create a cadre of teacher leaders with a voice in statewide policy making; and
- provide mentoring and competitive grants for districts whereby TLC data must be used to support the proposal.

Maryland State Education Department used the data to:

- assess the quality and effectiveness of new teacher induction and support programs;
- approve new regulations addressing teacher induction; and
- align school improvement plans with the goals for Professional Learning Communities (PLCs).

The City of Pittsburgh used the data to develop:

- a Teacher’s Guide to enhance understanding, prevention and response interventions to bullying and negative student behavior;
- an exemplary Schools Report to showcase best practices, actions and solutions for improving teaching and learning conditions; and
- a Differentiated Support to Schools Report for schools with low rates of positive teaching and learning conditions which outlined recommendations and detailed feedback on each school’s action plan for improvement, including connecting schools with resources (e.g. personnel, best practices, professional development) to support action plan implementation.

In these sites, a coalition of management partners are leading this work, including the Office of the Governor, State Education Department, Teachers Union, Principals/Superintendent Associations, School Boards Association and other professional organizations. To ensure a successful initiative, coalition partners share responsibility for promoting the survey, interpreting the survey results, issuing a report of findings, engaging stakeholders in developing solutions, celebrating positive conditions, and implementing an action plan to improve priority conditions.

Improving Conditions through Labor/Management Collaboration

School improvement is a continuous process that schools use to ensure all students are achieving at high levels. For the process to succeed key stakeholders must be involved and contribute their thinking, expertise, knowledge and leadership to create and maintain the conditions that student needs to succeed. According to a study by Dr. Saul Rubinstein (2014), labor/management partnerships engaged in problem-solving activities help drive thinking and find solutions about ways to increase student learning using a school improvement process. One of the major findings from the study was that 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.”

In 2012, as part of NYSUT’s Innovation Initiative, labor/management teams administered a teaching and learning conditions survey to more than 1,400 teachers and principals in six school districts. The goal was to document teaching and learning conditions and engage labor/management teams in a collaborative process for identifying priority conditions and shaping solutions.

North Syracuse School District: John Kuryla, the Teachers’ Association president, stated the Teaching and Learning Conditions survey was the first time the district’s teachers were asked to complete a formal survey about their working conditions with the intent to learn more about the unique culture, climate and context of each work site. The results of the first survey, by building and district-wide, were shared with each of the building planning teams and were used to form building actions/plans for that year. To exemplify this further, one of the elementary school buildings used the survey data, specifically the lack of collaborative time, to implement a weekly end-of-day dismissal procedure that now allows for grade level meeting time once a week.

John Kuryla, President, *North Syracuse Education Association*
Annette Speech, *Superintendent*

Marlboro School District: The school district labor/management team made it a priority that everyone in the school received the results of the survey. Central administration and the labor/management team met together to review the district and school building results together. The building principals met with their teachers to review and discuss the data and identify the areas that the school should be proud of and areas that needed more attention. For one school building, the data supported the need for increased opportunities for ongoing dialogue between educators and administrators. As a result, one building principal reinstated the former Principal’s Advisory Council composed of staff

To ensure a successful initiative, coalition partners share responsibility.

from the building as a vehicle to address the issues identified in the survey and create a process to address any future issues and concerns related to teaching and working conditions at the school.

Joe Pesavento, *President, Marlboro Faculty Association*

Robin Hecht, *Director of Curriculum and Instruction*

Recommendations for Policymakers

According to the 2014 NTC report, “Understanding contextual factors and establishing processes to interpret their influence on the school culture and environment are critical components in state and local decisions related to policies, supports and resources to ensure all students receive quality learning experiences.” NTC recommends that a coalition of stakeholders undertake a series of actions to elevate awareness of the significance of teaching and learning conditions; systematically and periodically collect and examine conditions data generated through a survey of educators; and use the data to guide state and local school improvement efforts. These recommendations, crafted as steps, are intended to guide New York state policymakers in establishing a statewide initiative to assess and improve the conditions necessary for successful teaching and learning in all school districts.

Step 1 – Establish a state policy by amending Education Law to require school districts to periodically assess the conditions of teaching and learning, analyze such data and develop, implement and monitor a plan to improve the district’s conditions. (Such policy should provide for sufficient resources and time to develop the structures, tools and training to ensure local capacity to implement this initiative.)

Step 2 – Engage key stakeholders by creating a Statewide Task Force composed of practitioners and experts to develop an implementation plan outlining the stakeholder engagement strategy, and the necessary structures, tools, training, data platforms and processes to implement the initiative. (Such plan would be approved by the Board of Regents and codified in state regulations.)

Step 3 – State or local districts contracts with vendor(s) to implement this initiative including training on stakeholder engagement, survey administration, data collection and analysis, report generation, and school improvement.

Step 4 – Establish a State Technical Support Center to assist school districts in their continuous school improvement efforts to drive student achievement.

Step 5 – Establish procedures to guide and monitor school district implementation of school improvement efforts through a data-driven process and indicators of success.

Step 6 – Use data to assess change in ongoing school improvement processes and to target resources and supports for continuous improvement efforts.

Summary

This report underscores the significance of new research based on states and school districts implementing programs to assess and improve teaching and learning conditions. These studies make a strong case that the contextual factors in a learning environment matter in important ways to teachers, principals and students. Specifically the research supports that:

- Positive teaching and learning conditions significantly correlate to improved student achievement.
- Supportive professional environments improve teacher development and effectiveness over time.
- Factors, such as professional development and school leadership, have a more direct impact on teachers' ability to do their jobs.
- School leadership matters a great deal compared to other conditions.

By examining contextual data and taking actionable steps to improve conditions of the learning environment, schools provide opportunities for educators, teachers and principals to enhance student learning. A successful TLC initiative engages all stakeholders, since no single practitioner or group can create and sustain the conditions for continuous student growth. Labor/management collaboration serves as a tool to create a unified force leading to schools that benefit everyone.

REFERENCES

- Bryk, A. S. & Schneider, B. (2002). *Trust in Schools: A Core Resource for Improvement*. New York: Russell Sage Foundation.
- Johnson, S., Kraft, M. & Papay, J. (2011). *How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement*. *Teachers College Record*, 114(10).
- Johnson, S., Kraft, M. & Papay, J. (2012). *Committed to Their Students but in Need of Support: How School Context Influences Teacher Turnover in High-Poverty, Urban Schools* http://scholar.harvard.edu/files/mkraft/files/kraft_papay_charner-laird_johnson_ng_reinhorn.
- Kraft, M. & Papay, J. (2014). *Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns to Teaching Experience Examined Whether Schools Promote Teacher Development?* *Educational Evaluation and Policy Analysis*. Vol. 36, No. 4, pp. 476–500.
- Ferguson, R. & Hirsch, E. (2014). *Using Teacher and Student Surveys To Link School Context, Classroom Learning Conditions and Achievement*, Kane, T.J., Kerr, K.A. & Pianta, R.C. *New Guidance from the Measures of Effective Teaching Project*. San Francisco: Jossey-Bass.
- Swanlund, A. (2011). *Identifying Working Conditions that Enhance Teacher Effectiveness The Psychometric Evaluation of the Teacher Working Conditions Survey*. Chicago, IL: American Institutes for Research.
- What the Research Says About the Importance of Principal Leadership*. The National Association of Secondary School Principals, (2011).
- Cross-State Analyses of Results, 2013-2014*. Research Report, New Teacher Center, (2014).
- Anrig, G., *Cultivating Collaboration: The Science Behind Thriving Labor/Management Collaboration*. *American Educator*, (Winter, 2013-2014).
- Ladd, H. (2009). *Teachers' Perceptions of Their Working Conditions: How Predictive of Policy Relevant Outcomes?* (Working Paper No. 33). Washington, DC: National Center for Analysis of Longitudinal Data in Education. Retrieved March 2, 2011, from <http://www.urban.org/uploadedpdf/1001440-Teachers-Perceptions.pdf>.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D., (2006). *Seven Strong Claims about Successful School Leadership*. Retrieved from Leadership Innovations.
- The school principal as leader: Guiding schools to better teaching and learning*. Wallace Foundation, (2011).
- Rubinstein, S. & McCarthy, J., *Teachers Unions and Management Partnerships: How Working Together Improves Student Achievement*. Center for American Progress, (March 2014).

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