Chapter 3
The Interconnectivity of Trust in Schools

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3.1 Introduction

Trust has been conceptualized as a multidimensional construct that involves both confidence in the other and a willingness to take risks on the part of the trusting party, whether an individual or a group. Specifically, trust is defined as the willingness to be vulnerable to another party based on the confidence that the other party is benevolent, honest, open, reliable, and competent (Hoy and Tschannen-Moran 1999; Tschannen-Moran 2004a). Trust is increasingly recognized as an essential element in high-functioning schools because trust undergirds cooperative behavior. Without trust organizational effectiveness and efficiency is severely hampered (Bryk and Schneider 2002; Tschannen-Moran 2004a; Uline et al. 1998). Thus trust involves specific expectations of role relationships and is seen as a vital ingredient in the work of schools.

In schools, principals, teachers, students, and parents all have expectations that the other parties will behave in ways that are deemed to be right and good. The fulfillment of these expectations over time acts as a resource in times of transition and change (Bryk and Schneider 2002; Mishra 1996). Within the context of schools, trust is considered a normative property that results from multiple social exchanges between members of one group of individuals with members of another group. A number of studies have established that faculty trust varies sufficiently between schools, in comparison to the variability within schools, for it to be considered a property of the school (Forsyth at al. 2011; Tschannen-Moran 2009; Tschannen-Moran and Goddard 2001). Teachers as a group form trusting bonds with various other role groups, including their colleagues, the principal, students, and parents. In like manner, students form collective perceptions of the trustworthiness of teachers, and parents form perceptions of the school.

This chapter explores the interrelationships of trust across five pairings that are relevant to schools: faculty trust in the principal, colleagues, and clients, parent trust

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in schools, and student trust in teachers. While various sets of these relationships have been examined in previous studies, this is the first attempt to examine the interconnectivity of all five. In addition, the extent to which this set of interrelated trust variables works in concert as well as independently to explain variance in student achievement at the elementary, middle school, and high school levels is explored.

3.2 Interconnections Within and Across Role Groups in Schools

3.2.1 Faculty Trust in the Principal

Principals live in glass houses. Like leaders in any organization, they do much of their work in the public eye. Whether they are on stage at an assembly, leading a committee meeting, walking down the hall, or stopping to chat with a student, their actions are under continuous scrutiny. Teachers keep a watchful eye, interpreting the principal's actions to discern whether they will choose to extend their trust. Particularly in the early stages of the relationship, it is vital to teachers to determine whether their principal is trustworthy because they are vulnerable to the organizational authority held by the principal. Principals have at their disposal the means to either reward or punish teachers of whose behavior they approve or disapprove, thus teachers are dependent on the benevolence and fairness of the principal in exercising their essential evaluative role. A principal who is trusted can be the glue that holds a school community together, whereas a principal who is not trusted by faculty can cause teachers to devote their energies to protecting themselves from anticipated harm or redressing ways they have felt wronged (Tschannen-Moran 2004a). A growing body of research attests to the potent impact of these contrasting realities on school outcomes. For example, faculty trust in the principal has been linked to healthy and productive school climates whereas when faculty distrust the principal the climate is likely to become closed and dysfunctional (Hoffman et al. 1994; Hoy et al. 1996; Smith et al. 2001; Tarter et al. 1989, 1995; Tarter and Hoy 1988; Tschannen-Moran 2004a, 2009; Tschannen-Moran et al. 2006).

For principals to earn the trust of their teachers, they must conduct themselves with authenticity and integrity (Tschannen-Moran and Hoy 1998). Authenticity has to do with a willingness to share one's heart, humanity, and foibles with others. Principals who come across as too guarded in what they are willing to reveal about themselves can be perceived as though they are simply playing a role, as in a play, and thus their motivations may be regarded with suspicion. Authenticity also involves a willingness to take responsibility for one's mistakes. It means refraining from blaming others for personal failings as well as from using one's authority to manipulate subordinates. The perceived authenticity of the principal has been correlated to faculty trust in the principal (Hoy and Kupersmith 1985; Hoy and Henderson 1983). Moreover, integrity speaks to the alignment between the principal's words and deeds, as well as living according to a set of core values or principles. When teachers begin to perceive a discrepancy between their principal's words and actions, suspicion is the likely result. Once school leaders' verbal statements are regarded with suspicion, it will be hard for them to earn or regain trust because language is an essential tool leaders must use to lead and inspire people. Finally, a sense of fairness and fair play is an essential element of integrity, refraining from using one's authority to play favorites or to improve one's personal outcomes.

Principals also win the trust of their faculty through their willingness to extend trust, which is evident through openness in communication and in decision making. When principals withhold information from teachers, it evokes suspicion as teachers wonder what is being hidden and why. Openness in decision making, inviting not only teachers' involvement but influence over organizational decisions that affect them, can create the conditions necessary to foster mutual trust between teachers and principals (Tschannen-Moran 2001). Creating decision-making structures and granting discretion in instructional decisions that rely on teacher expertise and commitment to students builds trust (Bryk and Schneider 2002; Tschannen-Moran 2004a). A collegial leadership style, in which a school leader is perceived to be approachable and open to the ideas of others, has been linked to greater faculty trust in the principal (Tschannen-Moran and Hoy 1998). Subordinates who report a high level of trust in their leader are more likely to have higher levels of confidence in the accuracy of information coming from the leader, a greater desire for interaction with the leader, and greater satisfaction with communication with the leader (Roberts and O'Reilly 1974).

Principals foster the open flow of information coming to them by being open with communication that flows from them (Bryk and Schneider 2002). Teachers who trust their principal are more likely to disclose accurate, relevant, and complete data about problems, as well as to share their thoughts, feelings or ideas for possible solutions (Zand 1997). When high trust allows for candor and the open exchange of information, problems can be disclosed, diagnosed, and corrected before they are compounded. Mistakes are viewed as opportunities for learning and refinement rather than for blame and castigation, resulting in greater openness and honesty in the face of disappointing results. This openness then allows collective problem-finding and problem-solving to characterize the professional dialogue in a school (Hoy and Sweetland 2001; Tschannen-Moran and Hoy 2000; Tschannen-Moran 2004a, 2009). The open communication that high trust environments make possible confers a competitive advantage to organizations in times of turbulence and change (Mishra 1996). Schools where trust is high can help avoid rigidity and a "hunkering down" mentality that organizations often fall victim to in the midst of crisis (Daly 2009). Communication flows more easily and resources are shared rather than hoarded so that they can be allocated in ways that will have the greatest benefit for the survival and flourishing of the organization.

Whether faculty trust their principal also relies heavily on the competence of the principal. For school leaders to cultivate faculty trust involves fostering a compelling collective vision, modeling desired and appropriate behaviors, coaching faculty to align their skills with the school vision, managing organizational resources fairly and skillfully, and standing ready to mediate the inevitable conflicts that emerge as educators engage in the complex work of schooling (Tschannen-Moran 2004a, 2009). To garner the trust of faculty seems to require that leaders balance the task dimension with the relationship dimension of leadership (Tschannen-Moran 2004a). A leadership style that is narrowly focused on the task dimensions of leadership at the expense of relationships may damage trust in the principal, but so may a leadership style that emphasizes relationships to the detriment of task accomplishment. School leaders with a professional orientation adopt enabling school structures (Adams and Forsyth 2007; Hoy and Sweetland 2001). They do not abuse their power to enforce policies through an over-reliance on coercive punishments, but neither do they abdicate their responsibility for leadership. They engage in coaching and collaboration to bring underperforming teachers into alignment with professional standards, as well as to provide resources to continually extend the professional knowledge of all teachers in their building (Tschannen-Moran 2004a). Reliability in following through on decisions and promises also contributes in substantive ways to faculty trust in the principal.

To meet the challenging new standards that have been set for schools, school personnel must go well beyond minimum performance of their duties, and school leaders need to know what is necessary to foster these extra-role behaviors. Organizational theorists have asserted that transformational leadership behavior on the part of leaders will motivate workers to go beyond their formally prescribed job responsibilities and to give their very best to the task. However, in a study that examined the antecedents of faculty extra-role behaviors, faculty trust in the principal outstripped transformational leadership behaviors as a predictor of organizational citizenship behaviors (Tschannen-Moran 2003). Transformational leadership behaviors have been presumed to inspire followers to greater citizenship, but there was no significant correlation between those behaviors and the organizational citizenship of teachers in the schools studied. Trust alone emerged as an important factor in relation to greater citizenship among teachers. Likewise, faculty trust in principals has been linked to faculty perceptions of both the professional orientation of a principal as well as the professionalism of their colleagues, suggesting that principals set the tone of professionalism and trust in their buildings (Tschannen-Moran 2009).

3.2.2 Faculty Trust in Teacher Colleagues

A generation ago, teaching was described as work that was done primarily in isolation from other adults and in which norms of autonomy and equal status were especially prized (Little 1990). With the reform initiatives of recent decades, including the pressures of the accountability movement and the press for greater professionalism, the work arrangements of teachers have shifted in ways that require greater collaboration (Tschannen-Moran et al. 2000). The hallmarks of professional practice include the deprivitization of practice, reflective dialogue, as well as disciplined, collective inquiry in search of individualized solutions to meet the needs of clients (Cooper 1988; Louis and Kruse 1995; Marks and

Louis 1997; Louis et al. 1996). Participants in professional learning communities continually research best practices to better serve clients. Ongoing, rigorous professional inquiry supports joint deliberation as participants pursue data to bolster decision making (Darling-Hammond 1988; Elmore et al. 1996; Fullan 2003). As schools are moving toward greater alignment with the standards of professionalism, and thus more active collaboration, faculty trust in colleagues is becoming more essential to fulfilling the central mission of schools (Adams and Forsyth 2007; Tschannen-Moran 2001, 2009).

Low trust between teachers presents a significant barrier to the establishment of these new norms of professionalism and collaboration. When teachers do not trust their colleagues, whether due to perceptions of a lack of competence, benevolence, reliability or other factors, they are not likely to feel comfortable putting their own professional practice at risk through shared instructional planning, peer observations, or reflective dialogue. The level of faculty trust in colleagues has been strongly and significantly related to teachers' perceptions of the professionalism of their colleagues. Thus, where teachers trusted one another, they were more likely to respect colleagues as exercising professional judgment and demonstrating a commitment to students; whereas where teachers did not perceive their colleagues as behaving in a professional manner, they were less likely to trust them (Tschannen-Moran 2009; Tschannen-Moran and Hoy 1998). Perceptions of the behavior of their colleagues in ways that influenced trust went beyond teacher professionalism. The degree to which teachers perceived the behavior of their colleagues to be authentic (Tschannen-Moran and Hoy 1998) and the degree to which faculty reported the relationships with their peers to be collegial (Hoy et al. 1992) have both been found to correlate with teacher trust in colleagues.

The quality of the relationships in a school has been related to some important school outcomes. In exploring the extent to which the climate of a school supported innovation, Moolenaar and Sleegers (2010), using social network analysis in a sample of Dutch schools, found that faculty trust in their colleagues was related to the density of work-related conversations, and that trust mediated the relationship between the density of these conversations and the innovative climate of the school. Thus, even where teachers were engaged in active professional dialogue, a spirit of innovation would only prevail when they had trust in one another. If they did not trust each other, the conversations did not lead to a climate of innovation. In addition, the extent to which teachers reported a climate of continuous learning in their school has also been found to correlate with faculty trust in colleagues (Kensler et al. 2009). And in a study of organizational effectiveness, faculty trust in colleagues outstripped the contribution of other variables and was the only variable found to make an independent contribution to explaining variance in faculty perceptions of school effectiveness among the elementary schools studied (Hoy et al. 1992). Each of these processes, innovative climate, continuous learning, and teacher perceptions of organizational effectiveness, is postulated to create the conditions that support student learning. Finally, faculty trust in colleagues has been found to be moderately correlated to student achievement (Tschannen-Moran 2004b).

3.2.3 Teacher Trust in Students and Parents

When teachers trust their students, when they believe that their students are respectful, honest, reliable, open, and competent, they are more likely to create learning environments that facilitate student academic success. When they don't trust their students, it is likely to be evident to students in the guarded tone and generally negative affect that teachers display in the classroom as well as in informal interactions. It may also show up as a lack of warmth or empathy for students and the propensity for teachers to blame students for poor performance or behavior. Furthermore, repeated research studies have found that when teachers do not trust students, they are likewise unlikely to trust their students' parents (Hoy and Tschannen-Moran 2003). And it is likely that teachers' disposition regarding their trust of parents, whether of high or low trust, is equally evident to parents. Thus, the trust that teachers hold toward students and parents is likely to set the tone for these vital relationships.

The level of teacher collaboration with parents, as well as among teachers and with the principal, have all been found to be related to the level of trust in students and parents. In a bivariate correlation, faculty trust in parents was related to collaboration with parents. Furthermore, canonical correlation in which faculty trust in the principal, colleagues, and clients (i.e. students and parents) was regressed on a set of collaboration variables including collaboration with the principal, colleagues, parents, and students, faculty trust in clients was most influential in predicting the set of collaboration variables (Tschannen-Moran 2001).

There is a growing body of research that documents the powerful role that faculty trust in students and parents plays in fostering student achievement in both direct and indirect ways. Studies in a variety of contexts have consistently found that faculty trust in students makes an important contribution to students' academic achievement. In a decade-long study of Chicago public schools engaged in reform initiatives, Bryk and Schneider (2002) concluded that trust was a critical factor in predicting which schools would make the greatest gains in student achievement and which would sustain those gains over time. In addition, in a study of middle schools in a southeastern state, faculty trust in clients was found to be strongly related to student achievement on state tests in both English and math (Tschannen-Moran 2004b). In this study, the proportion of students receiving free and reduced price lunch was inversely correlated to faculty trust in clients and faculty trust in colleagues, but was not related to faculty trust in the principal.

The powerful role that socioeconomic status (SES) of students plays as a predictor of student success in schools has been well documented over the past 50 years. Educational researchers have searched diligently for school factors that predict achievement outcomes above and beyond the effects of SES. And yet, faculty trust in students and its close correlates have been found to do just that. Studies have demonstrated a substantial relationship between faculty trust in clients and student achievement, even when the impact of socioeconomic status was held constant (Goddard et al. 2001, 2009; Hoy 2002; Hoy and Tschannen-Moran 1999). In addition, the collective efficacy of the faculty, that is, the shared belief among the faculty of a school that they have the capability to facilitate successful outcomes for all of their students, influences the effort that teachers invest in preparing for and delivering instruction as well as the extent to which teachers persist in finding new instructional strategies for students who are struggling. In a sample of urban elementary schools, collective teacher efficacy predicted between-school variation in teacher trust in students and the strength of the relation between collective efficacy and trust diminished very little even when SES, race, and past achievement were added as predictors (Tschannen-Moran and Goddard 2001). Furthermore, collective teacher efficacy has repeatedly been found to be related to student achievement even when school SES, minority composition, and past achievement were held constant (Goddard 2001; Goddard et al. 2000a, 2001; Tschannen-Moran and Barr 2004). In addition, when teachers trust their students, there is also likely to be a stronger press for high academic achievement, and academic press has also been found to predict student achievement, even when controlling for SES (Goddard et al. 2000b; Hoy et al. 1998; Lee and Bryk 1989; Lee and Smith 1999; Tschannen-Moran et al. 2006). Moreover, faculty trust in clients, collective teacher efficacy, and academic press are so closely linked and such potent predictors of student achievement, that together they have been framed as a composite variable called Academic Optimism (Hoy et al. 2006; Kirby and DiPaola 2011; McGuigan and Hoy 2006; Smith et al. 2001). Together, these three variables consistently do what few variables examined by educational researchers have done, and that is to explain student achievement above and beyond the influence of student socioeconomic status.

These studies offer new insight into the importance of teacher trust to student learning. The evidence is strong that faculty trust makes schools better places for students to learn. When teachers believe their students are respectful and honest, competent and reliable, they create learning environments that facilitate student academic success. Because of the tendency for trust to build on itself, higher student achievement is likely to produce even greater trust, whereas low student achievement could be expected to lead to a self-reinforcing spiral of blame and suspicion on the part of teachers and students that could further impair student achievement. As teachers learn better how to cultivate high-trust learning environments in their schools, student success is likely to follow.

3.2.4 Parent Trust in Schools

Researchers and policy makers alike have increasingly recognized the importance of relationships that connect families and schools. In exploring the factors that influence parents' involvement, specifically those from economically distressed circumstances, relational school factors have been found to have a major impact (Henderson and Mapp 2002; Mapp 2003). Parents' desire to be involved in children's education is enhanced when teachers and principals recognize parents as partners in the educational development of their children. When the school community welcomes parents into the school, fosters caring and trusting relationships with parents, honors their participation, and connects with parents through a focus on the children and their learning, parents are more likely to be involved (Henderson and Mapp 2002, p. 45). As clients in the care of professionals, parents expect thorough assessment of their child's needs, an array of intervention strategies tailored to the individual student, decisions based on evidence, as well as reliability, consistency, and even-handedness in dealings with their child (Cooper 1988, pp. 48–49).

When exploring whether parent trust could be considered a property of schools, Adams, Forsyth, and Mitchell (2009) confirmed that it varied sufficiently from school to school to be considered a property of schools. Whether parents perceived that they had a voice and could influence school decisions and whether their children felt a sense of belonging at school influenced parents' trust in the school to a much greater extent than contextual conditions such as poverty status, school size, diverse ethnic composition, and school level. This suggests that school leaders can build and sustain parent trust by aligning policies and practices to be responsive to the needs of parents and to reduce the sense of vulnerability they perceived in the parent-school relationship.

A number of studies have suggested that strong school-family relationships matter to student achievement (Conway and Houtenville 2008; Henderson and Mapp 2002; Jeynes 2005). Evidence further suggests that parental participation at school can positively impact student achievement even after the cognitive ability of the students and socioeconomic status of the families have been factored in (Epstein 1988; Mapp 2003; Purkey and Smith 1983; Westat and Policy Studies Associates 2001). In a meta-analysis on research on parental involvement in middle schools, Hill and Tyson (2009) found that while almost all forms of parental involvement were positively associated with achievement, strategies reflecting academic socialization had the strongest positive association with achievement. The authors suggested that this form of socialization is consistent with the developmental stage and tasks of adolescence. Similarly, Adams (2010) labeled this form of socialization as "home academic emphasis" and found that where there was a strong emphasis on academics at home, students were much more likely to trust teachers. Further, he asserted that the "interaction patterns between parents and students were largely a function of parent orientation, not school membership" (p. 274).

Schools serving increasingly diverse student populations may have to work especially hard to cultivate trust with parents. In an urban elementary school serving a largely Latino student population, Peña (2000) found that parent involvement was heavily influenced by the attitudes of school staff. She emphasized the importance of school staff being welcoming and taking the time to gain the trust of parents and to inform them of how they could be involved. School personnel communicated respect and benevolence when they worked to find ways around the many barriers to parent involvement, such as the availability of childcare, language differences, and cultural influences that colored parents' expectations of how they should interact with school personnel. In addition, fostering trust was especially important for parents whose educational level was below that of the teachers.

3.2.5 Student Trust in Teachers

Finally, the importance of student trust in teachers is also supported by a compelling evidence base. Learning involves risk and vulnerability, and much of what inspires children to invest the effort required in learning happens in the interpersonal space between student and teacher. Thus, the relationships of trust between teachers and students are at the heart of the learning enterprise of schools. When students trust their teachers, a climate of safety and warmth prevails which facilitates learning. Conversely, when distrust prevails, students are motivated to minimize their vulnerability by adopting self-protective stances. The result is disengagement from the educational process. Safety comes at the expense of student investment in the learning process.

Listening to students' voices provides an interesting perspective on the development of trust between students and their teachers. In a qualitative study of urban youth involved in a multi-year intervention to support their enrollment and success in higher education, students reported that they tested the benevolence and trustworthiness of the adults in the program before they were willing to let down their guard and begin to trust them (Owens and Johnson 2009). Once trust was established, the students began to cooperate with the program structure, to demonstrate leadership within program activities, and to promote the program among their friends and family members. In addition, a study that used mixed-methods including interviews and surveys with teachers and discipline-referred students supported the association between cooperative or defiant behavior and the adolescents' perceptions of their teachers as trustworthy authority figures (Gregory and Ripski 2008). Teachers may earn the trust and cooperation of students if they use relationship-building strategies and persist in their attempts to foster trust even when students initially test their good will with defiance.

When trust between teachers and students breaks down or fails to develop in the first place, a number of problems arise. Not only is there insufficient safety to support the kinds of risk-taking necessary to learn new skills but teachers may resort to more rigid forms of discipline and control as well as the use of extrinsic rewards. Teachers who do not trust their students are likely to rely on inflexible rules and treat students as a unit rather than as individuals. When coercive actions are used to force compliance, student alienation is likely. In contrast, extending trust is likely to elicit instructional practices and behaviors based on attraction, engagement, and identification (Adams 2010, pp. 264–265).

Student trust in teachers has consistently been found to be strongly related to student achievement across a variety of contexts (Adams 2010; Lee 2007; Mitchel et al. 2010, 2008; Tschannen-Moran et al. in press). Students' trust has an influence on student achievement through its relationship to other potent variables, such as student identification with school, student perceptions of academic press, and safety. When students trust teachers and believe that they have their best interest at heart, they will be more likely to identify with school, to value school and school-related outcomes, and to feel that they belong (Tschannen-Moran et al. in press; Mitchell et al. 2010). Moreover, Mitchell, Forsyth, and Robinson (2008) found that student trust of principal and parent trust of schools were stronger predictors of student identification with school than SES. Student trust in teachers has also been found to be related to their perceptions of academic press in their schools (Tschannen-Moran et al. in press). And among middle school students in Korea, student trust was found to be related to student motivation and adjustment to school, as well as academic performance (Lee 2007). The student-teacher trust relationship contributed both directly to students' performance and indirectly through school adjustment and academic motivation. Although student trust, student identification with schools, and student perceptions of academic press were all significant predictors of student achievement, in a regression analysis student trust was the strongest (Tschannen-Moran et al. in press). Furthermore, student trust in teachers has also been found to be related to students' feelings of safety (Mitchell et al. 2010, 2008) as well as to student attendance (Moore 2010). When students had low trust in their teachers and school leaders, they felt less safe at school and their attendance suffered.

Student trust of teachers was positively correlated with student identification with school as well as with student perception of safety (Mitchell et al. 2010). All three variables, student trust in teachers, student identification with school, and student perceptions of safety, declined as students progressed from elementary to middle school and on to high school. In a hierarchical regression, student trust of teachers made the most substantial contribution to the explanation of identification with school while student perceptions of school safety made a smaller contribution.

The relationships between teachers and students are reciprocal. Thus, when teachers trust their students, students are more likely to trust them in return (Moore 2010). Faculty trust in students and student trust in teachers are reciprocal processes; a growing body of research evidence attests to the importance of each. Educators would do well to attend to the dynamics of trust in the classroom because trust hits schools in their bottom line—student achievement (Tschannen-Moran et al. in press; Howes and Ritchie 2002; Mitchell et al. 2010; Moore 2010).

3.2.6 Summary

Trust is increasingly recognized as an essential element in high functioning schools. The research reported here reports the link between trust and school effectiveness, collaboration, collective efficacy, organizational citizenship, and teacher professionalism. Fostering trust has been related to the authenticity, collegial and considerate behaviors of principals, as well as adopting a welcoming stance towards parents. Moreover, the relationships of trust between students and their teachers are powerfully related to student safety, identification with school, and achievement.

Based on the previous research on trust among teachers, parents, and students, three hypotheses guided this study. These were:

H1: Faculty trust in administrators, colleagues, and clients, parent trust in the school, and student trust in teachers will all be significantly and positively related to one another.

H2: Faculty trust in administrators, colleagues, and clients, parent trust in the school, and student trust in teachers will each be significantly and positively related to student achievement.

H3: Faculty trust in administrators, colleagues, and clients, parent trust in the school, and student trust in teachers will collectively explain a significant amount of the variance in student achievement.

3.3 Method

In order to test the hypotheses that faculty, parent, and student trust would be related to one another and that individually and collectively they would predict student achievement, I conducted a correlational analysis and multiple regression. Survey data were collected from two school districts, one urban and the other suburban, in a mid-Atlantic state. This section describes the participants, measures, data collection, and methods of analysis.

3.3.1 Participants

Data from 64 elementary, middle, and high schools in two school districts formed the basis of this study. The urban district included 35 elementary schools, 9 middle schools, and 5 high schools, while the suburban district consisted of 9 elementary schools, 3 middle schools, and 3 high schools. Since the school was the unit of analysis, data were aggregated to the school level. Forsyth, Adams, and Hoy (2011) have argued that trust can be considered a normative property of schools, and have offered statistical analyses demonstrating that there is sufficient variance in trust between schools (as compared to variability within schools) to justify this level of analysis.

The school scores were based on the responses of 3,215 teachers (2,581 from the urban schools, and 634 from the suburban schools) and 2,959 parents (1,867 urban + 1,092 suburban), nested within the 64 schools. All schools levels were well represented among the participants in both the faculty, parent, and student surveys (See Table 3.1). Surveys were anonymous, and demographic data on the gender and ethnicity of the respondents were not collected. Student scores were limited to

Table 3.1 Participation by level

	Context	Faculty participants	Parent participants	Student participants	Totals
Elementary Schools	Suburban	332	363		695
	Urban	1,389	1,004	4,778	7,171
Middle Schools	Suburban	121	263		384
	Urban	595	320	2,048	2,963
High Schools	Suburban	181	466		647
	Urban	597	543	1,430	2,570
Total Participants		3,215	2,959	8,256	14,430

the students from the 49 schools in the urban district. The school scores for these 49 schools were based on the responses of 8,256 students in grades 3–12. Data on gender were not collected, however, the ethnicity reported by students in the sample was 71.8 % African American and 28.2 % Caucasian.

3.3.2 Measures

Data were gathered using surveys to assess the trust perceptions of teachers, parents, and students. The measures of trust used in this study were developed based on the definition of trust as one party's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, honest, open, reliable, and competent (Tschannen-Moran and Hoy 2000). The response set was a five-point Likert scale anchored at (5) Strongly Agree, (4) Agree, (3) Neutral, (2) Disagree, and (1) Strongly Disagree. Student achievement was assessed using state standardized assessments. Participation in this study was voluntary.

3.3.2.1 Faculty Trust in Principal, Colleagues, and Clients

This study assessed faculty trust using the *Faculty Trust Scales (FTS)*. The *FTS* captures teacher trust in four important consistencies within the school: the principal, colleagues, students, and parents. Statistical analysis, however, demonstrated that teachers' perceptions of trust in students were statistically indistinguishable from their trust in parents so these two subscales were collapsed into one, which was labeled *Trust in Clients* (Hoy and Tschannen-Moran 2003). The *FTS* consists of 26 items divided between three subscales. *Faculty Trust in the Principal* subscale consists of eight items. Three of the items were negatively worded and consequently were reverse-coded. In the current sample, the alpha coefficient of reliability for this subscale was 0.98. Sample items include:

- The principal of this school typically acts with the best interest of the teachers in mind.
- Teachers in this school can rely on the principal.

The *Faculty Trust in Colleagues* subscale contained eight items. In the current sample, the alpha coefficient of reliability for this subscale was 0.87. Sample items include:

- Teachers in this school have faith in the integrity of their colleagues.
- Even in difficult situations, teachers in this school can depend on each other.

The *Faculty Trust in Clients* (students and parents) subscale included 9 items. In the current sample, the alpha coefficient of reliability for this subscale was 0.97. Sample items include:

- Students in this school are reliable.
- Teachers can count on parental support.

3.3.2.2 Parent Trust in Schools

The measure used in this study was an adaptation of a ten-item measure developed by Forsyth, Adams, and Barnes (2002). Two of the 10 items were taken directly from the Forsyth and Adams measure, while the remaining eight were close adaptations. A factor analysis of this measure among the urban schools in this sample found that all ten items formed a single factor (Pennycuff 2009). The reliability for this measure using Cronbach's Alpha was 0.98. Sample items include:

- This school has high standards for all kids.
- This school keeps me well informed.

3.3.2.3 Student Trust in Teachers

The *Student Trust in Teachers Scale* consisted of 10 items that were taken from the scale developed by Adams and Forsyth (2009). This scale had a Cronbach alpha reliability score of 0.93. Sample items on this scale include:

- Teachers are always ready to help.
- Teachers at this school are always honest with me.

3.3.2.4 Student Achievement

School math and English achievement were operationalized as standardized scores taken on state-mandated criterion referenced achievement tests for grades 3–8 and end-of-course tests at the high school level. Student performance is scored on a scale of 0–600 with 400 representing the minimum level of acceptable proficiency and 500 representing advanced proficiency. Student scaled scores for math and reading were averaged to produce a school score.

3.3.3 Data Collection

Data collection in the urban district made use of scannable paper surveys, while in the suburban district data were collected electronically using Survey Monkey. In the urban district, faculty surveys were administered during faculty meetings at each school to ensure broad representation of faculty and staff. Surveys were delivered to each of the 49 schools by central office personnel and picked up at a later date. In the suburban district, teachers and building-level staff in all 15 buildings were sent email invitations that provided them with the hyperlink to the survey and the password to complete the survey.

In the urban district, the parent survey measuring parents' trust in schools was sent home with all students to deliver to their parents. Stamped envelopes were provided for parents to return the surveys through the mail. In the suburban district, all parents were given the opportunity to participate in the study, with the option to complete the survey electronically or to complete a paper version of the survey. All but three of the participating parents opted for the electronic version. Parents in both districts were directed to complete the survey in reference to the school that their oldest student in the district attended.

The student survey measuring students' trust in teachers was distributed to randomly-selected homerooms representing about 50 % of the students in grades 3–12 in the urban school district.

3.3.4 Data Analysis

First, descriptive statistics were run to ensure sufficient variability among the school-level variables. Then, to test the hypotheses that faculty trust in the principal, in colleagues, and in clients would be related to one another as well as to parent and student trust, bivariate Pearson Product Moment correlations were conducted. In addition, correlations were run to analyze the extent to which each of the trust variables were related to student achievement. Finally, multiple regression analysis was conducted to assess the collective impact of the trust variables in explaining variance in a composite measure of math and reading student achievement.

3.4 Results

3.4.1 Descriptive Statistics

An analysis of the descriptive statistics found that the range of school-level trust scores varied between 1.50 and 2.85 points, with standard deviations that ranged from 0.43 to 0.66. This demonstrated that trust scores varied between the schools in

Table 3.2 Descriptive statistics

	N	Min	Max	Mean	SD
Faculty Trust in Principal	64	2.92	5.77	4.30	.66
Faculty Trust in Colleagues	64	3.72	5.63	4.59	0.43
Faculty Trust in Students	64	2.84	5.14	3.88	0.56
Parent Trust in Schools	64	3.56	5.47	4.32	0.48
Student Trust in Teachers	49	3.00	4.50	3.84	0.44
Student Achievement	64	420.78	529.60	471.87	26.90

Table 3.3 Correlation table for trust and achievement variables

	2	3	4	5	6
Faculty Trust in Principal	0.74**	0.53**	0.51**	0.26	0.43**
Faculty Trust in Colleagues		0.78**	0.72**	0.43**	0.68**
Faculty Trust in Clients			0.83**	0.64**	0.88**
Parent Trust				0.80**	0.79**
Student Trust					0.77**
Student Achievement					

*$p<0.05$; **$p<0.01$

this sample. The composite student scores also varied, with a range of 108.82 points and a standard deviation of 26.90 points. See Table 3.2 for specific results.

3.4.2 Correlational Analysis

The trust that teachers hold for their principal was strongly related to the extent to which teachers trusted one another ($r=0.74$, $p<0.01$), suggesting that trust among the adults in a school is somewhat generalized. Faculty trust in the principal was also moderately related to faculty trust in clients ($r=0.53$, $p<0.01$). This suggests that when principals are trustworthy, they set a tone that extends to teachers' perceptions of students and parents. It is interesting that the perceptions of their principal as trustworthy were also related to parents' perceptions of the trust in the school ($r=0.51$, $p<0.01$). Faculty trust in the principal, however, was not related to the level of trust students had in their teachers.

Faculty trust in their colleagues was strongly related to the level of trust in students and parents ($r=0.78$, $p<0.01$). The level of faculty trust in colleagues was also strongly related to the level of parent trust in the school ($r=0.72$, $p<0.01$) and moderately related to student trust in teachers ($r=0.43$, $p<0.01$). Faculty trust in their students and parents was reciprocated by parent trust in the school ($r=0.83$, $p<0.01$) as well as by students trust ($r=0.64$, $p<0.01$). As might be expected, parent trust in the school and student trust in teachers were strongly related ($r=0.80$, $p<0.01$). See Table 3.3.

Trust across all role groups was significantly related to student achievement. While it was important that teachers trust one another ($r=0.68$, $p<0.01$) and their

Table 3.4 Multiple regression analysis of trust variables and student achievement

Perception	Student achievement composite				
	b	SE_b	B	*t(103)*	
Faculty Trust in Principal	−3.53	4.31	−0.08	−0.819	0.417
Faculty Trust in Colleagues	8.537	8.88	0.119	0.961	0.342
Faculty Trust in Clients	22.138	6.874	0.416	3.22***	0.002
Parent Trust	20.388	13.64	0.205	1.495	0.142
Student Trust	17.100	6.921	0.305	2.471*	0.018

$F(5,43)=29.66$***, $R^2=0.78$, adjusted $R^2=0.75$
*$p<0.05$; **$p<0.01$; ***$p<0.001$

administrators ($r=0.43$, $p<0.01$), the aspect of faculty trust most strongly related to student achievement was teachers' trust in their students and parents ($r=0.88$, $p<0.01$). Also strongly related to student achievement were parent trust in the school ($r=0.79$, $p<0.01$), and student trust in teachers ($r=0.77$, $p<0.01$). See Table 3.3.

3.4.3 Multiple Regression

Given the compelling evidence of the strong intercorrelations of the various aspects of trust between different referent groups, I next wanted to see the combined contribution of the set of trust variables to explaining a composite measure of student achievement in reading and math. A multiple regression analysis revealed that the set of trust variables explained 78% of the variance of student achievement. Furthermore, two variables made strong independent contributions to explaining that variance. Those were teacher trust in clients ($B=3.22$, $p<0.001$) and student trust in teachers ($B=2.47$, $p<0.05$). See Table 3.4.

3.5 Discussion

The first hypothesis, that faculty trust in principal, colleagues, and clients, parent trust in the school, as well as student trust in teachers would all be significantly and positively related to one another, was largely confirmed. All of the intercorrelations were significantly related with the exception of one. The level of faculty trust in the principal was not related to the level of student trust in teachers. Many of these relationships were particularly strong. It is not surprising that parent trust in schools was strongly related to student trust in teachers because parents likely base much of their sense of trust on the input they receive from their children regarding their experiences in school. Where students perceive that their teachers are benevolent, honest, open, reliable, and competent, their parents are also likely to extend trust to school personnel. Where students do not feel they can trust their teachers, parents are likely to regard the school with suspicion. It was noteworthy, however, that faculty trust in clients was strongly related to both parent trust in schools and student trust in teachers. This speaks to a strong element of reciprocity in the teacher-student relationship that extends to parents' perceptions as well. When teachers do not trust their students, where the cultural values of students and parents are perceived to be sufficiently at odds with the values of teachers that the teachers interact with guarded suspicion or even fear, it is likely to be obvious to the students and their parents. In schools where teachers tend to hold these views, they are not likely to be regarded as benevolent, open, reliable, or competent by students and parents.

That faculty trust in principal was related to faculty trust in colleagues speaks to a tone set by administrators that influences the climate of the school. Where trust in the administrator is low, trust in colleagues is likely to suffer as well. Conversely, where the principal has established high trust relationships, teachers are more likely to perceive that they can trust their colleagues as well. It is interesting and important that both faculty trust in the principal and trust in colleagues are related to faculty trust in students. This is a role group that is not necessarily tied to the relationship among the adults in a school building, and yet the evidence from this study suggests that where the adults trust one another, they are more likely to extend trust to their students as well. Moreover, where distrust characterizes the relationships among the adults in a school, the trust between teachers and students is likely to suffer as well.

The second hypothesis, that faculty trust in principal, colleagues, and clients, parent trust in the school, and student trust in teachers would each be significantly and positively related to student achievement was also confirmed. All five aspects of trust in schools were found to be significantly and positively related to a composite measure of student achievement scores in reading and math. The strength of the correlations, ranging from 0.43 to 0.88, demonstrate that trust is not a "nice to have" feature of school climate—it is an essential element of productive schools. When a culture of trust pervaded the schools in this study, where teachers trusted their administrators, their colleagues, and their students, achievement was higher. Faculty trust was not the only driver of positive outcomes identified in this study, however. Students who trusted their teachers learned more, posting higher student achievement scores. And even parent trust was related to more positive outcomes for students on state-mandated tests. The schools in this study included both urban and suburban schools as well as schools at the elementary, middle, and high school levels, suggesting that trust is important across a variety of school contexts.

The third hypothesis, that faculty in principal, colleagues, and clients, parent trust in the school, and student trust in teachers would collectively explain a significant amount of the variance in student achievement was also confirmed. That 78 % of the variance in student achievement could be explained by this set of trust variables is powerful evidence that trust matters in schools. Few other variables examined by educational researchers come close to this level of predictive power. The non-significant beta weights for faculty trust in principal and in colleagues suggest that the portion of these variables that contributed to the bivariate correlations with student achievement was largely variance that was shared with faculty trust in students. Recall that faculty trust in clients was correlated with faculty trust in administrators at $r=.53$ and with faculty trust in colleagues at $r=0.78$. Similarly, the proportion of student achievement explained by parent trust in schools revealed in the bivariate correlation was apparently primarily variance that was shared with student trust in teachers ($r=0.80$). Interestingly, parent trust in schools shared a large proportion of variance with teacher trust in clients ($r=0.83$), so that may also have contributed to its non-significant beta weight in the presence of the set of trust variables.

3.6 Implications

3.6.1 Implications for Practice

The implications from these findings are far reaching for the practice of school leadership. With 75 % of the variance in student achievement explained by the set of trust variables, it seems clear that schools will find it nearly impossible to fulfill their essential mission unless they establish a climate of trust within and between the various role groups within the school. Central to this climate is fostering mutual trust between teachers and students. School leaders should be alert for signs of teacher aggression and have effective means of intervention when signs of teacher distrust in students surfaces, whether as isolated cases or as a more generalized climate of distrust.

The findings of this research also suggest the importance of principals earning the trust of their faculty. They can earn this trust by extending a sense of care for the teachers and staff of their schools, not just for the instrumental role they serve within the school but also as human beings. They must demonstrate authenticity, by taking responsibility for their actions, resist blaming others for their mistakes, and avoid abusing their authority through manipulation. Furthermore, they must let their personality and passion for their work find expression, so that they come across as being “real” and not simply as an organizational actor playing a role. In addition, administrators who wish to receive trust would do well to extend trust by being open with information, including teachers in decisions that affect them, and sharing power by delegating without micromanaging. They must also be scrupulously honest in all their dealings, even (and perhaps especially) when standards of propriety require confidentiality in ways that limit openness. Principals are more likely to be trusted when they are approachable and demonstrate openness to ideas and suggestions made by teachers, staff, parents, and even students. In order to foster trust, principals must be competent in their duties as both instructional leaders and managers of the organization and reliable in their follow-through on promises. The principal must create sufficient trust that teachers feel comfortable in disclosing difficulties as they arise so that problems can be addressed when they are manageable, not hidden until they become too severe to hide. School leaders should be alert to symptoms of distrust and have strategies for rebuilding trust that has been damaged.

The growing body of research on trust in schools makes clear that school leaders need to be knowledgeable in matters of trust. They need to know that the time it takes to establish and maintain trusting relationships is time well spent because it helps create the conditions necessary for schools to meet their goals. In order to garner the trust of their faculties, principals must be trustworthy in their own actions, demonstrating an unfailing ethic of care as well as the highest integrity in all their dealings. Principals must also work to create the conditions for faculty trust to develop. The findings of this study suggest that when principals are trustworthy, they set a tone that influences how teachers relate to one another, and that where teachers are trustworthy with one another, they are more likely to extend that trust to their students.

For schools to fulfill their duty to students, a context that is responsive to student needs must be cultivated. This will necessitate that leaders strengthen the norms, attitudes, and values of teachers so that leaders can trust teachers and grant them discretion as professionals. This study provides strong evidence that creating conditions that strengthen faculty trust in students and parents will pay dividends in student achievement. There is also evidence that cultivating student trust in teachers is likely to lead to greater student identification and engagement with school (Tschannen-Moran et al. in press; Mitchell et al. 2010). Without trust, students will seek to minimize their vulnerability, resulting in disengagement from the educational process that comes at the expense of student achievement. Because of the tendency of trust to build on itself, higher student achievement is likely to produce even greater trust, whereas low student achievement could be expected to lead to a self-reinforcing spiral of blame and suspicion on the part of teachers, parents, and students that could further impair student achievement.

Teachers, as well as students and parents, will look to school leaders for competence in navigating conflict skillfully (Cosner 2009; Tschannen-Moran 2004a). Competence in school leadership requires not only inspiring teachers in their commitment to students but also challenging and supporting teachers who fall short in their duty to improve their instructional practice. Adopting a trusting stance is not the same thing as taking a lax orientation where teachers are not held accountable in their responsibilities to students. Principals must address instances of unprofessional or untrustworthy behavior on the part of teachers in a proactive but respectful manner in order to foster strong collegial relationships between teachers. Coaching teachers through new expectations and providing professional development to assist teachers in resolving the inevitable conflicts inherent in joint work will assist teachers in fostering the strong relationships that undergird collaboration and a professional orientation in schools.

If schools are to garner the benefits of greater trust among the faculty and students, fostering a trusting work environment through trustworthy leadership on the part of principals is an important place to start. The behavior of principals plays a critical role in setting the tone of trust within a school. Thus, it is imperative that principal preparation programs alert prospective school leaders to the essential role that trust plays in the success of their schools. These fledgling school leaders should be taught to focus on the development of trust as a crucial component of leadership. Prospective principals should be taught the importance of these skills during their preservice training and have these skills reinforced in ongoing professional development throughout their careers. Leadership coaching is a particularly powerful form of professional development as it can assist school leaders to navigate the complexities of their particular situations. Trust, as an important element of the expressive functions of schools, contributes substantially to school effectiveness (Uline et al. 1998). School leaders would do well, then, to be equipped to cultivate trust in their schools.

3.6.2 Directions for Future Research

The findings of this study open new avenues for research on the dynamics of trust in schools. There is a growing interest in the importance of trust in interpersonal relationships to well-functioning organizations and the literature of trust in schools continues to grow. The groundwork laid to date provides a rich foundation for future scholarship on trust in schools. A number of directions for future research emerge from this current study. We need greater clarity to understand the dynamics that foster trust. Teachers are dependent on principals, but so too are principals dependent on teachers; it is the interdependency that makes both parties vulnerable and in need of trusting relationships. An understanding of the conditions and processes that enable teachers and administrators to learn to trust and cooperate is critical as schools increasingly are faced with the volatility of changing expectations. To what extent is faculty trust in the principal and colleagues related to teachers' propensity to innovate and take risks? To what extent is faculty trust in the principal related to the collective teacher efficacy beliefs of a school faculty?

We would do well to continue to build on the knowledge base of trust in situations of reform and organizational change. We need to know more about the mechanisms for building initial trust, whether a school leader is entering a building where heretofore trust has been low or whether the principal is assuming leadership of a high-trust learning community. How does a principal build trust in a school turnaround or a school in distress? How does a new principal foster trust when following on the heels of a well-loved principal? Longitudinal studies of the formation of trust in schools would be useful.

One of the most serious issues that most schools face may be the problem of broken trust. When trust is broken between administrators and teachers, suspicion and psychological withdrawal are likely to result. When trust is broken between teachers and students, a cycle of punishment and withdrawal or rebellion may result, setting up a dynamic that is deleterious to cognitive and social-emotional development of students. Both administrators and teachers would do well to be aware of the dramatic costs of broken trust and use that knowledge to encourage openness and cooperation and to prevent the abuse of power. What school conditions produce such knowledge? How can such knowledge be transformed into positive outcomes? The process of repairing broken trust is difficult and costly. Studies that examine the process of rebuilding broken trust in schools are essential if we are to begin to break through the barriers of building more trusting school cultures.

Faculty trust in principals and in colleagues are important elements of organizational life, but they represent only part of the complex of trust relationships found in schools. The reciprocal trust between teachers and students has not received adequate attention. Similarly, the trust between teachers and parents, and between administrators and parents have been virtually ignored. For example, to what extent is faculty trust in clients reciprocated by students and their parents, and how is it related to communication, collaboration, and cooperation with parents? Furthermore, educators and researchers need to understand more about the mechanisms that link trust and achievement. We need further exploration not only of how trust relationships among teachers, parents, and students relate to risk taking inherent in learning but also of how they influence persistence and effort. Teachers' self-efficacy beliefs may be hampered in a climate of distrust. Teachers' level of trust in relation to their classroom management strategies and their attitudes about student control also seem promising avenues to explore in understanding the link between trust and achievement. Researchers need to work vigorously to unlock the secrets of trust in school settings.

3.7 Conclusion

Clearly, trust is a salient aspect of school life. It is an important end-in-itself but it is also related to other important organizational outcomes. School leaders and those who prepare future school leaders would do well to attend to the growing body of research suggesting the importance of cultivating teacher-student trust in schools. Developing strategies for fostering deeper trust, especially in multi-cultural and low-income environments where trust may be more challenging, are crucial skills for those who would lead schools in our increasingly diverse society. Scholars, too, would do well to attend to issues of trust as they explore the conditions that foster school success. Schools are likely to benefit from a greater understanding of the dynamics of and consequences of trust in schools. For schools to live up to the aspirations that we have for them, they will need to function as high-trust organizations.

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