



Teacher Leadership: Leading the Way to Effective Teaching and Learning

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A rich literature – both within education circles and in other kinds of labor markets – links teachers’ sense of efficacy and collective responsibility to their teaching effectiveness and improved student achievement.¹ Prior research has found that a teacher’s self-efficacy as an instructional leader is strongly and positively associated with soliciting parent involvement, communicating positive expectations for student learning, improving instructional practice, and being willing (and able) to innovate successfully in the classroom.² Increased opportunities to lead build on one another and translate into increased success for instructional leaders. Teachers who report more control over the policies in their schools and greater degrees of autonomy in their jobs are more likely to remain in teaching and to feel invested in their careers and schools.³

However, teachers have few opportunities to lead and influence both policy and programs. In fact, teaching is a traditionally “flat” profession, with few opportunities for teachers to advance professionally without leaving the classroom.⁴ If teachers are to be “promoted” within education, such as moving into administration, then they no longer work with students directly. And once they no longer work with students they often lose not only classroom perspective but also credibility with their colleagues as instructional leaders.

In this policy brief, Teachers Network and the Center for Teaching Quality (CTQ) consider the ways in which teacher leadership is key to present-day teaching effectiveness and a healthy future for the teaching profession. We draw on surveys and interviews of teachers in urban, high-needs schools as well as a broader research literature to demonstrate that when teachers are empowered as instructional leaders and decision-makers, students and the public schools they attend will benefit.

Unpacking the Evidence on Teacher Leadership and Effectiveness

About the Teachers Network Study

With the support of the Ford Foundation, the Teachers Network undertook a national survey of 1,210 teacher leaders, to better understand the role that participation in teacher leadership networks plays in supporting and retaining effective teachers in high-needs urban schools. Follow-up interviews with 29 network participants provided a more nuanced view of ways in which opportunities for collaboration and leadership (within and beyond the classroom) can increase teacher efficacy and effectiveness, and improve the retention of the classroom experts students deserve. The survey sample was drawn from a diverse and accomplished group of preK-12 teacher leaders in every subject area: 93 percent were fully state-certified in their subject area and grade level at the time of the survey and 78 percent held at least a master’s

degree. A majority reported that they worked in urban, high-needs schools, where more than 75 percent of the student body was comprised of low-income or minority students.

The Teachers Network data have some significant limitations, both related to the instruments used and the fact that subgroups of teachers surveyed were too small to permit meaningful disaggregated analysis.* However, it is a unique data set in that it specifically focuses on the perceptions and career plans of acknowledged teacher leaders in these high-needs schools, many of whom have won teaching awards, been involved with leading teachers' unions or associations, or participated in education research themselves. In this series of briefs and a culminating research report, we have enriched findings from these data with results from CTQ's ongoing research on teacher working conditions and teacher effectiveness, and from the broader research literature.

Leading the Way to Effective Teaching

1. Teachers' leadership and collective expertise are tightly linked to student achievement.

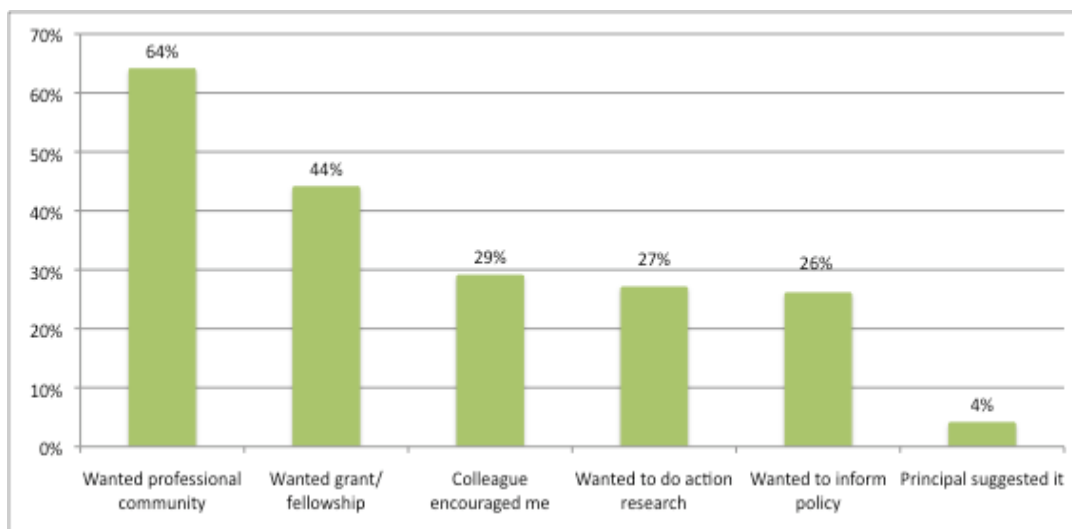
A sophisticated new study has found that schools staffed by credentialed and experienced teachers who work together over an extended time generate the largest student achievement gains. Students of less-experienced teachers who had access to the most accomplished colleagues made the very greatest achievement growth gains.⁵ Obviously, these less-experienced teachers had the greatest margin for improvement. But this finding nonetheless implies that the “master” teachers with whom they worked are spreading their expertise among colleagues.

The question is whether teachers have *time* to lead or learn from their peers, either informally or through structured professional development experiences. CTQ's surveys and case studies – and much of the other research in this area – find that they do not, limiting the cultivation of teacher leaders who can spread their expertise to their colleagues.⁶ The third in this series of CTQ and Teachers Network briefs explores these issues, and their implications, in greater detail.

Teachers Network survey respondents joined their professional networks for a broad variety of reasons, including the ability to secure funding for projects in their classrooms or schools and involvement in research or policymaking. (See Figure 1 below.) Related interview data suggest that involvement in such collaborative leadership work was important to teachers' sense of professional efficacy, and it made them more effective classroom teachers – whether by allowing them to obtain extra resources, learn and practice new skills, or exchange ideas with other practitioners.

* For a fuller discussion of the limitations of these data, please see the full report that accompanies this series of briefs, forthcoming from the Center for Teaching Quality and Teachers Network in February 2010.

Figure 1: Teachers' Reported Reasons for Joining Professional Networks



SOURCE: Authors' tabulations of Teachers Network survey data

Interestingly, over a quarter of respondents to the Teachers Network survey indicated that they initially joined a teacher leadership network at a colleague's suggestion. This finding suggests that existing, if informal, professional communities may have given rise to more formal and structured involvements as teacher leaders. While the preliminary survey data cannot tell us which comes first – professional community and collaboration or leadership that drives more effective teaching – the relationship is nonetheless clear and compelling. Are there particular (if hard to measure) attributes or opportunities that make teachers more likely to collaborate and to lead? What skills do teachers learn that make it more likely that they will assume leadership roles within their communities of practice, or in the larger community of educators? We hope that future research can examine these questions more granularly.

2. Teachers search for innovative strategies as instructional and school leaders but are often stifled by prescriptive policies that drive them from the profession.

Historically, teachers who have sought innovative or leadership roles within the teaching profession have been limited by occupational norms⁷ and organizational structures in their schools.⁸ While instructional leadership roles for teachers have increased of late, the pressure in school cultures for teachers to retain strictly egalitarian working relationships, as well as resistance from administrators, limit the potential of teacher leaders' influence on peers.⁹ Teacher leadership can be problematic – especially in the context of peer review when teachers give critical and high-stakes feedback to their colleagues.¹⁰ However, in other nations (e.g., Japan), lesson studies – where teachers jointly craft specific classroom techniques and critically assess each other's practices – have been found to be drivers of higher student achievement gains.¹¹

The Teachers Network survey and interviews did not directly solicit information from teachers about any barriers to leadership they encountered. Indeed – contrary to findings elsewhere in the research on teacher leadership – most participants in this study appeared to experience

relatively high degrees of freedom to lead, both within their classrooms and in a broader context. Of course, because the study focused on well-established teacher leaders rather than all classroom teachers, this finding is not surprising.

However, what we did learn from the survey is that many teachers reported receiving a great deal of satisfaction and professional motivation from working as leaders and innovators in their schools – contributing both to their effectiveness and retention. In a recent CTQ study of working conditions and student achievement, one teacher defined the importance of teacher leadership to student learning:

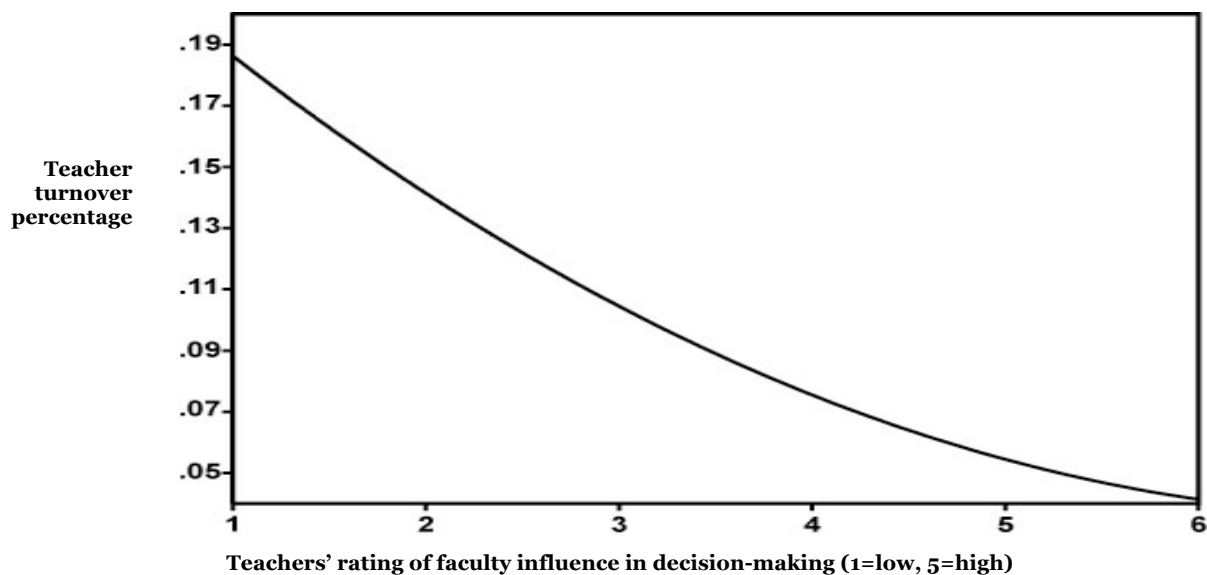
[Teacher leadership] to me means taking control of student learning – using the best practices and research-based strategies out there. And if it doesn't work, then what strategy do you try next? It's never an option to say, 'Oh, it didn't work, let's move on.'

A member of Teachers Network described the ways in which accomplished practitioners are uniquely well-equipped to design not just appropriate instructional strategies but entire curricula as well:

I'm in the profession. I have the expertise. I've studied. I know my students'... needs best. I'm able to fashion instruction according to those needs. So I look to myself more [than to others outside the classroom] as the professional and the expert in the field of curriculum for my students. But policymakers are handing down curriculum to us as teachers as if we do not have the knowledge and skills.

Research shows that when teachers are empowered to function as autonomous professionals and leaders, this builds a sense of professional confidence and pride that feeds effective teaching practice.¹² In fact, both individual and collective teacher leadership self-efficacy have been linked with successful school improvement and reform efforts, by creating a critical mass of empowered experts within the building.¹³ These findings are echoed in CTQ's survey results from one large urban district last year, where a plurality of all educators – teachers and administrators alike – agreed that teacher empowerment was the most important school-level factor to student learning.¹⁴ Our case studies have revealed that given the diversity of students entering classrooms, teachers need more tools and opportunities to adapt curriculum and instructional strategies than ever before.

Figure 2: Effects of Faculty Decision-making Influence on Teacher Turnover¹⁵



Opportunities for teacher leadership are also critically important to recruiting and retaining the most effective and accomplished teachers. Richard Ingersoll has found a strong relationship between teachers' reports of having influence in school wide decision-making processes and their retention in the profession, illustrated in Figure 2 above. Subsequent research focused on reasons for attrition among teachers of math and science – two of the highest-demand subject areas, in which high-needs schools particularly report teacher shortages. This study found that fully one-half of these teachers identified “lack of faculty influence” in decision-making as the reason that they left their former schools or left the profession altogether.¹⁶

Moreover, teachers newer to the profession are more likely to seek influence in school decision-making and collaborative work with colleagues.¹⁷ Recent research into what will motivate and retain Generation X and Y teachers suggests that opportunities, roles and allocated time for teacher leadership are critically important if public schools are to ensure a strong supply of effective teachers for the future.¹⁸

3. Teachers identify missing supports for leadership in their schools as barriers to their empowerment and effectiveness.

Despite the importance of teacher empowerment, fewer than half (45 percent) of the respondents in our CTQ survey reported that they played central roles in decision-making in their schools.¹⁹ It is not clear from that survey's data whether this is because administrators did not involve teachers, because teachers lacked time or tools to focus on issues beyond daily demands of their work life, or for other reasons. However, policies and practices adopted by some policymakers or administrators may communicate distrust of teachers' professional leadership, and prevent teachers from searching for and developing and using the approaches their students need.

Micromanaged or scripted instruction. Teachers Network members frequently cited increased reliance on district-adopted scripted curricula or mandated programs as a very basic challenge to their efficacy as instructional leaders:

[There are a lot of] initiatives and mandates going on [in my school and teachers] are really losing a sense of their own classrooms. [Administrators] are telling you, 'You have to do this... this is the new strategy or program we're using for writing... or math.' And then [administrators] come in to be sure you are implementing those programs. ...But I want the freedom to work with my children [and do what's best to meet their needs].

Teachers whose principals, coaches or facilitators did not trust them to go off-script, though, tended to report feeling professionally undermined or burnt out, spoke less positively about formal leadership in their schools, and were less enthusiastic about remaining in their current positions.

Pressures of high-stakes testing and accountability systems. Several Teachers Network interviewees appreciated increased emphasis on professional accountability as a way of strengthening the profession and improving outcomes for students. However, they noted that the ways in which it spurred micromanagement of instruction and curriculum distorted the educational process and made it difficult to teach innovatively and effectively:

Because of the focus on raising scores at my school... our principal's afraid [we won't reach achievement targets], you know. [The principal]... feels that overall things should be controlled [more tightly]. And I think that makes it very challenging [to function professionally and effectively].

Lack of material supports for teacher leadership. Even where principals and schools are supportive of teacher leadership in classrooms and schools, however, this does not guarantee that teachers can take full advantage of those opportunities to lead. When teachers lack the tools, time and materials needed to exercise that instructional leadership fully, they perceive these deficits as implicit challenges to their professionalism as well as barriers to their efficacy. A Teachers Network member reported:

I don't think teachers are treated like professionals.... [W]here teachers are worried about being able to have enough materials, enough books [or other supplies], and there are so many kids in the classroom that they can't devote enough time to... teaching... content, that's a profound disrespect for the profession.

In sum, it is not enough for teachers simply to be invited to the decision-making table as instructional leaders. Teachers also need basic material supports in order to fully realize their potential as teacher leaders and professional experts.

4. Teachers who are empowered to lead within their schools are more likely to remain in the profession.

Teachers Network survey data also suggest that when teachers perceive that their professional leadership is implicitly questioned or limited, they are less likely to remain in the profession. Among former teachers responding to the Teachers Network survey, one-third said that the professional respect accorded to them by parents and students was extremely or quite important to their decisions to leave the classroom. A number of "stayers" cited similar factors as important to their decisions to remain in their classrooms, suggesting that these two groups of

teachers do not have different motivations but rather are prompted to make different career decisions based upon the types of school environments they experience. Thus, schools that offer leadership opportunities for teachers appear likely to improve not just instructional quality but retention of their most effective teachers – a matter of particular importance for high-needs schools that tend to struggle with recruitment and retention.

Table 1: Networked Teachers Take on Leadership Beyond the Classroom

Responsibilities Held in Addition to Teaching	Percentage Reporting This Role
Coach or specialist	25%
Instructional leader or department head	38%
Administrative responsibilities	19%
Union responsibilities	13%
Other leadership responsibilities	45%
TOTAL holding additional roles	59%

SOURCE: Authors’ tabulations of Teachers Network survey data. All percentages are rounded to the nearest whole number to simplify reporting.

Conventional wisdom suggests that some teachers exit the classroom due to a sense of feeling overwhelmed or overworked. But we find that the addition of leadership roles appears to be *less* of a burden on teachers’ busy schedules than the addition of routine responsibilities like paperwork and the deadening impact of being micromanaged. As Table 1 illustrates, nearly two-thirds of teachers responding to the Teachers Network survey reported multiple roles in their schools beyond regular classroom teaching responsibilities, such as school-level administration duties, union leadership roles or work as a department or grade level chair. Holding such teacher leadership roles was associated with significant increases in planned short-run retention over the coming three years ($p < .001$).

Our initial analyses show no differences in career intentions based upon the type of leadership role held. This finding suggests that teacher leadership matters more than the *shape* of that leadership. Indeed, we expect that the preferred modes of leadership likely vary widely among individual teachers, depending upon their skill sets and dispositions.

5. Teacher leadership beyond the classroom walls facilitates the spread of effective teaching practices and breaks down barriers to effective teaching policies.

Although teachers tend – in both the Teachers Network interviews and in CTQ’s nationwide case studies – to start by defining their leadership as primarily instructional, many also see a role for teacher leadership beyond the classroom. CTQ case studies have surfaced evidence that teachers feel more in control of their work and more effective in guiding student learning when they are able to bridge gaps between what students learn in school and their out-of-school experiences in after-school or summer programs.

Parental involvement has been associated with improved academic and non-academic outcomes for students, but engaging families and other community partners is a frequent challenge for high-needs schools with large populations of disadvantaged or mobile students. Teacher leaders

might help to fill that gap by serving as community-school organizers by conducting more aggressive outreach to families, and resolving barriers to their involvement by finding ways to offer translation, transportation or other services. One Teachers Network teacher created just such a program:

I did action research on how to better bridge the lines of communication between monolingual teachers and non-English speaking parents — and then created a program in my school... based on ideas from other teachers [about the professional development they need in this area]. It has made a great deal of difference — and one reason was that I was able to work with and draw on the ideas of other teachers.

Importantly, that teacher's leadership not only directly benefitted students and families at the school but also provided vital support to colleagues' work to involve parents. The program could also have served as a best practice model for other schools in that district, spreading the expertise and leadership beyond the walls of a single building. Other teachers interviewed by Teachers Network reported similar "viral" effects of teacher leadership in sharing best practices and expertise with not only other educators but also with the public and policymakers as well:

[T]eachers can make a difference. ...I can write about [what I do in the classroom]... share it with other [teachers], and then I can share with the public. ...I think that... policymakers and the public need to know that whatever they decide [about teaching policies] affects the kids that I teach, it affects me and then therefore it affects [public education], so they need to hear from teachers any way they can.

However, many Teachers Network members expressed clear opinions that teachers' voices were all too often missing from policy debates on teaching and learning, and that those decisions should be more informed by classroom realities in order to be more effective — particularly relating to issues in high-needs schools. One teacher leader, recently named to a state education commission, noted after attending the first meeting:

Everybody else at the meeting seemed to be part of the status quo, and it was kind of interesting that they didn't have other representatives of people who are in education. I was the only teacher at the table with these education policymakers. And then at that point I thought... *I know why I'm here. I have to be here because people need to hear from teachers who are actually teaching in the inner city, with kids who don't speak English as their primary language and are experiencing school far differently than most policymakers imagine.*

Several teachers also noted that their participation in broader professional networks of teachers was important to their continued involvement as teacher leaders. They saw these networks (both face-to-face and virtual) as essential sounding boards for their work — as ways to test out their ideas and the presentation of evidence before they meet with policymakers:

You need the network. You need the relationships, and through this group you begin to establish those relationships. So I have a place to share my voice that's not with just other teachers. And [my ideas are] not just going to stay in my classroom. I want them to

actually go somewhere... so I need to network to learn the skills and to work with the people who have the power [to make a difference for students and their families].

Implications

Research on teacher leadership is still fairly limited. However, our findings here track fairly closely with what we do currently know about the positive relationship between teacher leadership, teacher effectiveness and teacher retention. CTQ's own virtual community, the [Teacher Leaders Network](#), offers a model of policy leadership from the classroom and how such leadership may be an important part of successful school models.

- **Teacher leadership is a critical component of effective teaching and school success.** Accomplished teachers have the most intimate knowledge of both the content they must teach students and the context of the community they serve. Providing opportunities for teachers to serve as instructional leaders within their schools allows them to bring their unique knowledge to bear in meeting student needs and can be particularly helpful in tailoring and streamlining services to students and families in high-needs schools as well as developing policies that can sustain them over time. Transformational school and district leaders who seek out and support the partnership of teacher leaders lay the groundwork for their joint success.
- **Accomplished teachers tend to seek out leadership opportunities but require supports to fulfill their promise as leaders.** Where this leadership can be structured into formal roles, with appropriate time and resources to accomplish the tasks they take on, teacher leaders may be more likely to succeed and less likely to experience frustration and professional burnout. For instance, schools and districts might consider offering half-time releases from teaching responsibilities for teacher leaders. Such hybrid roles would allow teacher leaders to function as peer evaluators and trainers, parent involvement coordinators, education policy advisors to elected or appointed bodies, or special needs facilitators, while keeping at least one foot in the classroom to ground their pedagogical leadership.
- **Expanding leadership roles and advancement opportunities for teachers may be an excellent and cost-effective strategy for retaining the most effective teachers.** Hybrid roles for teacher leaders offer yet another attractive benefit: creating a career ladder in a traditionally flat profession. Accomplished teachers might choose part-time leadership roles, or rotating positions that allow them to alternate between full time classroom teaching one year and educational leadership work in curriculum design, mentoring or other roles the next year. Teacher leaders could be part of peer review programs and rewards through a differentiated compensation system. Both transformed evaluation and performance pay systems can begin to unlock the current egalitarian culture of schools and promote the spread of teaching expertise from one teacher to another.
- **Professional networks for teachers offer a means by which teacher leadership can be nurtured and expertise can be spread.** Not every school is large enough or well-resourced enough to offer the full range of supports and opportunities that effective teacher leaders may seek. But both in-person and virtual professional networks can help to provide other outlets for leadership and professional learning. These networks can also allow

teacher leaders to share best practices for instruction and educational leadership beyond the confines of their building or district, raising the game for teachers in ever-widening circles of professional community.

- **More research needs to be conducted into teacher leadership and how it can be cultivated under different contexts and demands.** We hope that future research can reveal more detailed information about which teachers might be most interested in particular leadership opportunities. Such data might help schools and districts strategically match teachers best suited for particular roles with the schools that most need such assistance, or to design roles as effective retention incentives for their most accomplished teachers.

About Teachers Network and the Center for Teaching Quality

Teachers Network, a national nonprofit organization, leverages the creativity and expertise of a national and international community of outstanding educators to transform public schools into creative learning communities. Over the past three decades, Teachers Network has brought together 1.5 million classroom teachers in over 20 network affiliate communities for professional development that hones both classroom practice and instructional leadership.

The Center for Teaching Quality (CTQ) grew out of the work of the National Commission on Teaching and America's Future, which established teacher quality as the central school-based factor in students' academic success. CTQ seeks to improve student learning and advance the teaching profession by cultivating teacher leadership, conducting timely research, and crafting smart policy — all in an effort to ensure that every student in America has a qualified, well-supported and effective teacher.

Works Cited

- ¹ Goddard, R., Hoy, W. & Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37(2), 479-507.
- ² Hoover-Dempsey, K. V., Bassler, O. C. & Brissie, J. S. (1992). Parent efficacy, teacher efficacy and parent involvement: Explorations in parent-school relations. *Journal of Educational Research*, 85, 287-294; Hoover-Dempsey, K. V., Bassler, O. C. & Brissie, J. S. (1987). Parent involvement: Contributions of teacher efficacy, school socioeconomic status, and other school characteristics. *American Educational Research Journal*, 24(3), 417-435; Hoy, A. W. & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21, 343-356; Ross, J. A., Hogaboam-Gray, A., Hannay, L. (1999). Predictors of teachers' confidence in their ability to implement computer-based instruction. *Journal of Educational Computing Research*, 21(1), 75-97; Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.
- ³ Kirkman, B. L. & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, 42, 58-74; Ware, H. & Kitsantas, A., (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research*, 100(5), 308-321; Watkins, P. (2005). The principal's role in attracting, retaining and developing new teachers: Three strategies for collaboration and support. *The Clearing House*, 79(2), 83-87.
- ⁴ Lortie, D. C. (1975). *Schoolteacher: A Sociological Study* (Second ed.). Chicago: The University of Chicago Press.
- ⁵ Jackson, C. K. & Bruegmann, E. (2009, July). Teaching students and teaching each other: The importance of peer learning for teachers. NBER Working Paper 15202. Cambridge, MA: National Bureau of Economic Research.
- ⁶ Smylie, M. A. (2001). *Teacher Professional Development in Chicago: Supporting Effective Practice*. Chicago: Consortium on Chicago School Research.
- ⁷ Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19(3), 325-340; Lortie, D. C. (1975). *Schoolteacher: A Sociological Study*. Chicago: University of Chicago Press; Talbert, J. E. & McLaughlin, M. W. (1996). Teacher professionalism in local school contexts. In J. F. Goodson & A. Hargreaves (Eds.), *Teachers' Professional Lives*, 127-153. Washington, DC: Falmer Press.
- ⁸ Bryk, A., Camburn, E. & Louis, K. S. (1999). Professional community in Chicago elementary schools: Facilitating factors and organizational consequences. *Educational Administration Quarterly*, 35, 751-781; Louis, K. S., Marks, H. M. & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, 33(4), 757-798.
- ⁹ Donaldson, M. L., Johnson, S.M., Kirkpatrick, C., Marinell, W., Steele, J., Szczesiul, S. (2008). Angling for access, bartering for change: How second stage teachers experience differentiated roles in schools. *Teachers College Record*, 110(5).; Humphrey, D. C., Koppich, J. E. & Hough, H. J. (2005, March 3). Sharing the wealth: National Board Certified Teachers and the students who need them most. *Education Policy Analysis Archives*, 13(18). Retrieved June 1, 2005 from <http://epaa.asu.edu/epaa/v13n18/>.
- ¹⁰ Lord, B., Cress, K. & Miller, B. (2008). Teacher leadership in support of large-scale mathematics and science education reform. In M. Mangin & S. Stoelinga (Eds.), *Effective Teacher Leadership: Using Research to Inform and Reform*. New York, NY: Teachers College Press; Stoelinga, S. (2008). Leading from above and below: Formal and informal teacher leader roles. In M. Mangin & S. Stoelinga (Eds.), *Effective Teacher Leadership: Using Research to Inform and Reform*. New York, NY: Teachers College Press.
- ¹¹ Fernandez, C. (2002). Learning from Japanese approaches to professional development: The case of lesson study. *Journal of Teacher Education*, 53(5), 393-405; Darling-Hammond, L. (2009). *The Flat World and Education: How Our Nation's Commitment to Equity Will Determine our Nation's Future*. New York: Teachers College Press.
- ¹² Ware, H. & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research*, 100(5), 308-321.
- ¹³ Wayne, A. & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73(1), 89-122.
- ¹⁴ Berry, B., Daughtrey, A. & Montgomery, D. (2009, August). *Teaching and learning conditions 2009: An interim report*. Hillsborough, NC: Center for Teaching Quality.
- ¹⁵ Ingersoll, R. (2003). *Who Controls Teachers' Work?* Cambridge, MA: Harvard University Press.
- ¹⁶ Ingersoll, R. & Perda, D. (2009). The mathematics and science teacher shortage: Fact and myth. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- ¹⁷ Johnson, S. M. & The Project on the Next Generation of Teachers (2004). *Finders and Keepers: Helping New Teachers Survive and Thrive in Our Schools*. San Francisco: Jossey-Bass; Kardos, S. M., Johnson, S. M. Peske, H. G., Kauffman, D. & Liu, E. (2001). Counting on colleagues: New teachers encounter the professional cultures of their schools. *Educational Administration Quarterly*, 37(2), 250-290; Peske, H. G., Liu, E., Johnson, S. M. Kauffman, D & Kardos, S. M. (2001). The next generation of teachers: Changing conceptions of a career in teaching. *The Phi Delta Kappan*, 83(4), 34-311.
- ¹⁸ Coggshall, J. G., Ott, A., Behrstock, E. & Lasagna, M. (2009, November). Supporting teacher effectiveness: The view from Generation Y. Washington, DC: Learning Point Associates and Public Agenda. Retrieved November 30, 2009 at <http://www.learningpt.org/expertise/educatorquality/genY/index.php>.
- ¹⁹ Berry, B., Daughtrey, A. & Montgomery, D. (2009, August). *Teaching and learning conditions 2009: An interim report*. Hillsborough, NC: Center for Teaching Quality.