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## The Role of District and School Leaders' Trust and Communications in the Simultaneous Implementation of Innovative Policies

ABSTRACT: This mixed-method multiple case study investigated nine elementary schools. Six "odds-beating schools," which serve relatively high numbers of economically disadvantaged children, achieved higher than predicted performance on state assessments when compared with three typically performing schools. The overarching research question guiding this study was: What forces, factors, and actors account for odds-beating schools' better outcomes? The trust-communication connection provided one answer. Relational trust in odds-beating schools is an intraorganizational phenomenon, and it is accompanied by interorganizational trust (reciprocal trust). These two kinds of trust are accompanied by intraschool and district office-school communication mechanisms. Trust and communications are mutually constitutive as innovations are implemented. This connection is also an implementation outcome. When today's innovation implementation initiatives reinforce this trust-communication connection, it becomes an organizational resource for future innovation implementation.

**KEY WORDS:** Race-to-the-Top, Educational Policy Implementation, School Leadership, District Office Leadership, School Performance

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America's Race-to-the-Top (RttT) policy agenda provided the timely opportunity to investigate rapid, dramatic policy innovation implementation in district central offices and their constituent schools; and with special interest in district central office leaders, principals, and their relationships. Our first leadership study focused on district office leaders (Durand, Lawson, Wilcox, & Schiller, 2016). We asked how and why some district leaders were able to anticipate RttT innovations and ready their respective district offices and schools for innovation implementation. We discovered distinctive patterns of district-level leadership. Significantly, leaders employed adaptive and proactive strategies that facilitated innovation implementation, also enhancing the absorptive capacity of their respective district central offices and schools.

The study reported here is a sequel. With Common Core State Standards (CCSS) implementation as the primary focus, but with two other innovations as phenomena of interest (the Annual Professional Performance Reviews of Teachers and Principals and data-driven instruction), this study was designed to explore relationships between district office leaders and principals, focusing on the importance of trust, communications, and their relationships.

The main research question for this study was: What can we learn about the association between trust and communications during policy innovation implementation? This question required two levels of analysis. We began with the school as a unit of analysis, investigating principals' roles, behaviors, and interactions with staff members. In other words, we focused on intra-organizational relations.

Then we shifted to district office–school relations, with the goal of learning more about interorganizational and cross-role relations. Here, we proceeded with an explicit focus on superintendents and designated district officers' cross-boundary relationships with principals and teachers (Akkerman & Bakker, 2011).

Three sub-questions structured our analyses. How do district leaders communicate with principals and teachers as policy innovation implementation proceeds? What is the relationship between these implementation-related communications and trust? How does this trust-communication connection influence leadership for innovation implementation?

Because this study investigated espoused RttT policy aims and theories of action (Cobb, Donaldson, & Mayer, 2013), and RttT pilot states enjoyed some discretion with implementation, our analysis begins with relevant background. Then, after a review of education-specific and interdisciplinary literature, we provide details about the study design and analytical methods.

#### BACKGROUND: RACE-TO-THE-TOP IN NEW YORK STATE

RttT's aim is to develop college- and career-ready students to be able to participate in the global economy. Two of its main assumptions are noteworthy. High school graduation is an essential, but oftentimes insufficient, outcome, and postsecondary education completion with demonstrated competence is a practical necessity.

Pilot RttT states receiving funds had to comply with federal guidelines for the implementation of several designated RttT innovations (U.S. Department of Education, n.d.). New York (NY) was selected as an RttT state. The state education department received substantial federal funding to implement three policy innovations: (1) The Annual Professional Performance Review (APPR) system, which uses a variety of metrics to assess principal and teacher performance; (2) The Common Core State Standards (CCSS), which are structured to increase the rigor and relevance of curricula and instructional strategies to better prepare high school graduates for college or the workplace; and (3) Data-driven instruction (DDI), which prioritizes the use of evidence to guide and direct decision-making.

As in other states, this NY agenda was ambitious (Doherty & Jacobs, 2013) because these three policy innovations were scheduled for simultaneous implementation in a relatively short period of time. Questions arose regarding district officers' and principals' readiness, commitments, and competencies for innovation implementation leadership under such circumstances (Honig & Hatch, 2004). Meanwhile, substantial funding issues arose as implementation proceeded. Although state funding was provided to all participating NY schools and districts to facilitate the implementation of these innovations, each district's allocations depended on many factors such as student performance status and tax cap levies. In fact, variable and insufficient funding accounted for a variety of challenges NY superintendents and principals were confronting (Cunningham, 2014; Venettozzi, 2014). Additionally, leaders had to make a consequential shift from status quo-oriented management to two related kinds of leadership: (1) policy innovation implementation leadership (Cobb, Donaldson, & Mayer, 2012); and (2) direct and indirect instructional leadership required under the new APPR system (Klar, Huggins, Hammonds, & Buskey, 2016; Neumerski, 2013; Rowland, 2015).

Beyond this constellation of new demands on district and school leaders, RttT innovations brought new attention to how district offices and schools function as organizations. Based on prior research, we could expect that schools possessing requisite absorptive capacity for innovation adoption and implementation would experience minimal, if any, performance shortfalls (Hatch, 2009; Zahra & George, 2002).

However, important questions remained. For example: In what ways do organizations achieving different performance outcomes vary with regard to their innovation readiness and capacity (Wiener, 2013)? How do relationships between district office leaders and principals help to explain this initial readiness as well as schools' demonstrated innovation implementation capacity? An expansive, interdisciplinary literature provided initial conceptual guidance and facilitated data analysis.

#### RELATED LITERATURE

The research team integrated four theoretical strands: (1) school and district leaders' relationships, including learning, alignment, and improvement mechanisms during innovation implementation (e.g., Knapp, Copland, Honig, Plecki, & Portin, 2014; Malen et al., 2015); (2) the relationship between workforce characteristics, organizational factors, and organizational social capital (e.g., Day & Gu, 2014; Holme & Rangel, 2012); (3) policy implementation theory, especially policy attributes theory (Cobb et al., 2013; Desimone, 2008; Fullan, 2006) in tandem with research on implementers' sense-making mechanisms (e.g., Coburn, 2005; Coburn & Russell, 2008; Domina, Lewis, Agarwal, & Hanselman, 2015); and (4) the education-specific and interdisciplinary literatures on trust, communications, and their relationship.

We selectively summarize findings from our review with the aim of explaining and justifying this study's design and rationale. We provide additional references in the discussion section.

## RELATIONAL TRUST: AN INTRAORGANIZATIONAL RESOURCE

## Interdisciplinary Research

Trust denotes a special set of social relations among educators. It depends on mutual confidence in colleagues' dependability, benevolence, honesty, competence, and overall professionalism. When trust is bestowed to one's colleagues, it is accompanied by calculated risks and some vulnerability. The full measure of these risks and the costs of vulnerability become apparent when acts of betrayal are in evidence (Tschannen-Moran & Gareis, 2015a & b).

Tschannen-Moran and Hoy (2000) drew on interdisciplinary trust literature and brought it to bear on schools. They emphasized that trust derives from rational choices. For example, trust involves contingencies, including who is expected to trust whom and under what conditions, when, and

why. McAllister (1995) augmented the dominant orientation—a rational choice orientation called cognition-based trust—by emphasizing the importance of emotions. Affective-based trust derives from the emotional relationships among two or more people, and it merits attention alongside cognition-based trust.

Beyond interpersonal relationships, trust is a defining feature of organizations. It is socially constructed and constituted over time in particular organizational settings, which is why some researchers recommend research on "the lifecycles of trust" (Kutsyuruba & Walker, 2015). This trust lifecycle concept provides three reminders: (1) trust can be eroded when suboptimal practices, policies, and conditions prevail; (2) schools and district offices without trust are unlikely to make improvement progress until it is developed; and (3) workforce stability is an essential co-requisite for the development and sustainability of trust (Holme & Rangel, 2012).

#### Relational Trust in Schools

Bryk and Schneider (2002) laid the foundation for research focused on trust in principals. Aiming to discover why some schools were more effective than others, these researchers introduced the concept of relational trust, and they linked it to three main findings. First, the kinds of social exchanges among people in and around a school are central to a school's functioning and to its efforts to mount broad-scale change (p. xiv). Second, "The social relations of schooling are not just a mechanism of production but are a valued outcome in their own right" (p. 19). Third, "The form that trust takes depends on the nature of the specific social institution in which it is embedded" (p. 16). Framed in this way, relational trust is one answer to two important questions: (1) How can principals develop optimal conditions for teaching, learning, and school improvement? and (2) What can principals do to optimize the conditions for innovation implementation, including mechanisms for adjustments, knowledge generation, and learning?

Perhaps anticipating these questions, Bryk and Schneider (2002) emphasized an important combination of workforce factors and organizational configurations (see also Day & Gu, 2014; Holme & Rangel, 2012). In their words, "Designing good schools requires us to think about how best to organize the work of adults so that they are more likely to fashion together a coherent environment for the development of children" (p. 5). Relational trust facilitates this kind of collective action because it functions as a kind of social glue that connects and unites diverse stakeholders (see also Tschannen-Moran & Gareis, 2015a & b).

Browning (2014) and Northfield (2014) have enhanced this relational trust framework by providing an action orientation. Browning identified ten

trust-building practices employed by principals in schools that produced impressive academic performance. For example, these principals admitted mistakes, actively listened, and provided staff members with affirmation. Northfield's (2014) research yielded a three-component conceptualization of trust: character, integrity, and care for others. He claimed that all three components depend on two sets of leadership abilities: interpersonal and task-related. For Northfield, trust-building is a cumulative process, and ongoing trust-building efforts are either facilitated or constrained by the principal's previous relationships with teachers and other staff members.

More recently, Tschannen-Moran and Gareis (2015a & b) have enriched trust theory and research in multiple ways. For example, they have identified, described, and documented the importance of five principal characteristics, which describe and predict principal-related trust. In no particular order, these characteristics are benevolence (i.e., a sense of caring), honesty, openness, competence, and reliability.

#### Relational Trust in District Offices

District central offices also can be viewed as distinctive organizations characterized by varying degrees of trust among staff members and with identifiable trust lifecycles (Kutsyuruba & Walker, 2015). Superintendents are particularly important in developing stocks of relational trust in district central offices. Mirroring research on principals, characteristics such as benevolence, integrity, competence, and openness are observable in superintendents who build and benefit from relational trust. For example, research has documented the importance of relational trust between district office leaders as an important predictor for improvement (Chuon, Gilkey, Gonzalez, Daly, & Chrispeels, 2008).

Relational Trust as an Intraorganizational Resource. Thus, relational trust is rooted in interpersonal interactions in specific organizations. This special trust depends in part on people's ability to discern others' intentions from their respective actions. It is especially important during times of rapid, dramatic innovation because it helps to counter feelings of vulnerability amid uncertainty and complexity, especially as it becomes apparent that everyone depends in some measure on everyone else (Tschannen-Moran & Gareis, 2015a & b).

During all such turbulent times, relational trust functions as a kind of social glue (Bryk & Schneider, 2002). It helps to make dramatic, rapid policy innovation implementation a collective challenge in lieu of a lonely experience with divisive potential, one that reinforces a sense of professional isolation. Produced and experienced by people in their social relations and interpersonal interactions, relational trust extends to a prominent feature of

schools-as-organizations as well as district central offices-as-organizations. In fact, relational trust may be viewed as a special organizational capacity (Hatch, 2009)—one that helps to explain how and why some district offices and schools may enjoy more innovation readiness and absorptive capacity.

Cross-boundary Trust. RttT's ambitious policy innovation agenda requires implementation fidelity as innovations travel across several organizational and role-specific boundaries. Examples of these boundaries include those separating state education departments and district central offices; district office–school; superintendent–principal; principal and the assistant superintendent for curriculum and instruction; and principal–teachers.

When these relationships are framed by boundary theory (Akkerman & Bakker, 2012), an important implementation feature is illuminated. These relationships are developed in a vertical plane because state education systems, school districts, and constituent schools are public-sector bureaucracies characterized by hierarchical power and authority relationships (Lipksy, 1980). Fullan (2006, pp. 74–75) viewed this three-tiered relationship as the platform for "tri-level systems change," and he emphasized the delicate balance between inherited patterns of compliance-oriented alignment and sufficient discretion for innovation adaptation at the school level, especially for teachers.

Insofar as trusting relationships are consequential as policy innovations "travel" vertically from the state education department drawing board to classroom practices in a local school, our literature review indicates a gap, together with needs for a new concept. The reminder here is that relational trust is an intraorganizational property and resource. Viewed and operationalized in this way, it develops and functions on a horizontal plane.

So, when theorists and researchers shift their focus to the cross-boundary, vertical relationships (e.g., between principals and superintendents), an important conceptual void becomes apparent. There is a manifest need for a companion trust concept for interorganizational (i.e., cross-boundary) trusting relations. The practical reminder here is that relational trust in a school or a district office does not guarantee cross-boundary, interorganizational, and inter-role relational trust. In fact, it is possible to have one (e.g., school-based relational trust in the principal) without the other (e.g., trust between the principal and superintendent).

In this light, RttT research with its priority for the progressive reconfiguration of entire districts and their constituent schools-as-organizations provides an important opportunity. Ostensibly, the social relations between district office leaders and principals, especially the extent to which they trust each other, facilitate or constrain this RttT organizational systembuilding, and these relations also influence innovation implementation.

Relational trust	Intraorganizational property for	Principal-staff members		
	innovation implementation	Superintendent–district office leaders		
Reciprocal trust	Interorganizational property for innovation implementation	State education department officials-superintendents Superintendents/district office		
		leaders-principals Superintendents/district office leaders-teachers		

Figure 1. Relational trust and reciprocal trust as units of analysis.

In response to this need for cross-boundary, interorganizational trusting relationships, our research team developed the concept of reciprocal trust. As Figure 1 indicates, reciprocal trust complements relational trust. Together these two kinds of trust provide opportunities for researchers to provide thicker descriptions for policy innovation implementation mechanisms and outcomes—and with special interest in the relations between leadership dynamics and the absorptive capacity of district offices and particular schools.

### LEADERSHIP-RELATED AND ORGANIZATIONAL COMMUNICATIONS

The literature for leadership-related communications, organizational communications, and their relationship is voluminous. Essentially, communications entail "sending, receiving, and interpreting messages" (Dainton & Zelley, 2015, p. 2). This basic definition emphasizes the sender (e.g., a superintendent), the receiver (e.g., a principal), and the message, including its contents and the form of transmission. Messages encompass a variety of media such as formal presentations, emails, newsletters, reports, and discussions during staff meetings. The language employed in all such messages is influenced by the sender's cognitive frames. For example, educators working in schools serving considerable numbers of poverty-stricken children and families may be prone to view students' learning barriers as deficits and employ deficit-based language (Valencia, 1997).

Rogers' (2003) classic framework for innovation dissemination, diffusion, and implementation emphasizes the importance of communicating the relative or comparative advantages of a prioritized innovation. Gilley, Gilley, and McMillan (2009) add details:

Leaders as change agents must provide employees with abundant, relevant information with regard to impending changes, justify the appropriateness and rationale for change, address employees' questions and concerns,

and explore ways in which change might affect recipients in order to increase acceptance and participation. (p. 80)

Where the education research is concerned, one line of leadership-related and organizational communications research documents the importance of effective communications systems, especially where organizational learning and improvement are concerned (e.g., Knapp et al., 2014; Stein & Coburn, 2008). These recommendations for superintendents, other district office leaders, and principals tend to emphasize "the sender side" of communications in support of innovation implementation.

However, receivers' interpretations, particularly teachers' attributions of meaning and significance, also are important. Here, interdisciplinary communications researchers emphasize the possible differences between the intentions and motives of senders such as superintendents and principals and the constructed meanings and subsequent action orientations of teachers. Coburn's line of research is particularly noteworthy precisely because it focuses on teachers' sense-making of innovative policies as implementation proceeds (e.g., Coburn, 2005; Coburn & Russell, 2008). The unit of analysis in this research is the school, and it showcases the relationships between principals' sense-making of innovations and their teachers' sense-making and attendant actions.

Coburn (2005) found that principals make important decisions regarding, for example, what policy messages and approaches to bring to their respective teachers. Especially where multifaceted policies are concerned, principals decide which parts to emphasize as well as what they may need to do to buffer teachers from too many changes or perhaps an overly constricted implementation timetable. Here, researchers oftentimes rely on conceptual proxies for communication such as routines of interaction, forms of interaction, and substance of conversations (Coburn, 2005) and leaders' transparency (Wilcox & Angelis, 2010).

Coburn (2005) concluded that observed teacher practices alone do not account for substantive implementation. In her words, "Rather it is the nature, quality, and content of the interaction in the course of these activities that shapes the degree to which teachers engage with policy in ways that transform their practice or that reinforces preexisting approaches" (p. 501).

Although our previous study of district-level leaders for odds-beating schools did not employ Coburn's sense-making framework, our findings regarding district office-school relationships fit her description of sense-making mediators (Durand et al., 2016). Mirroring what principals do for their schools, we found that superintendents and other district officials perform mediating roles for principals and other staff members in their

schools. District office leaders' contingent use of bridging, buffering, and brokering strategies was instrumental in how principals, teachers, and other staff members in odds-beating schools framed innovation implementation. And, as implementation proceeded, leaders crafted coherence with combinations of top-down and bottom-up strategies, moderating the innovation as needed to fit somewhat unique local contexts (Durand et al., 2016).

When, why, and how do superintendents, other district officers, and principals perform mediating roles as innovation implementation proceeds? When, how and why do they perform moderating roles, helping to adapt the innovation to fit the local context? Answers to these two questions are not readily apparent in the literature.

It is plausible that the attributes of particular policy innovations (Cobb et al., 2013; Desimone, 2008; Fullan, 2006) occasion leaders' mediation and moderation efforts. The testable idea for future research is that leaders evaluate these policy innovation attributes, consider all that they entail and require, and then make determinations about important practical matters such as innovation-organization fit, organizational readiness and capacity, and workforce competency. Leaders opt for mediation and moderation strategies when they conclude that policy innovation implementation is problematic, not automatic.

This review would be incomplete without mention of power of the meta-messages accompanying leadership actions and inactions. Differences between what district-level officers and school leaders claim (espoused theory) and what they do (theory-in-use) are especially important (Argyris & Schön, 1996). For example, district and school leaders' negotiations with the local teachers' union members may be facilitated by the discourse of teacher professionalism and distributed leadership, but when implementation proceeds, these leaders may opt for top-down, compliance-oriented, and scripted implementation protocols. Under these kinds of circumstances, the meta-messages trump explicit communications about espoused values and beliefs. This discrepancy erodes trust and sets in motion defensive routines that inhibit future trust and communications (Argyris & Schön, 1996).

To summarize: Especially when disruptive innovations are slated for implementation, communications influence people's meaning-making, motives, and action orientations. Formal and informal communications mechanisms accompanying innovation adoption and implementation can be examined in three related ways: (1) the communicative forms; (2) communications content; and (3) the social relations that predate, accompany, and follow from formal communications, extending to the meta-messages that people interpret. Although leaders' communicative

actions and mediation strategies are not stand-alone variables, and they are not the only influence on implementation, they are influential in what gets implemented; how, when, where, and why; by whom; in what form; and for how long.

# THE TRUST-COMMUNICATION CONNECTION AND INNOVATION IMPLEMENTATION

This trust-communication connection is especially important when innovative policies are slated for implementation. The interdisciplinary literature provides an important contrast. When trust levels are high and communications are optimal, organizational rules and role structures are more supportive of professional autonomy and discretion. Conversely, when trust levels are low and communication patterns are suboptimal, top-down, scripted, compliance-oriented rule structures are developed to ensure acceptable, standardized role performance (McAllister, 1995), especially in rigid public-sector bureaucracies (Lipsky, 1980).

Recent educational research provides enriched support for the importance of the trust-communication connection and the attendant benefits. For example, Tschannen-Moran and Gareis (2015a & b) discovered associations between principal trust and three beneficial outcomes: academic press, teacher collective efficacy, and teacher professionalism.

The third construct is especially important during rapid innovation implementation. Principals who trust their teachers and enjoy solid communications with them tend to give them discretionary power when innovations are slated for implementation (Larson, 1979). This implementation leadership strategy facilitates teachers' trust in them.

However, this discretionary power should not be confused with professional autonomy because autonomy affords teachers the right to decline implementation of RttT innovations. In contrast to such unfettered implementation freedom, discretionary power means that teachers have genuine choices regarding the "how-to questions" of implementation. Here, teachers are able to adapt innovations during implementation in lieu of being treated as "implementation puppets" scripted for obedient implementation via compliance-oriented protocols.

Bryk and Schneider (2002) provide what amounts to the finishing touches for this literature review. They claim that the trust–communication connection facilitates risk-taking, especially during times of innovation implementation. To be able to talk honestly with colleagues about "what's working and what's not" means exposing one's ignorance and making one-self vulnerable (Byrk & Schneider, 2002, p. 123; see also Tschannen-Moran

& Gareis, 2015a & b). In brief, absent trust during innovation implementation, communications are at least constrained, and several suboptimal outcomes may follow, starting with implementation fidelity and extending to teacher isolation (Day & Gu, 2014) as well as limited organizational learning (Knapp et al., 2014). Without solid, relationship-building communications, trusting relationships are difficult to establish, strengthen, and maintain.

Thus, trust and communications appear to be mutually constitutive. Trust depends on, is fueled by, and facilitates, communication. Reciprocally, solid communications have the potential to facilitate the development of trust. This dynamic relationship holds for intraorganizational relationships (within schools and within district offices) and also for cross-boundary, interorganizational relationships (e.g., district officeschool relationships). During turbulent times of rapid, dramatic policy innovation implementation, trust functions as a kind of social glue, and communications serve as social lubricant for innovation implementation and learning.

### **METHODS**

This study is part of a larger mixed-method multiple case study designed to identify practices and processes within elementary schools whose students exceeded performance expectations on the 2012–2013 New York State CCSS ELA and math assessments in grades 3–5 as well as on assessments prior to the implementation of the CCSS. These assessments were the first to be aligned with and structured by the CCSS (Teddlie & Tashakkori 2009). The larger study sought to identify differences in how educators responded to the standards changes as well as the APPR and DDI mandates.

Our research team conducted case studies in nine elementary schools. In order to identify our sample we conducted regression analysis, which facilitates identification of sites with statistically significant differences in performance outcomes based upon a variety of demographic factors (Levine, Stephan, & Szabat, 2013). All of the schools identified as "oddsbeating" (N=6) fell at least one standard deviation above the state average for ELA and math performance taking into account the percentage of economically disadvantaged students and English language learners they serve. In some cases, multiple schools from the same district met the "odds-beating" criteria and we chose just one school from each district to study. We also chose, as a comparison data set, a set of three schools achieving expected performance (i.e., standard deviations close to zero); these schools we called "typically performing."

Table 1. Elementary School Sample

Odds-Beating Schools	School Pseudonym	Grade Span	% Economic Disadvantage	% White	PPE	Average z Residual Range <sup>2</sup>
Rural	Eagle Bluff <sup>3</sup>	K-6	50	100	\$15,000	1.00-1.49
	Spring Creek	K-6	50	90	\$18,000	1.50-1.99
Suburban	Starling Springs	K-5	30	50	\$19,000	1.50-1.99
	Yellow Valley	K-5	75	65	\$17,000	1.50-1.99
Large Suburban/ Urban	Bay City	K-6	100	40	\$18,000	1.50-1.99
	Goliad	K-6	60	20	\$24,000	1.00-1.49
Typical Schools						
Rural	Wolf Creek	K-6	35	95	\$18,000	-0.20-0.00
Suburban	Sun Hollow	K-6	40	90	\$18,000	0.00-0.20
Large Suburban/ Urban	Paige City	K-5	50	80	\$17,000	0.00-0.20
Average for New York	NA	NA	50	48	\$20,410	NA

#### Note

- 1. Per pupil expenditures
- 2. Ranges of statistical results are provided to protect anonymity
- 3. All school and district names are pseudonyms

In addition to favoring schools with greater socioeconomic and diversity challenges, yet better performance outcomes, the sample was further refined to include rural, suburban, and urban schools. All except one of the oddsbeating schools (i.e., Starling Springs) had higher than the state average for economic disadvantage. In addition, both Bay City and Goliad, the two urban odds-beating schools, are also more ethnically diverse than the state average.

The sample schools' demographic details as well as their performance on the 2012–13 CCSS assessments as represented in z scores are displayed in Table 1.

#### RECRUITMENT OF SAMPLE SCHOOLS

A research team member recruited selected schools and contacted both the district superintendent and the school principal to obtain consent to participate in the research. A modest stipend for facilitating site visits was provided to participant schools. A field research team, typically consisting of three to four members who were certified in human subjects research by the university's Institutional Review Board, was assigned to complete the site visit. Each team had a designated leader and a co-leader who shared responsibilities for data collection, transcript preparation, interpretive memo, and a summary report.

#### DATA COLLECTION

Multiple methods were employed to obtain several types of data (Teddlie & Tashakkori, 2009). A total of 69 interviews, 45 focus groups, 49 classroom observations, and 205 documents were collected for the larger study. Lines of inquiry were derived from the literature review and informed the interview, focus group, and observation protocols. These included district and school leadership, curriculum and instruction, data use and monitoring, organizational structuring, family and community partnerships, and student social-emotional development.

Data were collected from 38 district leaders, 9 principals, 79 teachers in grades 3, 4, and 5, and 69 school-level support staff and specialists (see Table 2). Interviews and focus groups with these participants lasted approximately one hour and researchers asked a series of open-ended semi-structured questions designed to elicit responses to questions about policy implementation, practices and procedures within the district and school buildings, descriptions of who were involved and what happened, and their perceptions of success and challenges within the district; particularly with regard to RttT policy implementation (Creswell, 2015; Morgan & Krueger, 1997).

#### DATA ANALYSIS

Data analysis commenced while the research teams were on site. This procedure is in compliance with a recommended standard for field-based qualitative research (Creswell, 2015). Structured by this study's lines of inquiry described above, teams engaged in debriefing activities that were cataloged in an interpretive memo. This memo served to organize the team's reflections on the data after the first day of data collection and again immediately after the site visit was completed.

Next, each case's data set was loaded into NVivo 10; a qualitative analysis software program (QSR International, 2012). Data were coded using an

Table 2. Study Participants

Participants Superintendents		
		Other District Leaders
Principals	9	
Teachers—Grades 3, 4, and 5	79	
School-Level Specialists (AIS, Special Education, ESL)		
School-Level Support Staff	20	

a priori scheme in alignment with the lines of inquiry (Miles, Huberman, & Saldana, 2014). All coders had participated in at least one school site visit, which served to provide them with a context for coding and case study writing. Each analyst then crafted a case study and engaged in member-checking (e.g., sharing the case study draft with a superintendent and the school principal) to ensure accuracy.

For the purposes of conducting cross-case comparisons, the research team used both deductive and inductive processes (Miles et al., 2014; Miles & Huberman, 1994). This work began with the extraction of code reports by *a priori* categories utilizing the matrix query function in NVivo 10 (Yin, 2014). In the next stage of analysis, research team members used an inductive approach whereby each analyst mapped relationships of themes evident in the data (Miles et al., 2014). These were then compared across schools and across school sets (i.e., oddsbeating and typically performing). In sum, several methods recommended for multiple case study analyses were employed to ensure the credibility of intra-case and cross-case findings, namely, source triangulation, researcher triangulation, and member checking (Creswell 2014; Yin, 2014).

In the end, in responding to our research questions, we identified contrasts between odds-beating schools and typically performing schools with regard to climates of trust, bidirectional and constructive communications, organizational alignment, readiness for change, workforce characteristics, and instructional adaptation (see Wilcox, Jeffrey, & Gardner-Bixler, 2015). Here we focus on the findings related to the relationship between trust and communications and with particular interest in highlighting the characteristics of the six odds-beating schools.

#### **FINDINGS**

We derived two important general findings regarding the trust–communication connection. First, relational trust in odds-beating elementary schools was implicated by participants when they responded to openended questions about how the school operates and why it is effective. Consistent with prior research, school respondents indicated that trust, particularly in the principal but extending to staff relations overall, was an important leadership quality and also a facilitator for innovation adoption and implementation. What is more, respondents provided an important connection between effective communications and relational trust. They highlighted the importance of both as RttT policy innovations (CCSS and APPR) were being implemented.

Second, when the analysis shifted to relationships between district office and the school, the lens moved from a horizontal plane (within a particular school) to a vertical one. Two kinds of vertical relationships and interactions were derived from the data (see Figure 1): superintendent—principal; and superintendent—teachers or other school professionals. In both of these relationships and interactions, participants identified, described, and explained the importance of trust. Although this second kind of trust no doubt is associated with relational trust, it is unique and significant. As indicated in the literature review, we named it *reciprocal trust*, reserving it to refer to the socially constructed and constituted, cross-boundary relations between school leaders and district central office leaders.

Mirroring the importance of communications in relational trust development, respondents also identified the importance of effective district–school communications in the development of reciprocal trust. Two communication patterns emerged as consequential for leadership and policy implementation: Superintendent-to-principal and superintendent-to-teachers. As in the case of individual schools, district office–school communication and reciprocal trust appear to be mutually constitutive.

Additionally, we found that these levels of trust and communication were found system-wide in odds-beating schools. In contrast, no typical schools demonstrated system-wide levels of trust and communication. We highlight next two interactions of particular interest in our odds-beaters: (1) district-to-school and school-to-district reciprocal trust and communication involving district leaders with principals and front-line school professionals, especially teachers; and (2) intraschool-level relational trust and communication, particularly between principals and front-line professionals, especially teachers.

## DISTRICT-SCHOOL RECIPROCAL TRUST AND COMMUNICATION

In the six odds-beating schools, we found evidence of reciprocal trust and communication between district leaders and both school leaders and teachers. In contrast, in typical schools, teachers expressed primarily top-down communication patterns with district leaders. Additionally, typically performing district leaders described a top-down approach to implementing CCSS and teachers echoed the feeling of lack of trust for leaders. Consequently, we found that odds-beating district office leaders and school personnel benefited from a baseline of reciprocal trust and effective communications. This leadership-initiated policy implementation strategy served to reinforce reciprocal trust and strengthen two communication patterns in odds-beating schools: (1) district leaders to school leaders and (2) district leaders to teachers.

### District-School Principal Communications

District-level leaders in odds-beating schools, starting with the superintendent and proceeding out to others, reported that communication with school leaders was fundamental in supporting the implementation of Common Core. This sentiment was part of a larger culture of communication and collaboration between district- and school-level leaders that facilitated innovation implementation.

A pattern emerged in the evidence from odds-beating schools. District leaders spoke of regular formal and informal meetings with school leaders for the purposes of goal setting, curriculum and instructional development, vision alignment, and professional development. For example, at Yellow Valley, the assistant superintendent spoke of meeting with principals on a regular basis, discussing leadership and other strategies to help meet student needs, and for professional development. At Bay City, district leaders reported helping principals move beyond "being the manager of the building . . . to have those instructional conversations about what they're doing, what they need to do, how they're providing feedback, how they're providing staff development, how they're monitoring and how I see it."

Odds-beating school leaders echoed this pattern in their interactions with district leaders. Principals and other building leaders described working with district leaders on curriculum and instructional decisions, including choosing textbooks and technology, using data, and professional development, among others. Principals repeatedly reported that this work was facilitated by knowing the district supported them in their efforts, feeling listened to and trusted, and believing that district leaders had confidence in their leadership. In contrast, typical school principals reported frustration with lack of resources to implement CCSS appropriately and little collaborative work with district leaders.

Importantly, these types of trust-building and communications-enhancing interactions and opportunities are not coincidental or haphazard in odds-beating schools. They are supported by work schedules created to enable and encourage collaboration and communications, especially communications that provide, clear and consistent messages about the joint achievement of shared goals. The pattern here is noteworthy: trust-building, effective communications facilitate collaboration, and these two people-related patterns (communications, collaboration) are enabled by deliberately designed organizational routines (scheduling and goal planning) (Spillane, 2013). In odds-beaters, the prized characteristics known as clarity, coherence, alignment, and "shared mindset" were evident (DuFour & Fullan, 2013), and communications systems were instrumental in their social construction.

District–School Staff Communications. Reflecting the finding regarding bidirectional communication, odds-beating district-level leaders reported that communication with school faculty and other staff was critical to facilitating innovation implementation. This system-wide communication was in evidence in the majority of odds-beating schools, with most teachers and other professional staff reporting that they felt comfortable collaborating and communicating with district leaders. For example, at Eagle Bluff and Yellow Valley, district leaders reported that they make it a point to be present in school buildings on a regular basis. Spring Creek teachers reported that their superintendent regularly convenes them to listen to their concerns and respond to their needs. An assistant superintendent for Starling Springs described the importance of developing and sustaining effective and various communication channels.

Leadership is really about a few things in my opinion. It's about communication. It's about relationship building, and it's also about following through on clear actions or goals, or both, so all those things are intertwined. The communication could be . . . all aspects of communication . . . meeting with one person, talking to a group, e-mail, social media, . . . large group meetings, and everywhere in between. But being a strong and consistent communicator I think is important for a leader.

Bidirectional district leader-school personnel communication was a facilitator for shared decision-making and distributed leadership in the odds-beating schools studied. Three examples support this claim. At Bay City, district leaders reported working collaboratively with building leaders to make use and understand student data. At Eagle Bluff, teachers reported having influence in the choice of a new math program and setting goals. A district leader at Starling Springs explained how a sense of humility, along with administrator role-identification as "learning leaders," facilitated bidirectional communication for shared decision-making and distributed leadership.

What's informing me the most are the conversations I'm having with individual teachers in our classrooms. When you are a learning leader, you are humble and you are learning with everyone else. I don't see myself as part of an org chart where I'm at the top. I'm sort of in the center of a web of connections and collaborations. I'm a facilitator of conversations.

District leaders, and particularly superintendents, were quick to point out that it is not simply about communicating, it also is about the clarity and regularity of messaging and communications sent across the district. Consistent with leaders' strategies for crafting coherence during policy implementation (Honig & Hatch, 2004), district leaders in the odds-beating schools provided clear and consistent messages to school faculty about how they understood the purpose of APPR, CCSS, and other organizational changes. These communications, in short, provided mutual clarity and a shared mindset (DuFour & Fullan, 2013), especially with regard to permissible adaptations as the CCSS was implemented.

For example, at Starling Springs, educators reported feeling well supported in their implementation of CCSS due to the conditions created by the school and district leadership. As one teacher put it:

They're incredible leaders, and they've been getting teachers together, big groups of teachers together, in order to really look at, unpack, and think through the standards and so they've provided time and resources for us to do that starting, I think, over three years ago.

District leaders' relationships with teachers were especially important. District leaders interviewed at odds-beating schools, particularly superintendents, articulated that teachers were the classroom experts and also that teachers should be trusted to implement innovations such as the Common Core. For example, they elicited and responded to teachers' perceived needs for professional development, restructured time and resources for teachers to discuss and plan Common Core—aligned lessons, and provided consistent messaging about the CCSS and other priorities and goals. At odds-beating Spring Creek, the district superintendent of curriculum stated, "We have really put a lot of trust in them [teachers] and it's reciprocated (emphasis added), and they trust us with a lot of the big decisions and in turn we trust them to make the best decisions for their kids."

Teachers were aware that district leaders trusted them, and they in turn expressed trust in district leaders. In the schools studied, trust was evidenced by front-line professionals' articulations of a sense of security or safety in making decisions. Teachers in odds-beating schools generally expressed that they felt safe to implement the CCSS using their professional judgment and this was highly contingent upon district and school leaders' messages of support to do so. As one odds-beating school teacher stated, "(Our) superintendent has given us the freedom to make adjustments and use our professional judgment."

Significantly, respondents in four of the six odds-beating schools reported that their implementation charge was to use their professional discretion when making instructional decisions regarding how best to adapt the CCSS. Leaders entrusted them to adapt the innovations in lieu of scripted, compliance-oriented implementation. The trust–communication

connection, facilitated by leaders, is manifest here, and it has import for theory and research.

## SCHOOL-LEVEL RELATIONAL TRUST AND COMMUNICATION

In the six odds-beating elementary schools, principals explicitly prioritized developing and building relational trust. They also recognized the important work of maintaining trust and the valuable role that using effective and consistent communication played in facilitating leadership and innovation implementation. In contrast, the typical schools in this study had inconsistent profiles in the relational trust among adults, reporting apprehension about CCSS implementation and teacher evaluations and lack of support from some leaders.

#### Relational Trust

We found that principals in odds-beating schools frequently discussed the importance of trust in leading school buildings. The following quote from the principal at odds-beater Starling Springs provides an example.

You can't lead anything unless there's a high level of trust between the staff and me. . . . I can have the best ideas, they can have great ideas too, so I think if that's not there, really kind of nothing else matters. That's . . . the bedrock foundation. My first year or two I just worked really hard to make this a place that people wanted to work at and come here and be positive and happy and feel like, not that I just do whatever they said, but at least they would feel listened to and that they had input as decisions were being made.

This principal demonstrates understanding that relational trust depends on strong communications, including active, empathic listening. Reciprocally, teachers and other front-line professionals in all six odds-beating schools reported that leaders listened to staff and responded appropriately. Every such communicative interaction is a trust-building and -reinforcing leadership act.

Moreover, principals in the odds-beating schools signaled their trust in teachers when they expressed confidence in their respective teachers' professional expertise and judgment. In lieu of mandating implementation timetables with strict, rule-driven compliance structures, principals in odds-beating schools encouraged teachers to make prudent decisions regarding CCSS implementation in their classrooms, enabling teachers to adapt their instructional practices as they gained readiness, competence, and confidence (Weiner, 2009). For example, the principal in odds-beating Eagle Bluff stated:

As far as the staff goes . . . I have a nice mix all the way through. So some people have a little bit of experience and some people have a lot of experience. All of them are highly motivated to do well in the classroom and push themselves, but I don't think that's what our strength is. I think what we do best is getting our kids to come to school. Quite honestly because once they're here, they are so good at what they do, they get kids to perform.

Reciprocally, one teacher in this same odds-beating school described her principal in the following way: "She reminds me in sports of a player's manager. She's very supportive of teachers, and she trusts us."

Teachers in all five other odds-beating schools praised their principals for exhibiting such trust in teacher and other staff professional judgments. One teacher reported, "She trusts our expertise and you feel that from her; you don't always feel that from others." Another teacher commented, "She [the principal] treats us as professionals. We're all well-educated and professionals."

Communication as a facilitator for innovation implementation leadership. In this study, communication was defined expansively to include written, verbal, and other forms of messaging (e.g., emails, memos), meetings, and listening. We found that odds-beating principals both spoke and listened to their teachers and other school staff and that this bidirectional communication was a facilitator for shared decision-making and distributed leadership in the odds-beating schools. In these schools communication was enabled, expected, and produced in multiple ways by school leaders. Principals in all six odds-beating schools reported using multiple opportunities to communicate with building educators, including memos, emails, phone calls, faculty meetings, and professional development opportunities. They also expressed that they had an "open door policy" for faculty and staff to provide feedback and information.

For example, a school leader at Yellow Valley expressed her approach toward distributing leadership to teachers through the use of teacher-led teams:

My philosophy of leadership. . . . You need to have input from your staff in order to lead with information. . . . In the building; we have a building planning team, an anti-bullying team, our [school spirit] team, we have a safety team, a principal advisory council, . . . all teacher volunteers that sit on these teams. We have a literacy team for intermediate, for primary, and they all sit voluntarily on these teams in order to talk about whatever the focus is; in essence, that all combines into a building planning team and how you move things forward.

A Bay City school leader took a similar perspective toward the role of teaming in encouraging shared decision-making and distributed leadership.

My personal belief is that leadership cannot be a dictatorship. It needs to be a team approach. I think that you need to surround yourself with really good people and you work as a team to get the job done capitalizing on everybody's strengths.

Such collaboration provided a predominant theme in odds-beating schools. The communications that occurred to make these collaborations effective were enhanced by a focus on shared understanding of priorities and goals as well as the allocation of time and resources for collaboration.

Two examples give life to this communication—collaboration relation—ship. Teachers in odds-beating Bay City and Yellow Valley have weekly grade-level common planning time, and this time is dedicated to discussions around instruction and student needs. At Starling Springs, teachers use a professional learning community approach and focus their work on analyzing data, student work, and developing plans for instruction. Teachers and principals in odds-beating schools credited this collaborative work focused squarely on children's learning as supporting the implementation of RttT innovations.

Communication for innovation implementation. Communication proved critical to the facilitation, understanding of, and acceptance of CCSS and APPR as they were implemented in odds-beating schools. One result was reduced uncertainty, tensions, and anxiety among teachers.

Educators implementing the CCSS at odds-beating schools relied on teamwork, multiple kinds of communication, and teachers' trust of each other, principals, and district leaders. Teachers, in particular, reported that they felt trusted by leaders as they proceeded with the implementation of the Common Core, especially so when they were given discretion regarding implementation timetables and implementation fidelity overall. They welcomed leaders' main message that their job was to "adapt" the state-developed Common Core—aligned curriculum in lieu of adopting it wholesale. Two odds-beating schools, Eagle Bluff and Starling Springs, provide examples. Teachers at these schools stated that they felt free to make decisions within their own classrooms and grade levels as long as they met district and school leaders' expectations. Additionally, they reported clearly understanding these expectations and their understandings were consistent; both signs of leaders' abilities to provide clear messages.

In all odds-beating schools, principals' communication with teachers included instructional feedback. While such evaluations could be perceived as threatening and trust-reducing, in odds-beating schools we found that this feedback reinforced relational trust within the school. The leaders

in the odds-beating schools were more likely than those in typically performing schools to engage in communication with teachers about their instruction frankly and constructively through the use of both formal and informal communications. This feedback contributed to a sense of professional safety and security for teachers.

While educators in all schools communicate to some extent, odds-beating school teachers were more likely, than their peers in typical schools, to speak of communicating at non-structured times such as in the hallway between classes, or before or after school. At odds-beating Spring Creek, a teacher explained,

Teacher[s] did a lot of communicating about making sure that we were covering the standards in the same way and making sure all of our kids were being exposed to what they needed to be exposed to. Constant communication I would have to say is huge. Checking in on each other, like, 'How is this kid doing? What do they need? What do you think I could do for this student because he or she isn't getting it? How are you doing it in your classroom? What did you do'?

The tenor of communications was also different in odds-beating schools. For instance, in contrast to deficit-oriented discourses and the cognitions they reflect and generate (Valencia, 1997), the research team discovered what we call "opportunity discourse." This discourse communicated the assets children, educators, and community members bring to learning experiences (rather than what they don't) and reflected a "we are all in this together" meta-message. This opportunity discourse was evident in interviews throughout the district and was particularly salient when school and district leaders and school staff discussed resources and resource allocations. A district leader at Yellow Valley spoke to the importance of early and collaborative planning as the RttT innovation implementation proceeded.

I meet with every program manager, every principal, every department head, every director, in November . . . I always say to them, 'Think about what your plan is for next year. We know we're going to do this with literacy. These are the costs I came up with. Is there anything else you need or you think you want to do with your staff next year?' . . . I let them come to the table with their ideas and then I build the budget from that.

Another example comes from a Bay City district leader, as he explained how their high-poverty population affords them more resources helping them provide additional services.

I'd like to say we have used our poverty wisely, or to the best that we could. It sounds like a little opposite statement, but when you think about it, we were

allowed to—because of our poverty—to apply for and receive . . . because of what we proposed we received many grants which helped us in presenting additional programs and services for kids that we knew that they needed, as well as our staff to be retrained or trained in the new kinds of students sitting before them in new numbers.

School-level trust and communication relationship summary. In sum, the trust–communications relationship, whether at the school level or pertaining to district office–school exchanges, opens avenues for the explorations of the tenor and content of all such communications, and especially during periods of rapid, multiple, and simultaneous policy innovation implementations. All in all, this finding indicates the importance of the content of communications, the qualities of the communications, and the patterns and frequencies of communications.

#### DISCUSSION

This study was structured to explore the trust–communication connection in odds-beating elementary schools and also in their respective district offices during RttT policy innovation. Prior research suggested that when trust is low and communications are suboptimal, management and supervision tend to be top-down, compliance-oriented, and rule-driven (McAllister, 1995). Innovation implementation protocols follow suit: They tend to be scripted and oriented toward strict fidelity standards. In the extreme form, strict implementation protocols strip teachers of their discretionary power (Larson, 1979). When this scenario is in evidence, schools fit Lipsky's (1980) depiction of a rigid public-sector bureaucracy, and school-district office alignment often translates into top-down compliance (Marzano & Waters, 2009). Here, teachers are treated like implementation puppets as district office and school leaders force implementation and rely on compliance-oriented, top-down implementation protocols (Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou, 2004).

The trust-communication connection found in odds-beating schools provides an important alternative. Although CCSS implementation was state-mandated, superintendents, other district leaders, and principals granted teachers considerable discretion. Both district and school leaders "helped implementation happen" in lieu of "making it happen" (Greenhalgh et al., 2004). District-level leaders and principals were aligned when they permitted teachers to use their expertise to adapt their instruction, while also encouraging and supporting collaboration as implementation proceeded. Moreover, these leaders encouraged and created opportunities

for regular communication, both top-down and bottom-up. These communications were facilitated by trusting relationships and also served to strengthen them. More than a technical relationship involving cognitive trust, leaders developed affective trust (McAllister, 1995) as they responded to teachers' feelings.

Our research provides another example of the importance of school-level relational trust in the principal, albeit with an expanded focus on the role of communications in building and nurturing that trust. Mirroring Tschannen-Moran and Gareis's (2015a & b) finding, a strong trust–communication connection in odds-beating schools was associated with teacher professionalism during innovation implementation. Although our study did not focus on academic press and teacher efficacy—two other outcome variables emphasized in Tschannen-Moran and Gareis's research—the performances of odds-beating schools suggest that both may co-occur with teacher professionalism. Nascent theory regarding teachers' professional capital adds additional support for this claim (Fullan, Rincon-Gallardo, & Hargreaves, 2015).

Relational trust and reciprocal trust, together with their respective communications patterns, open avenues to understanding the character of social exchanges and interpersonal relationships in two different organizations: a school and district office. Our research also emphasizes the importance of interorganizational, cross-boundary, and inter-role relationships (Akkerman & Bakker, 2011), especially during turbulent times accompanying the implementation of simultaneous and multiple innovations in entire families of schools comprising identifiable districts.

The salient reminder here is that innovations typically result in performance declines, at least in the short term (Christensen, Horn, & Johnson, 2011). The mere fact that performance declines did not occur in the oddsbeating schools in our sample suggests that they enjoy special innovation implementation readiness, resources, and capacity (Hatch, 2009; Zahra & George, 2002). While some such supports and resources may be school-specific, our findings indicate that district-level leadership, supports, and resources are invaluable innovation implementation assets. The trust–communication connection between district central office leaders, particularly superintendents, and principals facilitates policy innovation implementation, and the same can be said of important relationships between district office leaders and front-line professionals, especially teachers.

This emergent framework expands research and development from the dominant focus on organizational structures, particularly alignment mechanisms and organizational learning and improvement arrangements (Marzano & Waters, 2009; Knapp et al., 2014). The more nuanced and expansive framework provided in this study emphasizes dynamic, interpersonal, intraorganizational, and interorganizational interactions and exchanges that give life to policies and practices and help to explain innovation implementation effectiveness. Employing the human-body metaphor, these school and district structural features are the anatomy, while relational and reciprocal trust, together with their associated communications, are its physiology—the essence of the living system. Like the human body's physiology, these living systems in schools and school–district office interface, interact, and depend on each other.

Bryk and Schneider (2002) emphasized two functions of relational trust for schools, and this study extends these same functions to reciprocal trust regarding a different unit of analysis—district office leader and school leader relationships as well as district office leader and teacher and other support personnel relationships. This new concept, reciprocal trust, derived from our inductive analysis (Glaser & Strauss, 1967), is a special study contribution. Individually and together, these two kinds of trust function as social glue for improvement, while intraschool and district office—school communications function as a social lubricant. This trust—communication connection facilitates collective action in the pursuit of common purpose as RttT policy innovations are implemented.

Although both kinds of trust and especially their combination are important, prior research has not provided sufficient details regarding their development. One question is especially important: How is trust socially constructed and constituted over time in unique organizational settings undergoing innovation implementation? Descriptions of trust-building activities, especially by principals, are helpful, but remain incomplete (Browning, 2014; Northfield, 2014). When the focus turns to superintendents and other district office leaders' ability to build trusting relationships with school-level personnel, especially teachers, an important research gap becomes evident. Our study helps to address this gap.

Findings from this study indicate that communication is critical to building relational and reciprocal trust. While other researchers have implied that trust is built upon a foundation of communication, our research makes this connection explicit, demonstrating not only what such communications entail and accomplish, but how they are structured in two consequential units of analysis: intraschool and school-district office. Our findings also confirm that communication systems overall and opportunity discourses in particular facilitate planned organizational change especially in more challenged schools and districts. These findings help to address a gap in communications research (Jones, Watson, Gardner, & Gallois, 2004).

Additionally, this study indicates that the two kinds of trust (relational and reciprocal) and their respective communications patterns are

mutually constitutive. Trust depends on and facilitates communications, and strong communications reinforce and lubricate trusting relationships. Together they facilitate innovation adoption and implementation in this study's odds-beating elementary schools, and they also help to explicate these schools' comparative effectiveness even as they adopted and implemented multiple RttT innovations.

There is more to this living systems framework. Reciprocal and relational trust, together with an effective combination of top-down and bottom-up communications processes involving opportunity discourses, facilitated collaborative working relationships and enabled innovation implementation to proceed with professional discretion. Together, communication and trust facilitated collaboration and vice versa. Trust and communication also facilitated individual, group, and organizational learning (Knapp et al., 2014).

Fullan and Quinn's (2016) new conceptualization of coherence enriches this developing innovation implementation framework. Coherence, they claim, should not be conflated with alignment. Alignment, like human anatomy, is a structural feature, while coherence is part of an organization's living systems. It refers to "what is in the minds and actions of people individually and especially collectively" (pp. 1–2). What's more: "When large numbers of people have a deeply understood sense of what needs to be done—and see their part in that purpose—coherence emerges and powerful things happen" (p. 1). The trust–communication connection, intraschool and interorganizational, is part of this organizational living systems that enhances coherence during innovation implementation.

However, two important questions remain, and they have import for research, policy, practice, and professional education: (1) What conditions need to be in place for this trust–communication connection to develop and flourish? and (2) What do district office and school leaders prioritize and do to develop, enrich, and sustain it? Both questions are research priorities, and the study reported here lays some of the groundwork.

Chief among the necessary conditions is the potent combination of workforce stability, educators' innovation-related commitments and competencies, and the organizational capacities of schools and district central offices. Two units of analysis are implicated here: people (commitments and practice competencies) and organizations (capacities). It is possible to have one without the other. Both are needed, and so it is important that leaders invest in innovation-related, improvement capacity in district central office and constituent schools (Hatch, 2009), while prioritizing workforce commitments and competencies.

Research also indicates some districts and schools, including the odds-beaters in our study, are more innovation-ready than others. For

example, Hatch (2009) concluded that it takes capacity to build improvement capacity (p. 13), raising questions about the innovation readiness of schools and district offices that lack it. In the same vein, Weiner's (2009) interdisciplinary review yielded identifiable readiness indicators and facilitators for organizational change, while Flashpohler, Meehan, Moras, and Keller (2012) added the distinction between general innovation implementation capacity and innovation-specific capacity. Together these lines of research recommend nuanced district office and school classifications based on readiness, commitments, capacity, and competency for innovation implementation.

These lines of research also illuminate an important question. What can leaders prioritize and do to establish and augment innovation-related organizational capacities and workforce commitments and competencies? More specifically, what can be done to establish and enrich the trust–communication connection so that it becomes an improvement and innovation implementation resource? The current study offers four important priorities.

One was identified in the literature review as one of the proxies for communications: Transparency (Wilcox & Angelis, 2010). Our study suggests that transparency is at least an important co-requisite for relational and reciprocal trust. Indeed, future research may nominate transparency as a defining feature of both kinds of trust. After all, transparency connotes open communications and public agendas. It also connotes no secrets, behind-the-scenes planning, or cover-up dynamics, all of which contribute to what Argyris and Schön (1996) call defensive routines. The salient reminder here is that defensive routines start with suboptimal, interpersonal relationships and may become defining features of organizational life. Problems begin when important innovation-related priorities become "undiscussable"—which means that communication has ended. Things get worse when educators cannot discuss what they cannot discuss. Trusting relationships are a casualty when communications end, and so are mechanisms for staff, student, organizational, and policy learning.

The second priority follows suit, and it is a special orientation found among effective school and district leaders. Knapp and colleagues (2014) aptly named it "leadership for learning." Accurate feedback, actively elicited and welcomed by school and district office leaders, is a centerpiece in this kind of leadership. The leaders in this study's odds-beating schools were exemplars for this kind of leadership because they actively solicited feedback from all relevant stakeholders as they strived to craft coherence via varying combinations of top-down and bottom-up learning and improvement strategies (see also Durand et al., 2016).

The third priority, also evident in this study's odds-beating schools, is another reminder that actions often speak louder than words. Odds-beating principals tended to distribute instructional leadership to teachers, metacommunicating to them that they were trustworthy. All such delegated authority, including permission to adapt and not merely adopt the CCSS, also depends on perquisite and co-requisite conditions. "Chains of trust," cemented by solid communications, are implicated, and they cross-cut organizational levels (district office, schools) and roles (superintendents, district office staff, principals, teachers, and others). Future research can be designed to provide salient details and with the expectation that these trust-cemented relationships will be context- and operator-dependent.

Indeed, distributed instructional leadership, which is founded on delegated authority and standards of professionalism (Neumerski, 2013), fundamentally depends on such chains of trust. Klar, Huggins, Hammonds, and Buskey (2016) provide empirical support for this claim. As secondary school principals in their study created the conditions for distributed instructional leadership, they also created relationships with their teacher leaders that built relational trust.

The fourth priority derives from this study's findings regarding how teachers in odds-beating schools tended to trust their respective principal's instructional feedback. At root here is the important difference between the principal's formal role as an instructional leader and the extent to which the teachers under their supervision also entrust them with this role. What conditions need to be in place for teachers to invest in such a trusting relationship with their principal, one that also is consequential for their interactions with students? One study is suggestive. Lisy-Macan (2012) discovered differences in teachers' views of, and reactions to, their principals based on whether the school leader had garnered personal teaching experience with the students under their charge. This suggestive finding merits future research.

#### CONCLUSIONS

Consistent with Honig and Hatch's (2004) classic framework and a newer one provided by Fullan and Quinn (2016) as well as Johnson, Marietta, Higgins, Mapp, and Grossman (2015), school and district leaders in oddsbeating schools crafted coherence as they proceeded with innovation and adoption and implementation. Owing to the potent combination of relational and reciprocal trust with their respective communications patterns, front-line professionals, especially teachers, gained clarity, developed shared mindsets, jointly crafted coherence, and enjoyed some discretion as they proceeded with policy innovation implementation. The net result was a kind of school- and district-specific, "innovation implementation

sweet spot" in odds-beating schools. This special balance ostensibly resolved the "too-tight, too-loose" implementation dilemma (Fullan, 2006), if only for the time being.

"For the time being" implicates a temporal perspective, which reminds researchers, school and district leaders, and policy officials that there is nothing inevitable or permanent about these two kinds of trust, their associated communications systems and opportunity discourses, the collective action they facilitate, the coherence they provide, and the policy innovation implementation strategies they enable.

What other forces, factors, and actors help to account for the potent combination of communication, trust, and collaboration in the odds-beating schools? One missing factor was implicated in the literature review, and it is in evidence in everyday life in schools and district offices that thrive during turbulent times. Trust, communication, and collaboration are facilitated when educators enjoy considerable histories of working together effectively.

In contrast, trust, communication, and collaboration are impeded when strangers work and interact with other strangers. It follows that when workforce turnover is high, and both district and school leaders entertain doubts about teachers' professionalism and efficacy (Tschannen-Moran & Gareis, 2015a & b), innovation implementation is more likely to proceed with rule-driven and compliance-oriented protocols (e.g., Greenhalgh et al., 2004). In turn, teachers' relational resilience (Day & Gu, 2014) and the school's organizational health (Bottiania, Bradshaw, & Mendelson, 2014) will be impaired.

Here, it is noteworthy that New York state data systems indicate that the odds-beating schools in this study enjoyed considerable workforce stability; and this finding provides a segue to discuss implications for future research. In brief, one new priority for future research is workforce stability, commitments, and competence, including leaders, teachers, student support professionals, and other key staff members. The rationale is as follows.

When workforce retention is high, people come to know each other, communicate better, are more likely to trust each other, and are ready to collaborate. Under these conditions, leaders are more prone to take calculated implementation risks. They also are more likely to entrust teachers with shared responsibilities—for example, granting them discretion to adapt the CCSS. Absent these special relationships, and confronted by the consequences of high workforce turnover, particularly among teachers, district leaders may have been more prone to elect top-down, compliance-oriented CCSS implementation with minimal discretion granted to teachers (McAllister, 1995).

Finally, this study amplifies a path-breaking claim offered by Bryk and Schneider (2002) mentioned earlier: "The social relations of schooling are not just a mechanism of production but are a valued outcome in their own right" (p. 19). The trust–communication connection within schools and also between schools and district office provides an important example of these social relations.

But there is more to their claim: the trust–communication connection is more than a current feature of organizational life. It also needs to be viewed and treated as a proximal outcome as innovation implementation proceeds because the trust–communication connection emphasized in this study is perishable. Unless it is renewed by educators who self-consciously steward their schools and reinforce its assets (Goodlad, 1994); and if it is not protected by district office and school leaders as they proceed with innovation implementation in the here-and-now, it may not be available during the next iteration of policy innovation implementation. To prevent what might be called "the here today, gone tomorrow problem," Byrk and Schneider (2002) were prescient when they recommended that social relations such as the trust–communication connection should be viewed as an important outcome in its own right. State-level, district-wide, and school-specific theories of action for innovation implementation can be developed accordingly.

#### LIMITATIONS

Kutsyuruba and Walker (2015) provide a longitudinal-developmental perspective on trust when they emphasize trust's "life cycles" in particular organizational ecologies. These life cycles necessitate longitudinal research designs. Viewed with this lens, the current study's cross-sectional design is a limitation because trust and, by extension, the communications-trust relationship vary over time in particular school and district contexts. When this overall recommendation is brought to bear on this study's cross-sectional research design, needs for future research are identified at the same time that this study's limitations become apparent.

Another important limitation derives from the model provided by Malen and colleagues (2015). The simultaneous implementation of three or more RttT policy innovations (CCSS, APPR, and DDI) depends fundamentally on resource reallocations (see also Johnson et al., 2015). More than funding, these resource reallocations extend to new role and responsibility configurations, both in schools and district central offices. No doubt all such changes impact trust and communications. While our data provide what amounts to selective snapshots of these special trust and communications

dynamics, they are selective and limited. This manifest limitation indicates needs and opportunities for future research.

#### NOTE

1. Schools in need of turnaround and others under state education department supervision were not included in the sample. At the time this study was conducted, these schools and their district offices were undergoing a variety of state-led evaluations and were required to implement other improvement interventions. Our research would have been a burden.

#### REFERENCES

- Akkerman, S. F., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research*, 81(2), 132–169. doi: 10.3102/0034654311404435.
- Argyris C., & Schön, D. (1996). Organizational learning II: Theory, method and practice. Reading, MA: Addison Wesley.
- Bottiania, J. H., Bradshaw, C. P., & Mendelson, C. (2014). Promoting an equitable and supportive school climate in high schools: The role of school organizational health and staff burnout. *Journal of School Psychology*, *52*(6), 567–582. doi: 10.1016/j.jsp.2014.09.003.
- Browning, P. D. (2014). Why trust the head? Key practices for transformational leaders to build a purposeful relationship of trust. *International Journal of Leadership in Education: Theory and Practice*, 17(4), 388–409. doi: 10.1080/13603124.2013.844275.
- Bryk, A., Gomez, L., Grunow, A., & LeMahieu, P. (2015). Learning to improve: How America's schools can get better at getting better. Cambridge, MA: Harvard Education Press.
- Bryk, A. S., and Schneider, B. L. (2002). *Trust in schools: A core resource for improvement.* New York, NY: Russell Sage.
- Christensen, C. M., Horn, M. B., & Johnson, C. W. (2011). Disrupting class: how disruptive innovation will change the way the world learns. New York, NY: McGraw-Hill.
- Chuon, V., Gilkey, E. M., Gonzalez, M., Daly, A. J., Chrispeels, J. H. (2008). The little district that could: The process of building district-school trust. *Educational Administration Quarterly*, 44(2), 227–281.
- Cobb, C. D., Donaldson, M. L., & Mayerb, A. P. (2013). Creating high leverage policies: A new framework to support policy development. *Berkeley Review of Education*, 4(2), 265–284. http://escholarship.org/uc/ucbgse\_bre.
- Coburn, C. E. (2005). Shaping teacher sensemaking: School leaders and the enactment of reading policy. *Educational Policy*, 19(3), 476–509.
- Coburn, C. E., & Russell, J. L. (2008). District policy and teachers' social networks. *Educational Evaluation and Policy Analysis*, 30(3), 203–235.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative and mixed methods approaches (4th edition). Thousand Oaks, CA: Sage Publishers

- Creswell, J. W. (2015). Educational research: Planning, conducting and evaluating quantitative and qualitative research (5th edition). Upper Saddle River, NJ: Pearson.
- Cunningham, D. H. (2014). School finance and learning: Are we leveraging state aid to get all we can get out of it? *Education Finance and Policy*, 9(2), 109–115.
- Dainton, M., & Zelley, E. D. (2015). Applying communication theory for professional life: A practical introduction (3rd edition). Thousand Oaks, CA: Sage Publishers.
- Day, C., & Gu, Q. (2014). Resilient teachers, resilient schools: Building and sustaining quality in testing times. New York, NY: Routledge.
- Desimone, L. M. (2008). Whole-school change. In M. Shinn & H. Yoshikawa (Eds.), Toward positive youth development: Transforming schools and community programs (pp. 150–169). New York, NY: Oxford University Press.
- Doherty, K. & Jacobs, S. (2013). Connect the Dots: Using evaluations of teacher effectiveness to inform policy and practice. (State of the States 2013). Washington, DC: National Council on Teacher Quality.
- Domina, T., Lewis, R., Agarwal, P., & Hanselman, P. (2015). Professional sense-makers: Instructional specialists in contemporary schooling. *Educational Researcher*, 44(6), 359–364.
- DuFour, R., & Fullan, M. (2013). Cultures built to last: Systemic PLCs at work. Bloomington, IN: Solution Tree Press.
- Durand, F. T., Lawson, H. A., Wilcox, K. C., & Schiller, K. A. (2016). The role of proactive and adaptive district leadership in the adoption and implementation of the Common Core State Standards in elementary schools. *Educational Administration Quarterly*, 52(1), 45–74. doi:10.1177/0013161X15615391.
- Flashpohler. P. D., Meehan, C., Moras, M., & Keller, K. (2012). Developing a support system to promote implementation of school-based prevention programs. American Journal of Community Psychology, 50, 428–444.
- Fullan, M. (2006). *Turnaround leadership*. San Francisco, CA: Jossey-Bass, Wiley Imprint.
- Fullan, M. & Quinn, J. (2016). Coherence: The right drivers in action for schools, districts and systems. California, CA: Corwin.
- Fullan, M., Rincon-Gallardo, S., & Hargreaves, A. (2015). Professional capital as accountability. *Education Policy Analysis Archives*, 23(15). http://dx.doi. org/10.14507/epaa.v23.1998.
- Gilley, A., Gilley, J., & McMillan, H. (2009). Organizational change: Motivation, communication, and leadership effectiveness. *Performance Improvement Quarterly*, 21(4), 75–94. doi: 10.1002/piq.
- Glaser, B. G. & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine Publishing Company.
- Goodlad, J. (1994). Educational renewal: Better teachers, better schools. San Francisco, CA: Jossey-Bass.
- Greenhalgh, S., Robert, G., MacFarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly*, 82(4), 581–629.
- Hatch, T. C. (2009). Managing to change: How schools can survive (and sometimes thrive) in turbulent times. New York, NY: Teachers College Press.

- Holme, J. J., & Rangel, V. S. (2012). Putting school reform in its place: Social geography, organizational social capital, and school performance. *American Educational Research Journal*, 49(2), 257–283. doi: 10.3102/0002831211423316.
- Honig, M. I., & Hatch, T. C. (2004). Crafting coherence: How schools strategically manage multiple, conflicting demands. *Educational Researcher*, 33(8), 16–30.
- Johnson, S. S., Marietta, G., Higgins, M., Mapp, K., & Grossman, A. (2015). Achieving coherence in district improvement: Managing the relationship between central office and schools. Cambridge, MA: Harvard Education Press.
- Jones, E., Watson, B., Gardner, J., & Gallois, C. (2004). Organizational communication: Challenges for the new century. *Journal of Communication*, 54(4), 722–750.
- Klar, H. W., Huggins, K., Hammonds, H., & Buskey, F. (2016). Fostering the capacity for distributed leadership: A post-heroic approach to leading school improvement. *International Journal of Leadership in Education*, 19(2), 111–137.
- Knapp, M. S., Copland, M. A., Honig, M. I., Plecki, M. L., & Portin, B. S. (2014).
  Practicing and Supporting Learning-Focused Leadership in Schools and Districts. New York, NY: Routledge.
- Kutsyuruba, B., & Walker, K. (2015). The life cycle of trust in educational leadership: An ecological perspective. *International Journal of Educational Leadership: Theory and Practice.* 18(1), 106–121. doi: 10.1080/13603124.2014.915061.
- Larson, M. S. (1979). The rise of professionalism: A sociological analysis. Berkeley, CA: University of California Press.
- Levine, D. M., Stephan, D. F., & Szabat, K. A. (2013). Statistics for managers (7th edition). New York, NY: Pearson.
- Lipsky, M. (1980). Street-level bureaucracy: Dilemmas of the individual in public services. New York, NY: Russell Sage Foundation.
- Lisy-Macan, L. (2012). Elementary and middle school principals' theories of action in two rural school districts. (Doctoral Dissertation). Retrieved from ProQuest Dissertations Publishing (3523356).
- Malen, B., Rice, J., Matlach, L., Bowsher, A., Hoyer, K. & Hyde, L. (2015). Developing organizational capacity for implementing complex education reform initiatives: Insights from a multiyear study of a teacher incentive fund program. *Educational Administration Quarterly*, 51(1), 133–176. doi: 10.1177/0013161X14522482.
- Marzano, R. J., & Waters, T. (2009). District leadership that works: Striking the right balance. Bloomington, IN: Solution Tree Press.
- McAllister, D. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24–59.
- Miles, M., Huberman, M., & Saldana, J. (2014). Qualitative data analysis: A methods sourcebook (3rd editon.). California, CA: Sage.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd editon.). Thousand Oaks, CA: Sage.
- Morgan, D. L. & Krueger, R. A (1997). *The focus group kit.* Thousand Oaks, CA: Sage Publications, Inc.
- Neumerski, C. M. (2012). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where

- should we go from here? Educational Administration Quarterly, 49(2), 310–347. doi: 10.1177/0013161X12456700.
- Neumerski, C. M. (2013). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership and where should we go from here? *Educational Administration Quarterly*, 49(2), 310–347.
- Northfield, S. (2014). Multi-dimensional trust: How beginning principals build trust with their staff during leader succession. *International Journal of Educational Leadership: Theory and Practice*, 17(4), 410–441.
- QSR International Pty Ltd. (2012). NVivo qualitative data analysis software, Version 10.
- Rogers, E. (2003). *Diffusion of innovations* (5th edition). New York, NY: The Free Press.
- Rowland, C. (2015). *Improving educational outcomes: How state policy can sup- port school principals as instructional leaders*. Washington, DC: National Governors Association Center for Best Practices. Downloaded 2 August, 2105 from:
  http://nga.org/files/live/sites/NGA/files/pdf/2015/1506SupportingPrincipals.pdf.
- Spillane, J. P. (2013). The practice of leading and managing teaching in educational organizations. In OECD (Ed.), Leadership for 21st Century Learning (pp. 59–82). Paris: Organization for Economic and Cooperative Development.
- Stein, M. K., & Coburn, C. E. (2008). Architectures for learning: A comparative analysis of two urban school districts. American Journal of Education, 114 (August), 583–626.
- Teddlie, C., & Tashakkori, A. (Eds.). (2009). Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences. Thousand Oaks, CA: Sage Publications, Inc.
- Tschannen-Moran, M. & Gareis, C. R. (2015a). Faculty trust in the principal: An essential ingredient in high performing schools. *Journal of Educational Administration*, 53(1), 66–92.
- Tschannen-Moran, M. & Gareis, C. R. (2015b). Principals, trust, and cultivating vibrant schools. *Societies*, 5, 256–276.
- Tschannen-Moran, M., & Hoy, W. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. Review of Educational Research, 70(4), 547–593.
- U.S. Department of Education (n.d.). Race to the Top: Legislation, regulations, and guidance. Retrieved from http://www2.ed.gov/programs/racetothetop/legislation.html.
- Valencia, R. (Ed.) (1997). The evolution of deficit thinking: Educational thought and practice. London: Falmer Press.
- Venettozzi, C. J. (2014). Tax levy implications on educational programs and public school budgets in New York State. (Doctoral Dissertation) Retrieved from ProQuest Dissertation Publishing (3722930).
- Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science*, 4(67). doi:10.1186/1748-5908-4-67.
- Wiener, R. (2013). Teaching to the Core: Integrating implementation of Common Core and teacher effectiveness policies. Washington, DC: Aspen Institute and Council for Chief State School Officers. Downloaded 2 August, 2015 from:

- http://www.aspendrl.org/portal/browse/DocumentDetail?documentId=1640&download &admin=1640l1854119194.
- Wilcox, K. C., & Angelis, J. I. (2010). Best practices from high-performing high schools: How successful schools help students stay in school and thrive. New York, NY: Teachers College Press.
- Wilcox, K. C., Jeffrey, J. V., Gardner-Bixler, A. (2015). Writing to the common core: Teachers' responses to changes in standards and assessments for writing in elementary schools. *Reading and Writing: An Interdisciplinary Journal*. On-line first, retrieved from http://link.springer.com/article/10.1007/s11145-015-9588-6 doi:10.1007/s11145-015-9588-6.
- Yin, R. K. (2014). Case study research: Design and methods (5th edition). Newbury Park, CA: Sage Publishing.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185–223.

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