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Nitya Venkateswaran

When principals lead for improved teaching:  
The importance principal-teacher interactions

Nitya Venkateswaran

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Reading Committee:

Dr. Meredith Honig, Chair

Dr. Ann Ishimaru

Dr. Morva McDonald

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University of Washington

**Abstract**

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Nitya Venkateswaran

Chair of the Supervisory Committee:  
Associate Professor Dr. Meredith Honig  
College of Education, Educational Leadership and Policy Studies

Policymakers call on principals to support teachers' improvement in their instructional practice. However, research on principals' instructional leadership practice describe how principals' actions focus on instruction and not to what extent principals' supports provide teachers with opportunities for learning. As a result, these studies mostly describe principal actions and associate actions with outcomes instead of examining and describing how principals engage teachers in activities that support teacher learning. This qualitative dissertation uses learning theories to study how principals' practice may support teacher learning, focusing specifically on one aspect of effective teacher professional development: how social interaction facilitates teachers' meaning making. Using a conceptual framework built with concepts from sociocultural learning theory and classroom discourse, this embedded comparative case study explores two principals' different interactions with teachers, to what extent these interactions open up opportunities for teachers to make meaning of instructional ideas and what factors shape the interactions. By using concepts from classroom interaction discourse to conduct a moment-by-moment analysis of two principals' interactions with teachers, I was able to find variations in principals' interactions and describe various ways these interactions did or did not open up meaning making opportunities. To explain why principals engaged in different types of interactions, my analysis suggests that principals' interactions varied due to principals' interpretations of school improvement expectations regarding time allotted for teacher learning and change and principal's formal authority over teacher's change processes. This dissertation highlights the importance of researchers using learning theory to study principal practice. While both study principals engaged in the same leadership activities, their interactions had varied implications for teacher learning. This dissertation also highlights the importance of policy makers and practitioners using a teacher learning lens when intending to support principals and principals' attempts to improve teacher practice. By describing principal instructional leadership practice as actions to support teacher learning as opposed to actions focused on instruction, subsequent efforts to support leadership practice for school improvement may be more tightly aligned to desired outcomes: improved teaching and learning.

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## INTRODUCTION

*Two elementary school principals believe that as principals, they are one of the main support providers to their teachers in order to help teachers improve their practice. To support teachers, both principals regularly plan learning sessions for teachers where the principals teach them new reading and comprehension strategies outlined in the district's new literacy frameworks. To see how teachers are using the new practices in their classrooms, both principals drop in and observe teachers' classrooms once a week and give informal feedback to teachers after these visits. Furthermore, the principals meet with teachers once a month to discuss their assessment data in order to identify which standards students have grasped to help teachers think through the appropriate changes teachers should make to their teaching in order to ensure that all students demonstrate learning of the new standards. The principals' efforts to support teachers in these content areas are not ad-hoc, but part of a plan informed by their student achievement data where school staff select strategies with a strong research-base to inform their school improvement plan. Both principals' varied efforts to support teacher professional learning are aligned with research on effective school leadership. However, despite both principals' ongoing contact with teachers, results vary. In one school, teachers only make peripheral changes in practice and student achievement is stagnant, whereas in another school, teachers make substantial changes to their practice and student achievement increased. Why? How can we explain why one principal's efforts may matter while the other principal's efforts did not? Perhaps one principal solely monitors teachers' instruction while the other principal supports teachers' learning. How can we understand principals' practice more deeply to understand how they specifically do or do not support teachers' learning?*

To realize the goals of numerous policies and efforts to improve the quality of teaching and student achievement in K-12 public schools, local implementation of such policies hinge on principals' direct support of teachers, like those named above, to improve teachers' practice. Policies such as the Race to the Top's teacher evaluation policies (US Department of Education, 2009) and states' adoption of the Common Core State Standards ask for teachers to improve the quality of instruction. As a result, states and districts are asked to ensure that principals develop and provide ongoing job-embedded learning supports for teachers in order to ensure high quality teaching that aligns with rigorous standards (Cogshall, Rasmussen, Colton, Milton & Jacques, 2012; NAESP, 2013; Rubin, Neumerski, Goldring, Cannata, Drake, Grissom & Schuermann, 2014). For example, in New York City, principals provide professional development for teachers and assist with curriculum development so teachers are equipped to teach students according to the new Common Core State Standards (Wohlstetter, Houston & Buck, 2014). Furthermore, teacher evaluation policies for states that received waivers from the Elementary and Secondary Education Act charge leaders to, "... provide clear, timely and useful feedback, including feedback that identifies needs and guides professional development...." (US Department of Education, 2012, p. 18). These policies charge principals with supporting teachers' professional learning.

Current drafts of leadership standards and principal evaluation policies reflect these increasing responsibilities placed on principals to support teachers' professional growth. For example, the current draft of the Interstate School Leaders Licensure Consortium (ISLLC) standards highlights that leaders should develop the capacity of teachers by providing "ongoing and differentiated professional learning" (Council of State Schools, 2014, p. 16). States are also

including such standards in their principal evaluation rubrics. For instance, the Connecticut Leader Standards rubric for Leader Effectiveness describes “exemplary” leadership practice as principals who “work with staff to provide job-embedded, professional development and follow up supports aligned to specific learning needs” (Connecticut State Department of Education, 2012, p. 6). These new standards for school leaders not only ask principals to manage schools, but also to be the main agents of teachers’ learning.

Research on teacher learning would suggest that supports like the ones mentioned in the above scenario could be the types of learning opportunities teachers associated with teachers’ learning of new ways of teaching. Teachers are more likely to learn new ways of teaching and implement those changes in their practices when they have ongoing interactions with other experts or colleagues, who help them by talking through how to change or implement new strategies while analyzing student work or observations of practice (Borko, Jacobs, Eiteljorg & Pittman, 2006; Garet, Porter, Desimone, Birman, & Yoon, 2001; Kazemi & Franke, 2004; Parise & Spillane, 2010; Wilson & Berne, 1999). Researchers who study teacher learning describe how through such interactions teachers can understand what they do and why with more detail in order to uncover their existing routines, assumptions or beliefs that may limit students’ learning opportunities in the classroom and to identify areas of potential change (Gallimore, Ermeling, Saunders & Goldenberg, 2009; Wood, Cobb & Yackel, 1991). These opportunities are associated with teachers learning how to teach differently and make changes in their classroom practices.

More specifically, this literature elaborates on how these activities support teachers’ learning by using in-depth observations of these learning opportunities. One study describes how teachers began to consider students’ thinking when planning their lessons through ongoing

analysis of student work (Kazemi & Franke, 2004). Another studies examines how teachers refined their teaching practices and improved students' narrative writing scores by participating in ongoing teacher inquiry groups where teachers assessed the causes and effects of their teaching as they shared and analyzed how they taught students writing (Gallimore et al., 2009). If principal instructional leadership is about teacher learning, then perhaps the leadership literature should use this research on teacher learning and development to examine the extent to which principals provide such opportunities and then analyze the outcomes of principals' practice.

However, the research on effective leadership does not regard these findings from the teacher learning research when studying leadership practice. Instead, research on school leaders mostly identifies broad leadership activities and associates them with instructional improvement and student achievement without going into detail as to how principals do or do not provide such opportunities for learning (Bossert, Dwyer, Rowan, & Lee, 1982; Hallinger, 2011; Hallinger & Heck, 1996; Hallinger & Murphy, 1985, 1987; Leithwood, Louis, Anderson & Wahlstrom, 2004; Robinson; Lloyd & Rowe, 2008). For example, instead of examining how principals engage teachers in inquiry about their practice, which may allow teachers to identify routines in their classrooms that do not meet student needs, studies isolate specific leadership actions, such as the number of times principals observed classrooms or the number of times principals talked with teachers, and associate those actions with high student achievement or teacher reported changes in practice (Grissom, Loeb & Master, 2013; May & Supovitz, 2010). A few studies have gone beyond isolating actions to specifying the nature of principals' practice, specifically how principals talk with teachers (Blase & Blase, 1999; Hubbard & Mehan & Stein, 2006; Timperley, 2010) and connecting instructional conversations to positive outcomes (Grissom et al., 2013). However, these studies do not connect the dots between what principals do in these

conversations and how their actions may reflect the type of learning opportunities the teacher learning literature describes. Nevertheless, these findings on the nature of principals' talk with teachers provide a jumping-off point for further examination.

Before policymakers in states and school districts charge principals with the responsibility of not only evaluating but also supporting teachers' professional learning, how can we better understand what principals do as they attempt to support teachers' professional learning? What supports can we give principals to interact with teachers in ways that realize policy outcomes to improve teaching and learning?

This dissertation answers these questions by taking a qualitative comparative case study approach, analyzing not only *what* principals do to support instructional improvement, but also *how* they interact with teachers that are aligned with opportunities for teacher learning. Instead of taking a leadership frame, this dissertation takes a frame of looking at how teachers learn and at the extent to which principals' actions seem to align with the literature on teacher learning by examining a specific aspect of principals' instructional leadership practice, how principals talk with teachers about instruction. By isolating one aspect of principal practice, this dissertation begins to explore how the leadership field can anchor studies of principal instructional leadership practice in the literature on teacher learning, thus opening up further studies that may explore other aspects of principal practice.

In Chapter 1, I explore the literature on teacher learning, which covers vast aspects of teacher professional development that may matter to teacher learning. While I briefly explore some of this literature, I mainly focus on one aspect of this literature, how teachers' social interactions with other people may contribute to their learning or development of new practices. Although talk alone does not move teachers' practice, this area of the teacher learning literature

aligns nicely with the current leadership literature's focus on how principals talk with teachers. In this section, I explain how the literature on teacher learning describes the features of teachers' social interaction in learning activities and how certain interactions are associated with teachers improving the quality of their teaching.

Following this section, I explain how the literature on principal instructional leadership suggests that principals have various opportunities to interact and have conversations with teachers about practice across a myriad of instructional improvement activities. Yet these studies mainly highlight specific actions principals take during their interactions and do not describe the interactions between principals and teachers themselves—what principals and teachers do together as they engage with one another about strengthening teaching quality. While some of these studies make claims, through teacher or self-report, that principals' direct interactions with teachers support teacher learning, very few studies actually observe the quality or dynamics of their interactions. Therefore, most studies mainly imply that principals' actions may reflect the types of learning opportunities described in the teacher learning literature. Even the studies that do observe the quality or dynamics of interactions limit the analysis of these interactions to a few aspects, such as principals' questioning practices. Since very few studies focus on the principal-teacher interactions, I can only identify potential influences on principals' interactions.

Given the lack of research on principals' interactions with teachers as principals attempt to support their learning or change, in Chapter 2 I describe how I used a conceptual framework that helped me theorize learning interactions, specifically the outcomes of those interactions and how principals and teachers may participate. I used sociocultural learning theory and concepts from classroom discourse theories because together these theories help me understand the actions people may use interactions to facilitate participants learning new ways of thinking and acting.

These theories explain that meaning making interactions are crucial to learning new ways of thinking and acting, and that principals should engage teachers in meaning making and not tell teachers what to do. Concepts from a subset of sociocultural learning theory, called activity theory, drew my attention to dimensions of the cultural and historical context, in which the interactions take place, that allowed me to explain what may shape principal-teacher learning interactions.

In Chapter 3, I discuss how I employed a qualitative-embedded case study where I observed two elementary principals interacting with teachers as they discussed instructional issues. I use detailed observations of principals interacting with teachers in sequence instead of observing the number of times principals asked teachers particular questions or the number of times they gave teachers suggestions because studies of classroom discourse suggest that the pattern of moves in interaction, rather than just individual moves, matter to the overall nature of the interaction (Cazden, 1998; Gutierrez, 1994; Mehan 1979). I separated my data into particular interaction units called exchanges, which include sequences of principals' talk moves related to a particular topic. While this unit of analysis may be small and may not capture the nature of an entire conversation or meeting that contains multiple exchanges, it allows me to explain distinct variations in principals' interactions with teachers that may become obscure when examining the interactions using a larger unit of analysis, thus capturing the nuance of principal practice. I also use this unit of analysis to compare exchange types across schools in order to explain how context may have shaped the different types of exchanges principals used with teachers.

In Chapters 4–7, I lay out my findings. In Chapter 4, I describe how both principals intended to interact directly with teachers and have meaningful conversations about their practices as strategies to support teachers' learning. But the way these principals interacted with

teachers did not necessarily mirror the types of interactions the literature on teacher learning associates with teacher learning. I briefly explain the five different types of interactions I observed in both schools. Then in Chapters 5 and 6, I present the five patterns of interaction in detail. My conceptual framework suggests that exchanges associated with teacher learning are those where principals engage teachers in meaning making about their practices. However, I found that in some exchanges, both principals closed down teachers' ideas with no discussion. In other exchanges, principals engaged in active conversations with teachers about instructional ideas where both parties contributed ideas equally. These exchanges mirrored the type of interaction that was suggested in my conceptual framework and associated with learning new ways of teaching. However, neither type of exchange was common in either of the schools that I studied. Most of the time my study principals used exchanges that ranged between both types, partially shutting down some ideas while elaborating on others or expanding on teachers' ideas but not contributing their own. Furthermore, principals' use of closed exchanges followed a pattern according to the types of teachers' responses. In Chapter 5 I present the exchanges that are most aligned with the categories in my conceptual framework and in Chapter 6 I present the patterns that varied from those categories.

Principals' attempts to have meaningful conversations with teachers played out to some respects, but did not completely mirror the types of interactions outlined in the literature on teacher learning. Why? In Chapter 7, I explain why I observed interactions that closed down opportunities for teachers to make meaning of instructional ideas. Accountability policies at one school put pressure on the teachers to learn multiple new practices and to demonstrate immediate changes in their teaching and student achievement. I suggest these pressures created conditions that may not have allowed for deep meaning making, especially when principals' and teachers'

ideas conflicted. On the other hand, the teachers in the school that was without accountability pressure were able to focus on learning a few new practices and were not pressured to demonstrate improvement. These expectations for school improvement may have made the school's conditions more appropriate for open exchanges. Yet the lack of accountability pressure allowed other expectations to shape conditions. In that school, the principal limited her demonstration of control over teachers' learning processes due to norms regarding appropriate principal-teacher relationships. These norms made certain types of closed exchanges more appropriate. The principal's understanding of whether or not she could display her expertise and be direct with teachers' learning may have prevented direct negotiation when the principal's idea conflicted with teachers' ideas. Therefore, I suggest that both schools had a different set of guidelines and expectations placed on the principals that provided different conditions for change. As a result, even though both principals intended to be instructional leaders and have meaningful conversations with teachers to support teacher learning, the conditions in their schools that put parameters on principals' actions were not always appropriate for the interactions likely to be associated with teacher learning or change.

In Chapter 8, I summarize my findings and explain implications for research and practice. My findings highlight the importance of theoretically connecting principal practice to teacher learning when studying leadership, instead of assuming that when principals engage in certain actions, teachers automatically learn, change or improve. By continuing to focus on interactions, as opposed to discrete principal action, the field can further develop an understanding of the ways principals influence or shape teachers' learning, instead of solely focusing on the time principals spend on activities, including number of interactions principals have with teachers, and associating the time to teacher changes in practice. Using learning theories to analyze

leadership practice, as opposed to “effective” leadership theories, can also deepen theoretical implications of leaders’ practice on teacher learning. Analyzing principal practice with a learning lens also has implications for practice. By creating definitions of principal instructional practice that focus on principals’ support of teachers’ learning outcomes, as opposed to activity-focused rubrics (i.e. how many times leaders observe classrooms), supports for principals may realize desired improvements in teaching and student achievement.

## **CHAPTER 1: PRIOR RESEARCH ON (2) INSTRUCTIONAL LEADERSHIP AND (1) TEACHER LEARNING**

Current policies put demands on principals to improve both teaching and learning at their schools and ask principals to help teachers improve their instructional practice. However, questions arise from current research examining principals' practice on whether principals actually support teachers' learning. . What does it look like when principals interact with teachers to support instructional practice? To what extent are principals' actions associated with teacher learning and instructional change? What conditions influence how principals interact with teachers?

I review two bodies of literature to explore these questions, the literature on teacher learning and the literature on principal instructional leadership practice. I start with a brief review of studies explaining how teachers learn because I argue that these studies suggest that social interaction matters to teachers' learning and instructional change. These studies allow me to hypothesize how principals' interactions with teachers may also matter to teacher learning. First, I establish why social interaction matters to teacher learning. Next I elaborate on aspects of these interactions that shape the extent to which interactions are settings for teacher learning.

Then, I review the research on principal instructional leadership to show what extant research already reveals about how principals interact with teachers, outcomes associated with their efforts and the factors that shape or influence how principals interact with teachers. These studies highlight that principals do interact directly with teachers and some of those interactions are associated with teacher change and/or higher student achievement. However, most studies on how principals act as instructional leaders to support instructional improvement remain focused on principals' actions and whether principals' actions are focused on instruction. As a result,

methods to study principals' practice focus solely on quantifying or describing principals actions instead of elaborating to what extent such as those actions engage teachers in learning opportunities that are associated with teacher learning. Therefore, even though findings from these studies suggest that principals *may* interact with teachers in ways that align with the literature on teacher learning, most of these studies do not elaborate on whether or how those interactions are opportunities for teacher learning. Furthermore, since studies have not examined interactions in depth, researchers have not elaborated on how various internal and external factors may influence how principals interact with teachers. I end this chapter with research questions that I used to conduct a study that analyzed how principals interact with teachers as they directly support them to improve their practice, how we might understand their interactions in relation to teacher learning and what may shape those interactions.

### **How Teachers Learn: The Importance of Social Interaction**

I begin my review by looking at studies analyzing the impact of teacher professional development to identify the features of opportunities that matter to teacher learning. I review seminal studies in the field that theorize how teachers learn, as well as reviews of research on effective professional development and teacher learning outcomes. Since these two sets of literature highlights social interaction as one feature of professional development activities, which are associated with teacher learning, I subsequently review another body of literature on teacher learning that describes the types of interactions teachers have with others (i.e. colleagues, professional development providers, or coaches) to further explain why interactions matter to teacher learning. To identify those studies for review, I began with the seminal studies named in reviews of research and looked for additional studies that elaborated on how social interaction mattered. These studies included teachers' interactions with each other in inquiry teams, teacher

teams or professional learning communities, as well as studies where teachers interacted with experts or outside facilitators, such as university-based researchers or professional development providers. I narrowed my review to studies that specifically analyzed features of the interaction and associated interactions with some type of learning outcome.

### **The Importance of Teacher Learning**

Researchers of teacher learning problematize the notion that when teachers emerge from their preparation programs they are equipped to teach in all types of contexts and content and they merely need tweaks or “updating” of their practice (Ball & Cohen, 1999, p. 4, see also Cochran-Smith & Lytle, 1999). Theorists argue that current reforms in schools not only require teachers to become “serious learners” of their practice in order to meet the types of changes reforms envision (Ball & Cohen, 1999, p. 4) but that teaching itself is not merely technical implementation of routines learned in school. Teaching requires constant learning and change, sometimes on the spot, to meet current classroom needs and demands (Cochran-Smith & Lytle, 1999, p. 266). Therefore, teachers may require ongoing learning opportunities to not only meet changes required by new curriculum, standards or policies, but also to meet the varying student needs in their classrooms and schools.

### **Social Interaction as an Integral Feature of Teacher Professional Development**

Researchers analyzing the effectiveness of teacher professional development on teacher learning have suggested that solely relying on one-stop lecture or workshop formats may be insufficient to supporting teachers’ implementation or learning of new practices (Ball & Cohen, 1999; Wilson & Berne, 1999). Researchers highlight the importance of teachers’ ongoing social interactions in addition to or in lieu of those formats (Garet et al., 2001; Parise & Spillane, 2010; Putnam & Borko, 2000). These studies suggest that professional development programs that are

collaborative and provide opportunities for teachers to engage in “meaningful analysis of teaching and learning” with others are associated with positive teacher reports as opposed to “traditional” models where teachers sit and receive information (Desimone, Porter, Garet, Yoon & Birman, 2002, p. 83, see also Wilson & Berne, 1999). A few studies suggest that these formats can work in conjunction with one another (Franke, Carpenter, Fennema, Ansell & Behrend, 1998; Parise & Spillane, 2010). When teachers both attend workshops and participate in discussions with other teachers, these opportunities are associated with changes in elementary teachers’ practice in both English Language Arts and Math (Parise & Spillane, 2010). Even professional learning activities where teachers only interact with others, as opposed to learning ideas in workshop formats, have found the same results. Teachers’ interactions with instructional coaches, other experts or teachers have been associated with changes in teacher practice (Kazemi & Franke, 2004; Vescio, Ross & Adams, 2008) and increases in student learning (Biancarosa, Bryk & Dexter, 2010). These studies emphasize how social interaction may be crucial to teachers’ learning of new ideas or changing their practice in ways associated with increasing student achievement.

**Why social interaction matters to teacher learning.** Researchers posit professional development structures with ongoing social interaction components are more likely to realize changes in teacher learning because these opportunities can support teachers’ learning of new practices in their contexts (i.e. existing curriculum, students learning styles, and school context), especially when new practices require teachers to make major changes in practice (Ball & Cohen, 1999; Garet, et al. 1999; Joyce & Showers, 2002). Teachers who had opportunities to talk to and plan for instruction with their colleagues reported changes in their skills and knowledge about the new practices, in contrast to teachers who did not have those opportunities (Carey &

Frechtling, 1997, as cited in Garet et al., 2001). Theorists studying teacher learning explain that changing teaching practice does not occur through a linear process of acquiring new practices and implementing them identically into teachers' classrooms (Joyce & Showers, 2002). Instead, changing teaching practice or learning new practices includes teachers' ongoing construction of practice in their particular contexts (Putnam & Borko, 2000). Part of actively constructing in context involves seeing practice explicitly in action (Garet et al., 2001) and discussing the implementation and application of those new practices through critical reflection and analysis (Putnam & Borko, 2000).

Researchers suggest that such opportunities to construct understanding of new ideas through analysis and reflection are necessary because teachers already have existing teaching practices through which they merge new practices (Coburn, 2001; Cohen, 1990; Wood et al., 1990). Studies suggest that if teachers do not have these opportunities to grapple with what new practices mean in their contexts and instead professional development relies on telling teachers what to do, teachers may conflate the new practice to what they already do or only make surface changes to their practice, rather than making deep changes that the new practices require (Coburn, 2001; Cohen, 1990). For example, one study highlights a teacher's implementation of a new Math curriculum that asked teachers to generate students' exploration of mathematical concepts by use of hands-on materials (Cohen, 1990). The teacher thought she had implemented these new practices by having students use the materials, but she did not change how she taught or her understanding of how students learn. The teacher incorporated the new practice through her existing understanding of math instruction, which included thinking that in math students have to get the "right answer". This conflicted with the new curriculum that asked students to generate their own understanding (Cohen, 1990). In contrast, when another teacher had such

opportunities to explore what new practices meant in her conversations with research staff during implementation, she was able to see how those practices conflicted with her current practice and what additional changes she had to make, not only in her teaching but her understanding of student thinking (Wood et al., 1991). Researchers conclude that this teacher's changes in her classroom instruction aligned with what the new practice demanded (Wood et al., 1991). Thus, when teachers have opportunities to discuss new concepts and to analyze how it fits into or is different from their existing practice they may be more likely to implement new practices as intended (Coburn, 2001). Through social interactions teachers can generate collective knowledge about new teaching practices in their particular contexts (Cochran-Lytle & Smith, 1999; Franke, et al. 1998,).

Researchers elaborate on how reflection and analysis of practice can be powerful sources of new learning, whether learning new practices or improving current practices (Ball & Cohen, 1999; Cochran-Smith & Lytle, 1999; Richardson, 1994). When teachers reflect on their current practices, they can address the gaps or inconsistencies between what they do, what they know and what they intend to do by analyzing how their actions connect to various outcomes, such as student achievement (Ball & Cohen, 1999; Gallimore et al., 2009). Through reflecting and analyzing with other teachers, colleagues or experts, teachers can develop new ways of working that they had not done before. For example, Kazemi and Franke (2004) found, through observations of teachers' discussion in their teacher teams, that when teachers analyzed student work to see how students showed understanding of math concepts, teachers developed alternate instructional strategies based on students' understanding.

In another study of a teacher inquiry team, researchers explain how a group of four teachers that engaged in joint inquiry about a collective problem in their practice developed new

ways of fostering students' conceptual understanding of science phenomena (Ermeling, 2010). In ongoing meetings, the team decided that by identifying students' misconceptions, they could generate conceptual understanding. Teachers implemented a particular strategy with varying success that was designed to help students identify misconceptions. Using one teacher's lesson that was deemed successful for collective group analysis, two teachers who struggled with the strategy reflected how they had provided too much guidance to students in comparison to the more "successful" lesson. One teacher identified her fear in changing her normal teaching routine of giving students the right answer instead of allowing students to struggle. In the next iteration of this teacher's use of this strategy, she changed the structure of her lesson (Ermeling, 2010).

Even though teachers may reflect on or analyze their practice on their own, researchers hypothesize that major changes in practices and beliefs about teaching occur when teachers can encounter new or different ways of thinking and acting about teaching through interactions with others (Ball & Cohen, 1999; Putnam & Borko, 2000). Teachers may not encounter different ways of thinking and teaching on their own (Putnam & Borko, 2000). For example, Horn & Little, (2010) highlight how one teacher altered her understanding of a problem she faced in her classroom through discussions with the members of her teacher team. By elaborating on her problem with other teachers, the teacher went from explaining students' off-task behavior as students' desires to goof off to students not understanding the mathematical content of the task (Horn & Little, 2010). One study examining the potential of different opportunities for teachers' reflection suggested that reflection occurred more often when teachers participated in collaborative activities with other teachers or interacted with experts and not when teachers participated in traditional professional development opportunities (Camburn, 2010). Teachers

reported they were examining their practices more closely and also coming up with new ways of thinking through collaborative opportunities (Camburn, 2010).

**Aspects of interaction associated with teacher learning.** However, studies examining teachers' interactions highlight that not all interactions like those mentioned above are associated with teacher learning or change, even when teachers are asked to reflect on or discuss their practice (Levine & Marcus, 2010; Little 2002). These studies suggest that in order for teachers' social interactions to be settings for learning, teachers do not just talk about practice in general terms, but also talk about practice in particular ways that allow for analysis and reflection.

***Practice is visible and transparent.*** Even when the content of teachers' interactions are on instructional matters, studies on teacher communities highlight that some teachers talk about practice with little description or depth to use for collective learning (Stein & Coburn, 2008; Little, 1990). Teachers may tell quick stories about what happens in their classrooms or ask for quick advice (Little, 1990). For example, teacher collaborative groups that were designed to help teachers implement new Math curriculum mostly discussed the pacing and procedures of the curriculum by swapping ideas instead of discussing their instructional strategies in depth (Stein & Coburn, 2008). Researchers conclude that the teachers' discussions were not aligned with the way the curriculum intended for them to implement the new curriculum (Stein & Coburn, 2008).

However, when teachers' practice is concrete and transparent to others, those interactions may facilitate deeper analysis of practice (Curry, 2008; Horn, 2010; Little, 2002). For example, one group of teachers wanted to discuss teachers' processes of scoring writing during their department team meeting (Little, 2003). Instead of giving quick summaries or anecdotes, one teacher elaborated on her practice by bringing samples of student essays. She explained that she found it difficult to give feedback on students' use of quotes in their interpretive essays and how

students' writing issues may have been due to problems with her teaching, not students' refusal of her feedback (Little, 2003). Researchers posit that when conversations are rooted in "records of practice" those interactions allow for articulation of and shared construction of knowledge about practice (Ball & Cohen, 1999, p. 18). For example, Hall & Horn (2012) demonstrated how teachers and coaches created alternative understandings of why a particular problem persisted in classrooms through their elaborations on practice. When the coach probed one teacher to elaborate on an issue, the group collectively created a new "representation" of a particular problem, allowing both teachers to re-conceptualize students' state of confusion from a teaching barrier into a resource for understanding students' thought processes (Hall & Horn, 2012, p. 249). The participating teachers described why they anticipated problems in moving from small group to large group activities as they discussed their lesson plans for teaching students proportions. Researchers suggested that by discussing problems in depth and coming up with new ways to understand problems, teachers would be able to anticipate problems that may occur or be able to use new conceptualizations as resources for the future (Hall & Horn, 2012).

*Articulation of assumptions and beliefs.* Researchers also posit that when teachers discuss their practice with one another, those interactions are generative when teachers critically examine their practice by articulating and challenging their understandings as well as their assumptions and beliefs related to teaching (Ball & Cohen, 1999; Borko et al., 2006). Teachers may explicitly acknowledge conflict, explain their points of view (Achinstein, 2002; Grossman, Wineburg & Woolworth, 2001) and press others for explanations or rationale (Grossman et al., 2001). For example, during one inquiry group's discussion about student work, conflict arose about the content of a scoring rubric when the group of teachers gave varying scores to the same piece of student work (Crockett, 2002, p. 620). In that discussion, teachers challenged each

other's understandings of the rubric and how teachers placed value on accurate representation versus accurate calculation when scoring students' math explanations. Through their discussion, teachers explained their rationale for why they valued one aspect of the rubric over the other and after hearing each other's rationale, they eventually came to some agreement where members expressed valuing both aspects of the rubric that they would use in the future to score work (Crockett, 2002).

Not only do researchers highlight teachers' articulation about their assumptions on particular instructional strategies, but also they also highlight teachers' beliefs or taken-for-granted norms and assumptions related to teaching (Grossman et al., 2001; Little, 2002). For example, teachers challenged each other's assumptions about whether or not teachers were meeting the academic needs of African American students at their school (Achinstein, 2002). Teachers raised ideological beliefs in their discussions, such as teachers' low expectations for students, assumptions about teachers' responsibilities to teach particular students and whether segregating students in particular programs would either help or hinder their educational achievements. Through ongoing discussions, teachers came to consensus that the current programs at their school were not serving particular students and decided to implement a new program focused on serving African American students at their school (Achinstein, 2002).

However, teachers may not always interact with others in ways that challenge assumptions or uncover conflict (Achinstein, 2002; Grossman et al., 2001). Teachers may bypass conflict instead of probing teachers to explain their ideas (Achinstein, 2002; Grossman, et al., 2001). For example, teachers in a book group did not confront each other's different points of view but instead rolled their eyes or "muttered under their breath" during discussions (Grossman, et al., 2001, p. 957). Without discussions about practice, teachers may not learn new ways of

thinking about their classroom practices and continue the same ways of teaching (Putnam & Borko, 2000).

### **Influences on Social Interaction**

These studies also highlight a few influences on whether teachers talk in interactions reflect the aspects mentioned above therefore whether interactions realize positive outcomes. Studies highlight non-evaluative settings where teachers' trust in other participants may matter to whether or not teachers talk about conflicting ideas (Wood et al., 1991) or their practice in detail (Little, 1990). Studies suggest that when teachers were able to discuss their questions or concerns without fear of judgment they talked in depth about various aspects of their practice, including their beliefs and assumptions (Grossman et al, 2001; Wood et al., 1991, Little, 1982).

Furthermore, these types of discussions take time. Studies highlight the ongoing nature of interactions and implications for teacher learning (Garet et al., 2001; Gallimore et al. 2009; Opfer & Pedder, 2011). Without time to discuss ideas, especially ideas that conflict with others, teachers may not discuss practice in ways that uncovers details of teachers' understandings or practices (Coburn, 2001; Gallimore, et al. 2009; Grossman et al., 2001). With lack of time, conflict may persist (Coburn, 2001). Studies of effective professional development suggest that when teachers' discussions are ongoing for a period of time, they are associated with positive results (Opfer & Pedder, 2011).

In sum, these studies highlight that social interactions can be settings for teacher learning or instructional change when they provide teachers with opportunities to actively reflect and analyze their practice. More specifically, interactions that allow teachers to reflect on their practice by challenging their assumptions and making details of their practice visible to others are associated with teacher learning. Given how fundamental interactions are for teacher learning,

what does the research on principal instructional leadership say about how principals have those kinds of interactions with teachers?

### **Research On Principals' Interactions With Teachers**

Here I examine the literature on principal instructional leadership, paying particular attention to what the research says about principals' interactions with teachers, because these studies explore how principals direct their leadership efforts to improving instruction. I review studies on instructional leadership that connect leadership practice to teacher and student outcomes in order to explain how interactions may be associated with teacher learning. I also review studies that describe in depth how principals directly support teachers and how various factors may influence how principals engage in instructional leadership practice.

#### **Principals' Opportunities to Interact with Teachers to Support Instruction**

Studies examining principal instructional leadership practice suggest that principals have opportunities to directly interact with teachers and to discuss their instructional practice. These studies locate opportunities for interactions within different instructional leadership activities. Principals interact with teachers when providing feedback on teachers' current levels of practice after principals conduct classroom observations (Blase & Blase, 1999; Grissom et al., 2013; Ing, 2010; Louis, Leithwood, Wahlstrom, 2010; Marsh, Kerr, Ikemoto, Darilek, Suttorp & Zimmer, 2005). Studies report that some principals also have ongoing discussions with teachers about student work and student achievement data to help teachers craft instructional strategies (Grissom et al., 2013, Halverson, Grigg, Pritchett, & Thomas, 2007; Lachat & Smith, 2005; Timperly, 2011). For example, one study described, from principal and teacher focus group data, how principals and teachers worked collaboratively as they planned lessons based on student achievement data (Wayman, Spring, Lemke & Lehr, 2012).

Principals also support teachers' learning of new instructional practices during these interactions (Blase & Blase, 1999; May & Supovitz, 2011; Supovitz & Buckley, 2008). From teachers' survey responses on how principals support teachers, teachers explained that some principals would model instructional practices during classroom visits and then meet with teachers afterwards to discuss these practices (Blase & Blase, 1999). Principals also taught teachers new practices according to teachers' and schools' areas of need (Graczewski, Knudson, & Holtzman, 2009; May & Supovitz, 2011; Nelson, 1998; Youngs & King, 2002). For example, one study described how a principal in San Diego walked teachers through an instructional task so that teachers could understand what students might experience when engaging in that particular task (Hubbard et al., 2006). This interaction took place during a professional development session where teachers learned new practices.

In sum, the literature on instructional leadership suggests that principals have multiple opportunities to interact with teachers so that principals can specifically discuss various aspects of teachers' instructional practice. Therefore, principals potentially have opportunities to support teachers' learning of new ideas or reflection on current practice. But what are the outcomes associated with these interactions? To what extent are these interactions associated with teacher learning?

### **Outcomes of Principals' Direct Interactions with Teachers**

Studies analyzing the impact of instructional leadership on student achievement and/or teacher practice associate direct interactions between principals and teachers with positive outcomes (Grissom et al., 2013; Goddard, Neumerski, Goddard, Salloum & Berebitsky, 2010; Hallinger, Bickman, & Davis 1996; May & Supovitz, 2011; Robinson et al., 2008). For example, Grissom and colleagues (2013) found that the overall time principals' spent coaching teachers

predicted student achievement growth in math. Out of the twenty-two activities measured by Heck & colleagues (1990) three of the four most significant practices predicting high student achievement were those that directly supported teachers, including the amount of time principals spent directly observing classroom practices and promoting discussion about instructional issues. A meta-analysis reviewing the impact of principal leadership activities on student achievement elaborated that direct interactions between principals and teachers are more significant predictors of higher student achievement than when principals support teachers indirectly (Robinson et al., 2008). May & Supovitz (2011) explored more thoroughly how interactions with teachers may support teacher learning or change. These researchers correlated the time principals spent on instructional leadership practices with teachers' self reported changes in instruction during language arts. Researchers measured the time principals spent on these specific activities; monitoring/observing instruction, supporting teachers' professional development, analyzing student data or work with teachers, or modeling instructional practices; through teachers' and principals' reports. Teachers reported making made changes in how they grouped students, the use of materials, understanding of students, and the kind of work they have students do in the classroom. Researchers found the mean time spent on these activities correlated to changes in student achievement as well (May & Supovitz, 2011).

These positive findings imply that principals' interactions with teachers may support teacher learning or change. But how do principals support teacher learning as they interact with teachers during these activities? These studies do not elaborate on this dimension. Instead of examining to what extent teachers learn from their interactions with teachers, these studies associate the number of interactions between principals and teachers with changes in teacher practice and student achievement.

**The number of principal-teacher interactions.** Studies associating principal practice with either student achievement or teacher change outcomes describe the time that principals spend interacting with teachers rather than whether or not these interactions reflect aspects of learning interactions, such as thinking differently about practice or learning a new way to approach a problem. These studies measure the number of times principals interact with teachers and discuss instruction, but the studies do not describe the nature of the principal–teacher interaction enough to suggest how principals’ actions might provide opportunities for teacher learning (Grissom, et al. 2013; Hallinger et al., 1996; Robinson et al., 2008). For example, Grissom and colleagues (2013) measured principals’ interactions in a study where observers reported principals’ time allotment on predetermined activities, such as informally coaching teachers to improve, conducting classroom observations, using data to inform instruction and implementing professional development (Grissom et al., 2013). Observers noted “the task of the principal, the location of the principal, with whom the principal was interacting, and the nature of the activity (e.g., phone call or scheduled meeting)” (Hornig, Klasik & Loeb. p. 2010, p.496).<sup>1</sup> Through their methods, the observers found that principals in this study spent 0.5% of their time coaching interactions and that those interactions predicted higher math achievement. Researchers further elaborated on that the content of those coaching interactions included how teachers could improve, how to support students and classroom management issues (Grissom et al., 2013). Similarly, May & Supovitz (2011) also found that when principals’ spent time interacting with individual teachers more than a few times a year, those interactions were associated with changes in teachers’ practice. These findings suggest that ongoing interactions between principals and teachers that are focused on instructional issues may matter to teacher learning or change.

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<sup>1</sup> Grissom et al., 2013 used same observation protocol used for study reported in Hornig et al., 2010

<sup>2</sup> Principals’ varying definitions of instructional leadership might be due to a lack of consensus in the field.

However, these studies did elaborate how principals supposed teachers understanding implementation of research-based practices improved through those interactions.

Despite limited evidence about what principals do as they interact with teachers and how those interactions may support teacher learning, these studies associate positive outcomes to principal instructional leadership activities. These positive outcomes imply that when principals engage in certain activities those activities *may* support teacher learning because some teachers report making changes in their practices. Therefore, to examine principal practice more deeply, I turned to the studies in the principal instructional leadership literature that moves beyond quantifying principals' practice and associating practice with outcomes to the set of studies the literature that describes how principals implement those activities identified in the studies mentioned above, such as giving feedback, having conversations with teachers or providing professional development to see whether studies with richer descriptions of principal practice could shed light on how principals' interactions support teacher learning.

### **Principals' Implementation of Direct Support Activities**

To cull findings for this next section, I reviewed studies describing principal implementation of activities that describe how principals interact directly with teachers. However, these studies continue to describe principal practice more broadly than describing principal-teacher interactions. When they do describe interactions, it is only aspects of them, such as principals asking teachers reflective questions or giving suggestions to teachers. The studies do not explore to what extent teachers actually reflect on their practices during those interactions. These studies continue to take a limited view by only examining what principals do in specific instances, rather than including the extent to which the overall opportunities provide opportunities for teachers to engage in the types of interactions described in the teacher learning

literature. Only three studies explore principals' interactions with teachers from start-to-finish and whether or not those interactions provide opportunities for teachers to engage in the types of interactions associated with teacher learning. But these studies still do not elaborate on all dimensions of the principal-teacher interactions. Nevertheless, these studies do suggest a few dimensions of principal-teacher interactions that may be associated with teacher learning outcomes.

**Interactions for reflection.** While some studies mostly highlight the number of times principals interact with teachers and the content of those interactions, other studies use a little more detail to describe that some principals' interactions with teachers may align with the reflective interactions. As mentioned in the earlier review of teacher learning, reflection can allow for teachers to compare what they do to what they intend to do and come up with new ways of teaching. Teachers reported that principals had provided opportunities for them to think and reflect on their practices and that they found these interactions helpful (Blase and Blase, 1999; Coldren & Spillane, 2007; Louis et al. 2010). For example, teachers reported that they found classroom observations more supportive when principals used data not only give them feedback, but also to help them reflect on their practice (Blase and Blase, 1999; Louis et al. 2010). In fact, researchers conclude that teachers perceived principals to be influencing their practices when the principal promoted teacher inquiry (Blase & Blase, 1999).

Some of these studies provide details regarding what principals do to make interactions reflective (Graczewski et al., 2009; Wayman et al., 2012). Principals elicited teachers' thinking about their practices, especially their established routines, and query specifics of what teachers would do and what they would want to achieve in their practices. For example, principals asked questions regarding why teachers would engage in certain practices and then asked about the

outcomes teachers would aim to achieve (Coldren & Spillane, 2007; Graczewski et al., 2009; Louis et al., 2010). One teacher elaborated on the types of questions principals use when helping her to think through her lesson planning: "If there are any questions on the lesson plans I turn in, she asks me, 'Why are you doing this? Is this relevant to what you are doing to meet this objective?'" (Louis et al., 2010, p.85). From a study on how principals analyzed data with teachers, one principal reported how he asked teachers questions to reflect on changes teachers made in practice based on data during their weekly teacher team meetings (Wayman et al., 2012). The principal explained that he would ask teachers to make decisions based on data, "OK, what are we going to do now, if that kid's struggling?" and then would return a few weeks later to ask teachers to reflect on those changes by asking, "How did that go?" (Wayman et al., 2012, Participating in collaboration with faculty around data, paragraph 2). Teachers indicated that these questions prompted them to reflect about their own practice in ways they had not done before (Blase & Blase, 1999). However, these findings are all self-reported and do not describe how principals supported teachers' reflection over the course of their conversation.

One study that examined the entire principal–teacher interaction corroborates the finding that principals may support teachers' reflections. This study asked five principals, specifically chosen from schools with high student achievement, to record examples of their interactions with teachers that exemplified the nature of their instructional leadership practice (Timperly, 2011). In some interactions, principals elicited teachers' thinking about why student test scores were low by asking questions, and then each principal explained his or her rationale behind asking the questions. One principal also challenged teachers' ideas about why students were not doing well by asking probing questions to get teachers to reflect on their assumptions that were related to how they were teaching students. While data on the overall interactions was not presented, the

researchers claimed that the five principals in this study engaged teachers in conversations that enabled meaning making about various aspects of teaching (Timperly, 2011). But to what extent do principals provide such opportunities in each of their interactions with teachers, rather than just a selected few? Furthermore, what questions did the principal ask and how did teachers respond?

**Interactions to share thinking.** A couple of studies elaborate on how principals might provide opportunities for teachers to share their understanding of instructional ideas in interactions. As mentioned earlier, when teachers get to articulate their thoughts, assumptions or ideas about practice, these opportunities might be associated with teacher learning because teachers might not only gain deep understanding of their thinking or practice, but also collectively build knowledge with others. This may allow for collective problem solving or for generation of new ideas or teaching actions.

One study suggests that principals “solicit” teachers’ thinking and opinions on instructional matters during interactions, but it does not elaborate on what those interactions look like (Blase & Blase, 1999, p. 362). In contrast, another study describes how teachers were able to share their thinking during interactions instead of just providing snippets of what principals do. This study highlights that when principals gave teachers feedback after observations, teachers were able to “explain her/his viewpoint, discuss improvement strategies and, in some cases, to challenge the principal’s interpretation of the instructional practice” (Sartain, Stoelinga, & Brown (2011), p. 25). Researchers characterized these types of interactions as “more dynamic” in contrast to other interactions where principals dominated the conversations (Sartain et al., 2011). However, this study did not explain what principals did in those interactions to make them “dynamic.” Furthermore, this study only examined principals’ interactions during

feedback discussions. But as explained earlier, principals interact with teachers during other activities as well. What do those interactions look like? Are they also “dynamic”? Perhaps these findings can be elaborated upon when examining principal-teacher interactions during other activities.

**Critical and instructive interactions.** However, not all principals’ interactions with teachers are like those described above. Some studies suggest that principals do not provide teachers opportunities to reflect or share thinking about their practices during interactions (Grazcewski et al., 2009; Louis et al., 2010). Instead, principals give teachers information, which may be evaluative, but they do not provide opportunities for extended discussion and reflection. For example, some teachers reported that their principal provided them with critical feedback without providing opportunities for conversation, such that teachers found post-observation conversations unhelpful (Grazcewski et al., 2009; Louis et al., 2010). One study briefly mentioned how principals tell teachers information when teaching new practices instead of engaging teachers in discussions (Hubbard et al., 2006). Hubbard and colleagues (2006) suggest that some principals were more comfortable engaging in the “stand and deliver” method of interacting with teachers on curriculum matters instead of engaging in reflective dialogue (p. 133). The researchers conclude that principals’ participation during professional development activities did not provide adequate settings “conducive to deep learning” (Hubbard et al., 2006, p. 128).

But what do principals do in such interactions? Only a couple of studies discuss principals’ actions that may limit teachers’ reflections or discussions of practice. For example, principals ask teachers questions during these conversations, but not questions that solicit teachers’ thinking (Sartain et al., 2011). More specifically, in their random sample of principals

from eight elementary schools in Chicago, researchers found that principals' questions during pre- and post-observation conferences with teachers "failed to promote discussions" that focused deeply on instruction (Sartain et al., p. 24). Through observations of these conferences, researchers found such questions limited teachers' discussions of ideas by requiring short answers on task completion, as opposed to deeper elaboration. Sometimes principals may not even ask teachers to share their thoughts. For example, when engaging principals in role-playing difficult personnel conversations, researchers found that some principals may dismiss teachers' contributions to discussions (LeFevre & Robinson, 2014). Or principals may not leave room for teachers' ideas and may dominate conversations by talking more than teachers (Sartain et al., 2011).

In sum, principals have opportunities to interact with teachers to discuss their practice, and those interactions seem to matter to some extent to teacher and student learning. However, I found that these studies do not start with a conception of teacher learning when analyzing principal practice and the outcomes of practice. Instead, most studies focus on aspects of the interaction, such as the number of times principals do certain activities or specific things that principals do that teachers report to be helpful, but not whether or not the entire conversation between principals and teachers allows for reflection and analysis such that teachers discuss their practice in depth. Of the studies reviewed, only two (Sartain et al., 2011; Timperly, 2011) analyze principal-teacher interactions and begin to highlight that principals may or may not ask questions that solicit teachers' thinking. But what are other ways that principals enable or limit teachers' reflection and analysis of their practice in depth? In what types of activities do these interactions occur beyond feedback conversations? To what extent do principals interact with teachers in ways associated with teacher learning? Further in-depth study of principal-teacher

interactions, as principals support teachers through different activities, may uncover additional actions principals may take in interactions and provide deeper understanding of how principals-teacher interactions may provide teachers with opportunities for meaning making. Currently, the literature only skirts the surface of the issue with a few findings.

### **Influences on Principal Instructional Leadership Practice**

What may explain why principals may or may not interact with teachers in the ways that research on teacher learning suggests? What are those factors and how do they matter? To explore why principals may or may not interact with teachers, I mined studies of instructional leadership for factors that seemed to influence how principals interacted with their teachers. First, these studies provide some explanations for why principals may not interact with teachers in ways that align with the literature on teacher learning. Individual factors, such as a principal's skill and knowledge may directly shape what principals do in interactions. However, research has not moved beyond providing individual level explanations since most studies have not specifically focused on interactions as units of analysis to explain how context may shape what principals do in interactions with teachers. Contextual factors, such as other actors in the school system or social organization of schools, are named in studies of instructional leadership as sources of influence on principals' broader activities. Since they influence principal instructional leadership activities they may be relevant to principal and teacher interactions. Therefore, I explain how these factors shape principal practice more broadly. First, I explain the individual factors, and then I explain external contextual factors that seem to influence broader principal activities.

**Individual factors influencing principal practice.** Some studies describing principal instructional leadership practice highlight how principals' orientation towards interacting with

teachers and principals' skills matter to their interactions with teachers. These factors explain to some extent why principals may interact with teachers in certain ways.

***Principals' orientation to instructional leadership.*** Some principals may not consider their role to interact with teachers at all and therefore do not interact with teachers. Findings from a subset of studies suggest principals approach their instructional leadership practice based on what they think teachers need to improve their classroom instructions.<sup>2</sup> The kinds of supports teachers need are what shapes the activities principals emphasize. For example, some principals thought teachers improve their practice when provided necessary instructional resources. Therefore, principals provided indirect supports and directed their efforts to activities such as aligning benchmarks and providing assessments and other resources for students in need (Krug 1992; Mitchell & Castle, 2005). Other principals emphasized cultural factors, such as building collaborative relationships among teachers and setting up a culture of high expectations (Reitzug, West & Angel, 2008; Ruff & Shoho, 2005).

***Principals' skills to interact with teachers.*** However, studies on principal instructional leadership suggest that even if principals' conceptions of instructional leadership include interacting directly with teachers, they might not have the capacity or skills to support teacher learning in those interactions. Findings from a few studies start to explain why perhaps principals may not ask teachers reflective questions or elicit teachers' thinking about instructional ideas. These studies suggest that even when principals are experts in instructional practice, they may not know how to convert their knowledge of instruction to assist teachers with their practice

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<sup>2</sup> Principals' varying definitions of instructional leadership might be due to a lack of consensus in the field. Researchers conclude that instructional leadership is poorly defined and as a result it affects how principals conceive the term (Hallinger, 2005). When principals face ambiguity in their role, they use their prior knowledge or experiences to interpret what it means to be an instructional leader, thus causing variation in the field.

(Hubbard et al., 2006; Graczewski et al., 2009; Turnbull, Haslam, Arcaira, Riley, Sinclair, Coleman, 2009).

For instance, when principals in San Diego were faced with the explicit expectations of their supervisors to support their teachers' learning, they balked at these requests because they did not know how to interact with their teachers as learners. Principals' questions to their supervisors such as, "What questions could I ask that would lead me to a plan? How do I get to know my teachers? How do I construct a faculty conference that will lead to a change in teacher practice?" revealed that they did not know how to interact with teachers to support their learning (Hubbard et al., 2006, p. 173.) One of the principals in the study confessed she lacked the skills to provide feedback so that a teacher could improve her practice, even though the principal was able to identify the gaffes in the teacher's lesson. This study concluded that most of the principals in the district had very limited experience working with teachers "as learners" (Hubbard et al., 2006, p.120).

In another case, a principal who "had a command of literacy instruction" was unable to convert this understanding in a way that would facilitate conversations with teachers or that would use other teaching moves with teachers to support improvements in literacy instruction (Graczewski et al., 2009, p. 91). Researchers concluded that this principal did not understand how teachers learn how to teach and he could not effectively convey his knowledge of literacy instruction to his teachers.

In sum, these findings highlight that without an orientation towards instructional leadership, principals may not interact with teachers at all. More importantly, these studies suggest that even when principals aim to interact with teachers, their lack of skills may matter to how they interact with teachers.

**Contextual factors influencing principals' practice.** In this section, I highlight two different aspects of the external context that may matter to principal-teacher interactions. First, I highlight how factors inherent in the school context may matter to principal practice. Then I elaborate on how actors surrounding principals, such as central offices, state and federal agencies and teachers, may influence various aspects of principal instructional leadership practice by setting expectations for principal activity. These findings suggest these sources as potential influences on principal-teacher interactions even though these studies have not specifically used interactions as units of analysis.

*School organizational context.* First, studies suggest that certain aspects of the school organizational context, such as school size and availability of resources, influence the overall time that principals spend on instructional leadership activities.

*School size.* Studies highlight how school conditions correlate with how much time principals spend on instructional leader activities, but are not particular to interactions. First, school size and level seem to matter how principals spend their time (Hallinger & Murphy, 1985). Some studies report that principals of secondary schools spend less time on instructional leadership activities than elementary school principals do, possibly due to an increased number of teachers and diverse content areas (Augustine, Gonzalez, Ikemoto, Russell, Zellman, Constant, 2009; Heck 1992; Goldring, Huff, May & Camburn, 2008; Louis et al., 2010; Marsh et al., 2005). One high school principal lamented that the sheer number of teachers at his school prevented him from conducting observations on all his teachers (Marsh et al., 2005).

*Available resources.* Research on central office efforts to support instructional improvement suggests that resources for schools can matter to principal activity. First, central office resources can limit or increase the time principals have available to spend on instructional

leadership. Lack of central office supports may limit principals' time spent on instructional leadership activities by failing to provide resources or by not shifting principals' managerial responsibilities to other administrators (Hubbard et al., 2006). For example, in a study examining district-wide efforts to improve instruction, one principal commented, "I know the district is really pushing to help us to become instructional leaders, but it doesn't seem like they ever take anything off our plate so that we can do that. It just doesn't seem like it ever gets done" (Marsh et al., 2005, p. 48).

On the other hand, central office resources can also increase the time principals spend on instructional leadership activities by providing resources. Central offices also provide schools with additional personnel, such as by hiring school administrative managers (Turnbull et al., 2009), or other staff, such as literacy coaches (Togneri & Anderson, 2003), to help principals devote more time to or to assist them with instructional leadership activities. Other resources from other sources in the district or school context may also matter, but have not been explored as of yet.

*Actors' expectations of principals.* Furthermore, studies explain that external actors' expectations placed on principals may also matter to the time principals spend on instructional leadership activities. These expectations may also shape how principals engage in those activities. These studies also suggest how these expectations may influence certain aspects of principal-teacher interactions, such as the content of those interactions. I elaborate on these expectations below.

*Central office expectations.* Studies suggest that central office expectations can orient principals towards focusing on instructional leadership practices and increasing the time they spend on those activities by clearly communicating expectations for their role through

professional development and job expectations (Marsh et al., 2005). Observational studies indicate that central office administrators in charge of coaching principals help principals prioritize their time according to these job expectations and shield them from outside demands (Marsh et al., 2005), including demands from the central office (Honig, Copland, Rainey, Lorton & Newton, 2010). One study highlighted how a particular district provided standards for principals regarding principals' classroom observations practice (Louis & Robinson, 2012). Furthermore, some districts incorporate expectations for principals to be instructional leaders as part of their formal evaluation systems, thus incentivizing principals to engage instructional leadership practice. Researchers found that such expectations also correlated to the amount of time principals spent on instructional leadership (Augustine et al., 2009; Sun & Youngs, 2009). Thus, central offices seem to provide clarity for principals regarding their expectations on what they are supposed to do as instructional leaders, but not specifically on their interactions with teachers.

Not only do central offices provide formal expectations for principals to be instructional leaders, they can also shape how principals conceive what to do as instructional leaders through professional development. A subset of studies focus on central office professional development for principals and how they may shape principals' knowledge and execution of specific leadership functions (Fink & Resnick, 2001; Hubbard et al., 2006; Marsh et al., 2005). In one study, central office leaders helped principals understand high-quality instruction by conducting observational walk-throughs with principals (Honig et al., 2010; Honig, 2012). The central office staff observed classrooms with principals while using instructional rubrics, which defined high quality teaching that outlined different aspects of instruction, and the central office staff and principals worked together to understand the level of classroom instruction. Principals reported

that they used their understandings of high-quality instruction to help provide feedback for the teachers at their schools (Honig et al., 2010; Honig, 2012; see also Togneri & Anderson, 2003). Also, one principal in another study explained that she deepened her understanding of how to use teacher observations more strategically than she had prior to the learning sessions (Barnes, Camburn, Sanders & Sebastian, 2010). Thus, central office professional development may possibly shape principals' interactions with teachers by teaching them effective leadership practices.

*State education agency expectations.* Policies from the state may also shape principals' instructional leadership practice. First, these policies may steer the content of principals' interactions with teachers. Principals in one study suggested that state policies provided plans that focused the content of school improvement efforts (Louis & Robinson, 2012). In turn, these policies influenced the content of principals' interactions with teachers. For example, policies emphasized data use in schools, and thus principals centered their conversations with teachers on data (Knapp & Feldman, 2012). Or principals discussed specific instructional content with teachers and this content was aligned to the state's assessment and curriculum policies (Knapp, Feldman & Yeh, 2013). In addition, principals may emphasize certain types of instructional leadership activities in response to these policies. This may increase the number of interactions principals have with teachers. For example, one principal opted to coach teachers one-on-one in order to support teachers' implementation of curriculum (Knapp & Feldman, 2012) while another principal explained that he/she reconfigured staff meetings into professional learning communities and also regularly configured data teams in which he/she participated to meet state accountability demands (Louis & Robinson, 2012).

*Teachers' normative expectations.* While studies have focused specifically on central office or state's expectations to principals regarding instructional leadership and school improvement, researchers have not formally examined teachers' expectations of principals. Therefore, these next findings about teachers' expectations are byproducts of studies and are not the main findings. However, they do suggest that principals may consider teachers' expectations when deciding how to interact. Teachers may hold particular conceptions of appropriate role relationships between principals and teachers. In one study, teachers reported that the teacher should be the "expert" on instructional practice, not the principal, and rejected the practice of classroom visits (Marsh et al., 2005, p. 48). Similarly, researchers highlighted how teachers initially balked at principals' attempts at direct support since such attempts were different than how principals interacted with teachers prior (Coldren & Spillane, 2007; Hubbard et al., 2006). These studies suggest that these expectations were not formally written down, but informal expectations held by teachers.

One study explains how one principal considered these informal or normative expectations when making decisions on his/her interactions with teachers. One principal believed that getting involved in classroom instructional matters would be an "intrusion" on teacher's intellectual and physical space (Mitchell & Castle, 2005, p. 422). Therefore, the principal chose to spend time on building collaborative relationships instead of attempting to discuss and support classroom practice as the principal originally intended (Mitchell & Castle, 2005).

To summarize, the above studies provide explanations for what may influence principal instructional leadership practice broadly and, in some cases, how principals interact with teachers. Individual factors, including principals' conceptions of instructional leadership and their skills to interact with teachers directly, may matter specifically to principal and teacher interactions.

Another set of studies explores external factors and how they may shape principal practice more broadly. First, school organizational factors, such as demographics and resources, may shape the time principals have to interact with teachers. Second, expectations placed on principals, whether formal or informal, matter to certain aspects of principal-teacher interactions. Central office and state accountability policies provide formal expectations for principals that may shape principals' emphasis on certain types of activities and therefore may increase principals' opportunities to interact with teachers directly. They may also shape what principals and teachers talk about during those interactions. However, a few findings suggest that informal expectations from teachers about appropriate principal-teacher relationships may orient principals *away* from instructional leadership, not towards it.

### **Implications For My Study**

In this chapter, I reviewed one body of literature on teacher learning and another on principal instructional leadership practice. I used these two literatures to identify how teachers learn through social interaction and to shed light on how principals' interactions align with the findings from the teacher learning literature. In the process, I explained what principals may do in those interactions, and also what may shape whether or not they interact with teachers in ways that the teacher learning literature suggests.

Even though the teacher learning literature highlights teachers' social interactions and has elaborated on the quality of those interactions associated with teacher learning, researchers studying principal instructional leadership does not seem to heed the lessons from that literature about the importance of the quality of the interactions. Given that most researchers focus on the principal as the unit of analysis and not principal and teachers, this makes sense. Yet teacher learning is arguably one of the most important outcomes of principal-teacher interactions, second

to student achievement. Studies are beginning to focus on principal-teacher interactions and are on the right track. However, these studies were not focused on how principals may interact with teachers across various instructional leadership activities and also did not elaborate on all the types of interactions principals may have with teachers, not solely those that seem exceptional. As my literature review highlights, principals have opportunities to interact with teachers during multiple activities. And in those interactions, principals may have interactions that are both aligned and not aligned with the interactions in the literature on teacher learning. However, very few studies examine what principals do across the entire interaction and not solely aspects of the interaction. These findings suggest that my study should observe principals' start-to-finish interactions in various activities in order to identify what principals do in those interactions overall, which may provide teachers with opportunities to learn in those interactions.

In addition, the only findings that link principals' low quality interactions to factors are those that focus on explanations on individual principal skill level. Yet other studies highlight a host of factors that shape whether principals interact with teachers at all and certain aspects of principal-teacher interactions, such as the content of their discussions. How can we further understand to what extent, if at all, these influences may shape how principals interact with teachers? Additionally, do all of these factors matter equally or some more than others? Studies have not elaborated on the multiple influences on principal practice. Thus, my study should use a framework that foregrounds multiple aspects of principals' contexts so I can explore the relationship between those factors and principal-teacher interactions.

These findings from this review lead me to develop these research questions for my study:

1. When principals aim to support teacher learning directly, how do they interact with teachers?
2. To what extent are principal–teacher interactions aligned or not aligned with what the literature suggests to be interactions associated with teacher learning?
3. What conditions explain how principals interact with teachers?

## **CHAPTER 2: PRINCIPALS' TYPES OF INTERACTIONS IN A CULTURAL AND HISTORICAL CONTEXT**

To analyze the nature of principals' interactions with teachers and explain the conditions that may shape interactions, I draw on concepts from sociocultural learning theory. I chose sociocultural learning theory because my review of the literature suggests the importance of social interaction to teachers' learning. By using this theory of learning, which privileges social interaction, I can explain why interactions matter to teacher learning. Furthermore, by using a learning theory to ground my conceptualization of principals' participation in interactions with teachers, I can hypothesize the learning implications of principal practice without measuring teacher learning per se.

While sociocultural learning theory broadly conceptualizes the importance of interactions, the theory does not provide a unit of analysis to analyze an interaction. Concepts from cultural historical activity theory (activity theory), a subset of sociocultural learning theory, coupled with classroom discourse concepts provide me with a specific unit of analysis to examine principals' start-to finish interactions with teachers and what principals do in those interactions that may shape teachers' learning opportunities. By using this unit of analysis I can move beyond naming specific aspects of the interaction that are already named in the principal instructional leadership literature to conceptualize what happens in an entire interaction. Furthermore, activity theory provides concepts to link my unit of analysis, principal-teacher interactions, to context, an area currently underexplored in the current instructional leadership literature.

First, I explain why sociocultural learning theory privileges interactions by explaining why interaction matters, the broad learning process and what settings are appropriate to engage in those processes. Then I describe specific types of interactions detailed in the literature, what

learning outcomes may result for teachers from those different interactions and varying nature of principal participation.

### **Sociocultural Learning Theory: Learning Process and Outcomes**

Sociocultural theories of learning in the workplace theorize that the content people learn and how people learn that content lies in the social interactions between colleagues (Wenger, 1998). Learning occurs through social interaction because, as sociocultural learning theory posits, knowledge is not located in individuals' minds, but stretched over other people, artifacts, or resources in the context (Wenger, 1998). To learn new ways of working requires learners interacting with others who are also participating in the same activity. Through participation, learners can gain access to ideas and ways of thinking and acting that are in context. Therefore, this theory is aligned with how teacher learning literature suggests why social interaction for teachers' matters to development of their practice and is appropriate to explain how the aspects of teachers' social interactions mentioned in the literature on teacher learning are associated with learning or change

When people interact with one another they develop new meanings and understandings to go about their work, which includes changes in physical action and also changes in thinking and people's identity related to the activity (Rogoff, Baker-Sennett, Lacasa, & Goldsmith, 1995; Wenger, 1998). This conception of learning requires meaning making process, not rote memorization and imitation (Stein & Brown, 1997). Meaning making requires sharing ideas and discussing practice with one another through reflection and analysis (Stein & Brown, 1997; Wenger, 1998). This explains why when teachers talk about their practice in detail with one another, sharing ideas back and forth through reflection and analysis, those types of settings are associated with teachers' new understandings, as well as potential changes in practice.

## **Activities Where Learning Takes Place**

Sociocultural learning theory suggests that learning can occur through interactions between learners and more experienced people as they participate together in activities designed specifically to teach new ideas (Billet, 2002; Tharp & Gallimore, 1988), and it also occurs when actors engage in everyday work tasks (Lave & Wenger, 1991; Eraut, 2007). When individuals engage in any kind of meaning making, such as the “everyday conscious thinking and acting,” (Billet, 2004, p.110), their knowledge changes. However, not all workplace activities may allow for new ways of working, only those that require different practices than what people already do. Billet (2002) explains that “being permitted to engage in novel tasks or being in a position to confront the changing requirements of work practice presents opportunities to develop new procedures or conceptual categories” (p. 461). In these situations, more experienced people guide learners by making new practices and different ways of thinking “accessible” to learners (Billet, 2002 p. 33, see also Lave & Wenger, 1991) in ways that current work practices may not have allowed. Therefore, I posit that when principals and teachers interact during activities where teachers learn new ideas and engage in everyday work activities, such as planning for instruction or selecting initiatives where principals and teachers analyze and shift what they do according to different conditions, these are also settings for learning. Changing school conditions that may require new ways of thinking and acting can include implementation of new standards or curriculum, varying levels of students’ demonstration of knowledge that are shown by data, resource constraints, or lack of goal attainment.

## **Learning Outcomes**

However, merely talking or interacting during those activities may not bring about new ways of thinking and working. As mentioned earlier, learning requires meaning making, not rote

memorization. Sociocultural theory highlights that some interactions may prompt new ways of working and thinking while other interactions preserve current practice (Engestrom, 2001; Wenger, 1998). I explain the former and the latter interactions below.

**Outcomes of interactions for meaning making.** Interactions may generate new ways of working when learners are consciously making sense of ideas and actions with others (Stein & Brown, 1997; Wenger, 1998). This can occur when teachers reflect on and analyze their practice (Tharp & Gallimore, 1988). Reflection and analysis occur when learners are asked to explain their current understandings of their ideas (Salomon & Perkins, 1998), make aspects of their practice explicit by describing what they do and why (Brown, Collins & Duguid, 1989) or are asked to think about the target practice they want to learn in comparison to what they already do or know (Tharp & Gallimore, 1988). Through these activities, learners can jointly construct meanings and develop new ways of understanding what they do (Wenger, 1998), especially when learners grapple with ideas that conflict with their existing understandings (Engestrom, 2001). Thus, opportunities for teachers to construct understandings of ideas may allow for new ways of thinking about their teaching practice. Researchers using sociocultural learning theory to distinguish different types of interactions that teachers might have categorize such interactions described above as *substantive* (Little, 1990; Stein & Coburn, 2008).

***Expert participation in meaning making interactions.*** In these types of interactions, sociocultural learning theory suggests that experts and learners both actively participate and contribute ideas during meaning making, not just one or the other (Rogoff, 1994). Learning theorists suggest that interactions should be “conversations” and not “didactic” (Stein & Brown, 1997, p. 160) meaning experts should not dominate the interaction, but allow participants to

actively share ideas back and forth. Therefore, interactions where both principals and teachers contribute to meaning making may be meaning making interactions.

Meaning making occurs when ideas are *opened up* for discussion, such as various aspects of teachers practice that allow actors and teachers to further elaborate on their ideas, concerns or problems of practice (Horn & Little, 2010; Little, 1990; Little, 2002). Experts can open up ideas by asking questions, eliciting learners' thinking "in the form of explanations, suggestions, reflections and considerations" (Saloman & Perkins, 1998, p. 7). Participants may also specifically open up conflicting views and explicitly delve into the different ways that people think and believe by eliciting conflicting explanations and ideas (Akkerman & Bakker, 2011).

**Outcomes of interactions for transmission.** In contrast, learning activities that transmit information, instead of allowing for meaning making, may preserve existing ways of thinking and doing, including conflicting ideas, and not develop new practices (Akkerman & Bakker, 2011; Wenger, 1998). Researchers studying teacher interaction distinguish these interactions as *superficial* interactions where discussions remain at a surface level (Stein & Coburn, 2008). Actors merely share information back and forth instead of engaging in reasoning. As a result of such interactions, researchers posit that a learner merely "imitates" the appropriate behaviors (Brown & Campione, 1994, p. 237).

***Expert participation in transmission interactions.*** In such interactions, theorists posit that the expert transmits information to learner instead of the learner engaging with the content (Stein & Brown, 1997). When an expert transmits information, the interaction is "static" and information lands on the learner (Stein & Brown, 1997).

Transmission may occur when ideas are *closed down* and are not available for discussion (Horn & Little, 2010; Little, 2002), especially different interpretations or conflicting opinions

that people bring to the interactions (Akkerman & Bakker, 2011; Stein & Coburn, 2008). In such interactions, experts provide “ready-made information, directions, error corrections, or answers” instead of soliciting learners’ thinking (Saloman & Perkins, 1998, p. 7).

Thus, sociocultural learning theory allows me to select my settings for data collection, frame teacher learning outcomes and hypothesize the nature of principal participation in different interactions so that I will be able to connect interactions to teachers’ potential learning opportunities.

### **How to Study Principals’ Participation in Interactions?**

While sociocultural learning theory allows me to conceptualize different types of interactions, the nature of principal’s participation and subsequent learning outcomes, the theory does not allow me to conceptualize an interaction and how to define the parts of an interaction. Concepts from a subset of sociocultural learning theory, called cultural historical activity theory, provide me with a unit of analysis to examine principal-teacher interactions and, more importantly, specific principal actions that may or may not make interactions static.

To analyze principals’ overall participation in interactions with teachers, I use a unit of analysis called an **exchange** (Wells, 1996). Activity theory uses this unit of analysis to bound discussions or conversations into smaller units for analysis. According to activity theory, the exchange is made up of a sequence of units of talk, or **turns**, between participants and is bounded by topic. A **turn of talk** is the smallest unit of the exchange (Wells & DICEP, 2001). Exchanges are also topically bound (Wells, 1996). Therefore, by using a topically-bound exchange as a unit of analysis, I can examine interactions between principals and teachers from start to finish and analyze what types of meaning making opportunities teachers have in regards to a particular topic.

Activity theory conceptualizes what principals say in a turn of talk as an action, or **move** (Well, 1996). Through these moves a principal responds to a statement the teacher made in the previous turn of talk. Those moves are called **follow-up discourse moves** (Wells, 1996). These follow-up discourse moves facilitate different opportunities for teachers to engage in the ideas under discussion because they modify the content for discussion in particular ways. For example, a principal and teacher may engage in a discussion about student achievement data. During one particular exchange, the topic may be about reasons for increases in student achievement. After initiating a conversation with teachers and asking them to explain why they thought student. A principal might ask a clarifying question, such as, “Are you referring to the use of assessments?” This question gives the teacher the opportunity to give the principal information about what he/she referred to in the earlier statement to reduce confusion. Then the principal may engage in another follow-up move. The principal may elaborate on a teacher’s response by asking for an explanation of the teacher’s thinking, “Why do you think the assessment mattered?” The principal’s question gives the teacher the opportunity to further develop his/her idea. This explanation may move the development of understanding reasons for student achievement further than the principal’s move that asked for clarifying information. Activity theory calls attention to the fact that exchanges are jointly constructed between principal and teacher(s) because the principal makes these moves *in response* to teachers’ statements or contributions, not necessarily out of the blue (Wells, 2007a). See Figure 1 for conceptualization of an exchange and two different categories of interactions.

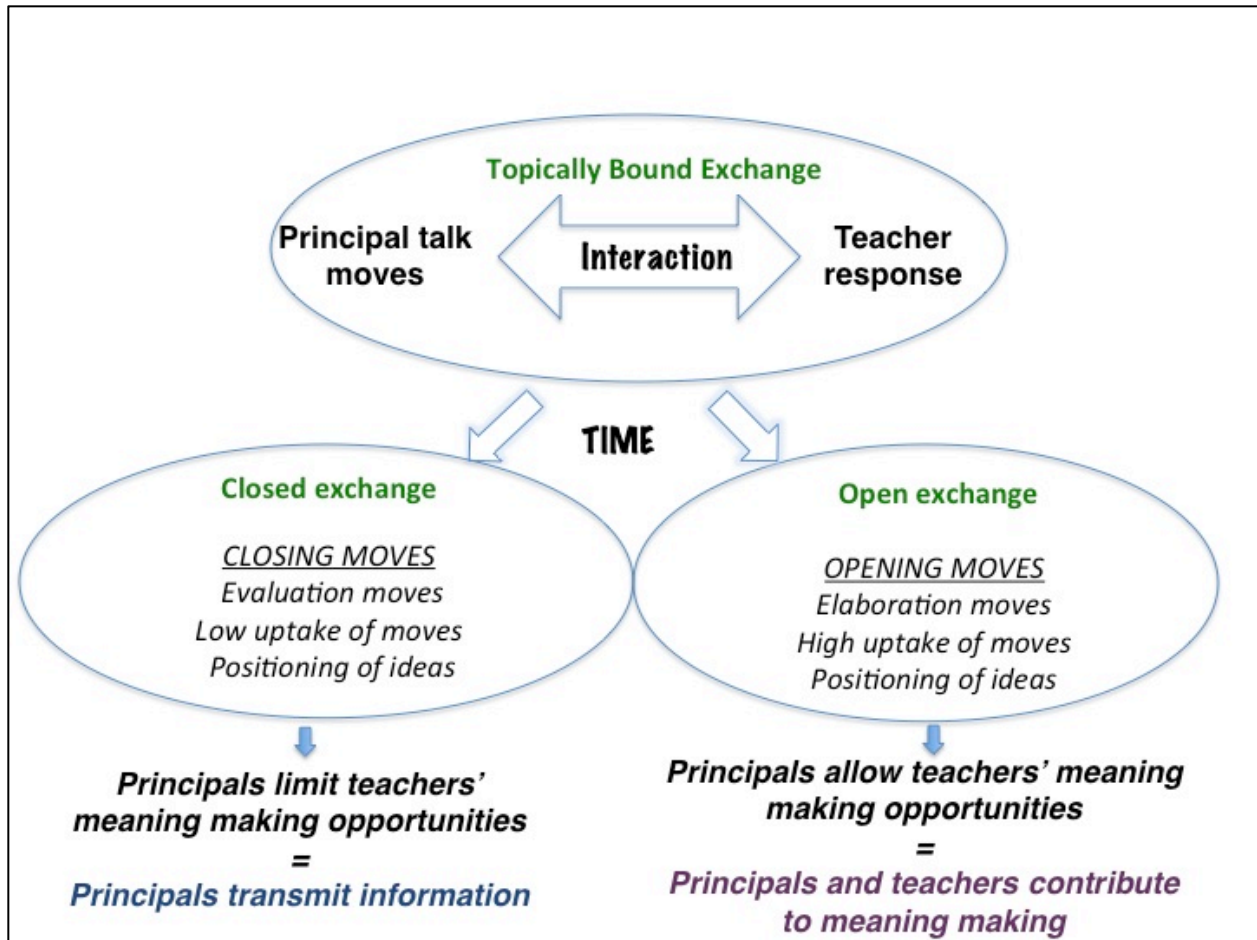


Figure 2.1. *Exchange as unit of analysis*

**Closing and opening moves in interactions.** Which types of moves and in what particular patterns may result in different types of exchanges? The follow-up discourse moves explained above are made in interactions where principals may both transmit information and engage teachers in meaning making. However, these moves can function differently over the course of the exchange, leading to different types of outcomes.

I elaborate on these different categories of moves below by using classroom discourse theory to identify moves that principals can make that may open up or close down ideas. I use concepts from classroom interaction, which are typically applied to how teachers interact with students during discussions, for advice in understanding how moves may open up or close down

ideas. These studies highlight the different aspects of talk moves that are more developed than the studies on teacher learning through interactions.

These studies are appropriate to use in this case because studies of classroom interaction between the student and teacher consider meaning making interactions as sources for learning (Cazden, 1988; Mehan, 1979; Tharp & Gallimore, 1988). Furthermore, they conceptualize teacher participation in interactions as transmitting information to by giving students appropriate information or by teachers acting as a “partner,” or guide, and by participating jointly with students as they make meaning of ideas (Mehan, 1979; Polman, 2004; Tabak & Baumgardner, 2004). These conceptions of teachers’ participation in interactions are similar to how sociocultural learning theory explains the role of experts in both types of interactions. Furthermore, the robustness of these studies allow me to hypothesize when principal and teacher interactions play out in certain ways, how those interactions might be certain settings for different types of learning.

***Closing moves.*** In particular, I consider that follow up discourse moves called **evaluation moves** close down teachers’ ideas because in those moves principals tell teachers that their ideas are wrong or inappropriate for discussion by correcting or rejecting teachers’ responses (Cazden, 1988; Mehan, 1979; Wells & DICEP, 2001). A person may evaluate a response by rejecting the idea altogether, such as saying “No, that idea is incorrect” or they might provide a counterargument by giving reasons why the person’s idea is incorrect (Wells & DICEP, 2001).

During activities where teachers are constructing understandings of a particular instructional practice, principals may also contribute their ideas into the discussion since sociocultural learning theory suggests that experts contribute to meaning making. However, principals’ contributions close down the development of teachers’ ideas when principals’

contributions do not reflect teachers' ideas. This concept is called **uptake** (Nystrand, Wu, Gamoran, Zeiser & Long, 2001). If principals contribute ideas in their follow up moves and these ideas do not take up teacher's thinking and instead display their own thinking, these moves have **low uptake** (Nystrand et al., 2001). If a principal continually uses low uptake moves in an exchange, the principal may control the content under discussion and not allow for teachers' ideas to be further developed in that particular exchange.

Lack of solicitation of teachers' thinking can also be a closing move. When the principal does not ask for teachers' thinking, especially in response to the ideas that principals put forth, teachers may not have opportunities for meaning making in that exchange. Furthermore, this may signal to teachers that their ideas are not allowed to be contributed to meaning making and that the principal's contributions are the authoritative answer on the subject matter (Bakhtin, 2001; Tabak & Baumgardner, 2004, Wells, 2007b). This may occur if facilitators consider the content under discussion to have definitive right or wrong answers. Instead of meaning making, the facilitator may tell participants the right answer without asking others to debate or elaborate on their ideas (Mehan, 1979). Thus, if the principal does not ask teachers to comment on his/her idea, this may close down opportunities for teachers to understand why the principal's idea is appropriate or correct and to engage in further meaning making.

*Opening moves.* In contrast, follow up discourse moves can *open up* teachers' and principals' ideas or descriptions of practice for analysis and reflection to allow for teachers' meaning making. Principals can do this by either requesting ideas or giving pieces of information that relate to the participant's previous response in order to continue the discussion of those same ideas. For example, a principal might elaborate on teachers' ideas by requesting further explanations of what they mean (explanation move), or by providing an example to illustrate the

teacher's contribution (exemplify move) (Wells & DICEP, 2001). Such elaboration moves have **high uptake** because they extend the participant's ideas and thinking often using the same words or pronouns referring to the participant's ideas (Nystrand et al., 2001). I provided examples of some of these types of questions that principals asked earlier in Chapter 1 such as, "Is this relevant to what you are doing to meet this objective?" (Louis et al., 2010b, p.85) or "How did that go?" (Wayman et al., 2012, p.). These questions ask teachers to elaborate on their ideas or actions and share their opinions.

Even if the principal's move is unrelated to what a teacher said before, which are moves with **low uptake**, the principal may open up the discussion by allowing participants to comment on the new idea, especially when the principal's idea is in conflict with teachers' previously shared ideas (Bakhtin, 2001). This type of move suggests that teachers are equal contributors to the discussion and can create their own personal meanings of the ideas, as opposed to when principals do not solicit ideas and possibly use their authority over a subject (Wells, 2007b). When people ask for others to comment on their ideas, they do not position themselves as ultimate experts or authorities over the idea (Bakhtin, 2001). Therefore, such moves can give teachers permission to grapple with the principal's idea and either take parts of it or reject them during interactions (Bakhtin, 2001).

I illustrate these concepts with an example. A principal may contribute her opinion about the usefulness of assessments, which contrasts with a teacher's opinion. The principal might say to teachers during a discussion, "I understand that you do not think these assessments may not be worth administering because they take a lot of time to administer, but I think these assessments are useful because they provide diagnostic information to teachers about students' reading difficulties." The principal may engage in another move after the first follow up move by asking,

“What do you think about that aspect of the assessment?” By asking for teachers’ opinions in relation to the principal’s statement, this move may open up conflicting ideas, further deepening teachers’ understanding of the usefulness of the assessment. This move also suggests that teachers’ understanding may also be a valid point of view that can contribute to the overall discussion about assessments. When principals use such moves, they allow teachers’ ideas to contribute equally to the discussion and do not control what teachers are supposed to think or do.

Using these different types of **open** and **closing** moves, I suggest that the extent to which the interactions that open up ideas for discussion or close them down can vary by the dominance of particular moves. Therefore, I create two categories of exchanges, exchanges with opening moves, which I call **open exchanges**, and exchanges with closing moves, which I call **closed exchanges**. For example, studies of classroom interaction suggest that when teachers use more elaborate moves, like asking students questions about their ideas, this can allow students to share their ideas more deeply than when a teacher asks students only one question, and then evaluates the answer as correct or incorrect and ends the exchange with no other follow up moves (Gutierrez, 1994; Nassaji & Wells, 2000). Such exchanges where the principal controls the content of the discussion may be “closed to the points of view of others, with its direction having been set in advance” (Scott, Mortimer, & Aguiar, 2006, pp. 610-611). Furthermore, the sequence of moves may also matter. The principal may use an opening move, but then use a closing move later on that ultimately rejects all of the ideas that teachers contribute (Mehan, 1979). On the other hand, these studies allow me to distinguish that when principals use more moves that open up ideas, these exchanges may provide teachers opportunities for them to construct deeper understandings of different ideas (Gutierrez, 1994). In Table 1 I describe the features of both types of interactions.

Table 2.1. *Features of open or closed interactions*

	<b>Exchanges with Opening Moves</b>	<b>Exchanges with Closing Moves</b>
Teacher learning function	Construct understanding of open-ended ideas	Transmit fixed information
Conflict stance	Negotiated, uncovered	Bypassed
<b>Discourse moves</b>		
<i>Follow up</i>	Elaboration moves	Evaluation moves, Some elaboration moves
<i>Uptake</i>	Moves related to teachers: high uptake	Moves are not related to teachers' ideas: no uptake
<i>Positioning of contributions</i>	Soliciting teachers' thinking in response to principal's idea	No soliciting teachers' thinking in response to principal's idea

### **Influences on Interactions**

Studies examining learning interactions highlight how time and settings for interactions may mediate the types of interactions that result (Wenger, 1998; Engestrom, 2001). These concepts help me hypothesize what factors may influence the outcomes of principal-teacher interactions. In Stein and Coburn's study (2008), researchers describe that the structure of teachers' professional learning opportunities, provided by the school districts, explained to some extent whether or not teachers engaged in substantive interactions to understand a specific Math curriculum. These districts differed in the frequency of meetings and in who attended, and thus provided varied opportunities for teachers to engage with the content. Researchers argued that the different allocation of time mattered to whether teachers had substantive or procedural interactions with one another. These factors help me connect conditions in the context to certain types of patterns in certain schools. Depending on the time for interactions, I may see more interactions that close down opportunities for teachers to engage in ideas, rather than open them

up.

### **Explaining Principals' Patterns of Interactions**

What conditions might shape or inform why principals privilege certain types of interactions with teachers? In contrast to individual skill-based explanations for why principals interact with teachers in certain ways, activity theory suggests that principals' overall actions with teachers are outcomes of the social and historical context. Context mediates what people do by enabling or constraining certain activities (Werstch, 1998). Aspects of the social and historical context that mediate activity include *rules*, or norms, guidelines and expectations that govern principals' actions in regards to instructional improvement; *division of labor*, or people in the workplace that assist the principal in principal instructional leadership actions; *community*, people in the social context of principal practice that share the same general goal of instructional improvement; and *tools*, or resources that are available for actors to use to engage in their activity (Barab, Barnett, Yamagata-Lynch, & Squire, 2002; Engestrom, 2001; Leont'ev, 1981; Roth & Tobin, 2002). I use this concept of context because it allows me to connect the factors already mentioned in the current literature on instructional leadership and to explain, from the principal's perspective (Goodwin & Duranti, 1992), how those influences may mediate principals' interactions with teachers. These concepts allow me to move beyond the current studies that mostly explain how factors in the context shape the overall time that principals spend on instructional leadership and particular activities.

To identify links between context and action, I use the concept of routines. Activity theory explains that actors employ routines to engage in their day-to-day work activities and how context may shape routines and then make some routines more appropriate than others (Leont'ev, 1981; Wells, 1996). I use this concept of routines to suggest that principals' overall patterns of

open or closed exchanges are routines they use when they interact with teachers during the instructional leadership activities. Interactional routines reflect the social reality of the participants, including what the context considers appropriate ways of interacting (Goodwin & Duranti, 1992; Hymes, 1974; Schiffrin, 1994) and availability of certain resources (Leont'ev, 1981). Therefore, by analyzing the appropriate ways of interacting, or norms, that are present in each principal's sets of interactions with teachers (closed or open interactions) and by examining the available resources that activity theory suggests shape interactions in particular ways, I can connect context to the routines that principals privilege as instructional leaders. See Figure 2 for the relationships between context and interactions.

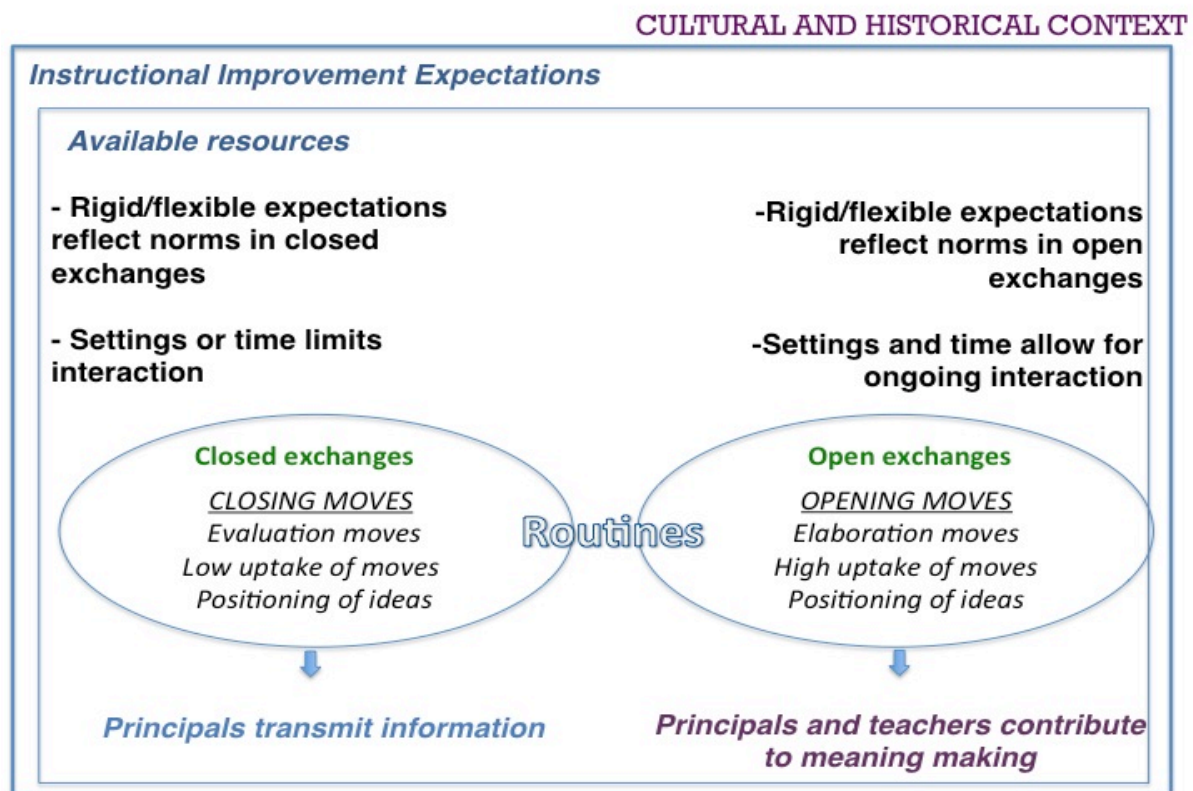


Figure 2.2. Relationship between context and exchanges

In the next section, I explain what aspects of the context may matter to principals' routines or the type of interactions they may typically engage with teachers. Then I explain how activity theory helps me identify specific aspects of the principal's context that the principal may privilege.

**Formal and informal expectations on principals' activity.** As mentioned above, rules put parameters on the activities that principal engage when supporting instructional improvement. These can be formal expectations or informal norms or assumptions about what people are supposed to do. These rules may be reflected in the ways principals interact with teachers, including overall types of moves principals make in their interactions (closed vs. open). The current research on instructional leadership highlights three groups of actors, central offices, state/federal agencies and teachers, and it also highlights how these actors provide guidelines or expectations for principals. The content of these expectations or guidelines may align with closed or open exchanges, and therefore make some patterns of moves in interactions more appropriate than others in the principal's workplace. Below, I highlight the sources of expectations for principal practice that focused my data collection and provide some hypotheses on how these sources may set some conditions that might make certain types of interactions more appropriate.

***Formal policies and principal activity.*** First, the research on instructional leadership highlights formal rules from central offices and state education offices; it goes on to highlight how principals may privilege those expectations and how they influence the content of their interactions with teachers. Rules are often conveyed through resources or tools (Wenger, 1998).

Central offices provide principals with job descriptions or evaluation rubrics that outline specific responsibilities. But they also convey expectations for principals' activity by teaching instructional leadership skills to principals. These skills may be aligned with the central office's

definition of effective instructional leadership practices, which may be conveyed through research-based articles describing how to give effective feedback to teachers. These articles outlining how principals give feedback may recommend that principals solicit teachers' ideas about their practice, thus possibly aligning with open exchanges.

In addition, state accountability policies may also provide rules for principal activity. These rules can also be conveyed through tools, such as formal policy itself, or rubrics and test scores. In my literature review I explained that state accountability policies, such as expectations to use state assessment data or expectations for teachers to align their instruction according to state standards, direct the content of principal-teacher interactions. These policies may also increase the time principals spend on data analysis activities or other instructional leadership activities. Ideas conveyed in these policies or tools may align with open or closed exchanges, therefore making closed or open exchanges more appropriate if principals consider these sources as guides for their practice.

***Informal norms and principal activity.*** In addition, I suggested in Chapter 1 that informal norms from teachers about appropriate principal-teacher relationships might also shape principal activity. A teacher in one school suggested that teachers should be the experts and not the principal (Marsh et al., 2005). Or one principal thought that she would infringe on teachers by conducting classroom observations and refrained from doing so (Mitchell & Castle, 2005). While the examples I provided in my literature review only suggest that principals may *not* interact with teachers based on these norms, I might see these norms play out in principal-teacher interactions. For example, principals who engage in more open exchanges where they solicit teachers' ideas instead telling them what to do may be refraining from displaying their expertise in interactions with teachers. Or, on the other hand, if teachers expect principals to be experts,

teachers may accept principals' ideas without challenging their contributions. Thus, depending on the content of these norms, certain types of exchanges may be more appropriate in principals' schools.

***Hierarchy of expectations.*** As explained above, principals may face multiple rules that set parameters on their work, but the current research on principals does not suggest which set of expectations principals adhere to or if they pick and choose some and not others. To be able to explain how these expectations converge, sociocultural theory suggests principals may consider some rules having more power over their activities due the source of the expectations. Wenger (1989) calls this negotiability. The power of the source of the rules can limit the extent of which rules can be interpreted in a rigid or flexible manner. Researchers using sociocultural learning theory to analyze learning interactions and context suggest that when such expectations are tied to professional evaluation or other high-stakes outcomes, those expectations might prevail (Stein & Coburn, 2008). Using these concepts, I suggest that central office or state policies that provide principals with expectations may exert more power over principals' actions if these expectations are connected with evaluation or other sanctions. Principals may feel they are required to comply with those expectations. I may observe principals privileging certain types of exchanges according to these rigid expectations. These concepts help me focus my analysis on these sources and explain which sets of expectations may take precedence in principals' overall patterns of interaction.

**Resources mediating activity.** Furthermore, activity theory calls attention to the resources that are available for actors to use in order to achieve their desired outcomes and to how those resources mediate activity (Leont'ev, 1981). How resources are used can also be governed by rules. As mentioned earlier, sociocultural learning highlights how time and settings

for interaction mediate the outcomes of interactions. Organizations may restrict or enable time for interaction, or they may provide certain settings for interaction through formal policies (Hallett & Ventrasca, 2006; Maines, 1977). District or state policies may set parameters for when and where principals and teachers interact, thus potentially making certain types of exchanges more compatible with the resources available at schools.

### **Summary**

In sum, cultural historical activity theory situates workplace activity in a cultural and historical context, allowing researchers to make analytical connections between what people do and how their contexts may shape what they do. These concepts allow me to analyze principal practice in ways that have not been studied before. First, activity theory allows me to conceptualize principal practice as patterns of discourse moves they have with their teachers. By analyzing principals' exchanges I can move beyond describing principal activity as discrete actions and proceed to describe the nature of their various interactions with teachers. Current literature on principals' instructional leadership practice is beginning to describe principals' overall interactions with teachers, but it only names specific actions, like principals' questioning practices, or describes the broad features of the interactions, such as the extent to which they are "dynamic." However, by using the exchange as my unit of analysis, I can not only describe various discourse moves, as well as the extent to which those moves open up or close down opportunities for teachers' meaning making, but also whether these exchanges reflect substantive or superficial interactions. Furthermore, activity theory highlights how the expectations or norms that principals' face can shape or constrain activity. Therefore, I can move beyond focusing on principals' individual skills as explanations for why principals interact with teachers in particular

ways and proceed to connect contextual factors to principals' patterns of discourse moves with their teachers.

1. When principals support teachers directly, how do they interact with teachers?
  - a. What are principals' patterns of discourse moves with teachers?
    - i. What discourse moves do they use? To what extent do they open up or close down teachers' ideas?
2. To what extent are principal–teacher interactions aligned or not aligned with the features of interactions described in the literature on teacher learning?
  - a. To what extent do they reflect substantive or superficial exchanges?
3. What conditions, if any, explain how principals interact with teachers?
  - a. What do principals conceive as their expectations for principal instructional leadership and instructional improvement? What is the context of those expectations?
    - i. What sources do principals attribute to their expectations?
  - b. To what extent do principals have the time or places to interact with teachers?
  - c. To what extent do these conditions align with principals' routines or patterns of interactions across various settings?

## **CHAPTER 3: RESEARCH DESIGN AND METHODS**

To study how principals interact with teachers and principals' patterns of discourse moves, I used a qualitative embedded case-study design. A qualitative embedded design allows researchers to study how events unfold in real time and how the context affects what people do (Merriam, 2009). The literature on teacher learning suggests that the extent to which teachers learn from their interactions with others necessitates a micro-investigation of their interactions with principals. By doing this I can track principals' specific moves and how the overall set of moves in one interaction may reflect different opportunities for learning. Thus, observations of principals as they interact with teachers are my main data source. In order to compare principals' interactions I employed an embedded comparative case study to compare the different types of exchanges two principals have with teachers (Yin, 2003).

In this chapter, I describe the research design for my dissertation. I explain why I chose the principals in my study and then how I collected and analyzed my data, describing the specific way I identified particular discourse moves and categorized overall patterns. Finally, I end by explaining the limitations of my research design.

### **Site Selection and Sample**

My review of the literature on principals' instructional leadership suggests that in order to observe principals interacting with teachers directly, my main selection criteria would need to include principals who had orientations toward working with teachers directly and also had the time to interact with teachers. Furthermore, principals are more likely to spend time on those activities if they are in a district that supports and expects principals to be instructional leaders. In my literature review I highlighted those supports as formal expectations for principals to be instructional leaders, the provisions of professional development focused on instructional

leadership and also resources that provide time for principals to work with teachers. Therefore, to identify principals for my study, I went through an iterative process by first selecting a district where I knew principals are expected to be instructional leaders, then selecting principals who have the orientation and skills for instructional leadership and finally selecting schools that would potentially have different expectations and resources from their context in order to maximize and understand instances of variation in practice (Patton, 2002). Patton calls this strategy intensive sampling (2002).

### **District Sample**

I chose a midsized school district in the Pacific Northwest that reflects the criteria mentioned above. First, the central office administrators expected principals to be instructional leaders. Principals' supervisors focused their work with principals on improving instructional quality. Second, the central office provided job-embedded professional development through one-on-one coaching and through professional learning communities. The central office developed principals' instructional leadership skills by contracting coaches and facilitators from university-based educational leadership organizations to provide differentiated supports for principals through principal professional learning communities.

Third, the district provided time for principals to work with teachers to support instructional improvement. The district's collective bargaining agreement with the teachers' union set aside time for principals to work on their school improvement efforts with teachers' during a weekly collaboration time. Because of this, students were dismissed 90 minutes earlier once a week. According to the collective bargaining agreement, 75% of the collaboration time had to be directed towards efforts mentioned in the school improvement plan, while 25% of the time had to be allocated to specialists or teams to meet together. The schedule and content for the

sessions directed towards the school improvement plan were supposed to be decided jointly by the principal, teachers, specialists and people who sat on the school's leadership team.

### **Study Schools and Principals**

To ensure I would have opportunities to study principals interacting with teachers, I used the literature on principal instructional leadership to strategically select two principals whom would be suitable sites for my study (Patton, 2002). I chose two principals so I could attempt to maximize the variation of the interactions I could observe principals having with teachers while also allowing for in-depth observations over time. An in-depth study of principals' and teachers' micro-interactions with more than two or three subjects would be difficult.

**Principals.** I chose two elementary school principals who had time to interact with teachers and were oriented towards instructional leadership. I chose elementary school principals since the literature on principals as instructional leaders suggests that, due to size, elementary school principals are more likely to spend time interacting with teachers on instructional issues than middle school or high school principals. I then purposefully sampled for principals who had professional orientation towards working directly with teachers. I asked the district central office staff that worked with elementary school principals in my district to name principals they have seen directly interacting with teachers, such as working one-on-one with teachers and providing professional development. Then, I looked for principals with specific skills and knowledge about instruction. I used the number of years as a teacher and prior experience as an instructional coach, lead teacher or assistant principal as proxies for those skills. I selected principals who did not have additional support staff, such as in-house instructional coaches or assistant principals, at their schools because I wanted to see how principals interacted with teachers as sole instructional leaders without explicitly sharing those responsibilities with other staff. I refer to the two

principals and schools that I selected with principals aligned with these criteria as Principal Mary of Elwood Elementary and Principal Julia of View Oaks Elementary, both pseudonyms. Details about the principal characteristics are displayed in Table 3.1 below.

Table 3.1. *Principal characteristics*

<b>School</b>	<b>Years Teaching</b>	<b>Previous administrative experience</b>	<b>Years principal total</b>	<b>Number of years at study school (including data collection year)</b>
<i>Elwood Elementary</i>	5 years	Assistant Principal	9 years	9 years
<i>View Oaks Elementary</i>	5 years	Assistant Principal Literacy Coach	6 years	3 years

**School context.** In order to maximize variation, I chose schools that were of similar sizes, but differed in their student populations and overall school performance. These differences provide important contextual variation for both schools in regards to the instructional improvement expectations placed on schools and resources given to schools for school improvement. See Table 3.2 for demographic differences between both schools. In Elwood Elementary, 86% of students qualified for free and reduced lunch. Due to demographic differences, Elwood Elementary received extra funds and resources through Title I of the Elementary and Secondary Education Act while View Oaks Elementary did not. Furthermore, federal and state policies placed different expectations on both schools for school improvement. Schools like Elwood Elementary that received government funds because of the number of students qualifying for free and reduced lunch are held to federal accountability sanctions when low performing. Accountability sanctions outline improvement strategies for schools and provide resources to engage in these improvement strategies. Statewide, Elwood was in the second 5% up from the bottom of schools in the lowest 5% and labeled as a school under accountability

designation by the state education office due to their achievement scores. In contrast, View Oaks Elementary was not under any accountability program due to their higher student test scores. These differences between both schools' accountability statuses, associated expectations and resources allowed me to hypothesize the relationship between school, district and policy context on principals' interactions with teachers.

Table 3.2. *School information and demographics*

<b>School</b>	<b>Number of students</b>	<b>Number of teachers</b>	<b>Racial Composition</b>	<b>% FRL</b>	<b>2012-2013 Math &amp; Reading Scores</b>
Elwood Elementary	480	32	2% Native American 14% Asian/Pacific Islander 18% African American 45% Hispanic/Latino 14% White 8% Multiracial	86%	44-60%
View Oaks Elementary	426	23	1% Native American 10% Asian/Pacific Islander 10% African American 20% Hispanic/Latino 44% White 14% Multiracial	43%	61-77%

### **Data Collection**

My data sources for this study include 67 hours of real-time observations, 20 interviews with principals and teachers and over 100 documents. The collected documents consist of weekly instructional letters sent by the principal, meeting agendas and notes, school improvement plans, instructional frameworks and data displays. I collected data over a time period from November 2012 to June 2013.

### **Observations**

My main data source was observations of principals' interactions with teachers. I captured observations with low-inference verbatim transcripts of principal and teacher interactions. Observations of principals' entire interactions with teachers were critical to my study because I wanted to observe not only what principals did in their interactions with teachers, but also how those interactions unfolded. To capture the entire interaction, I needed to capture all of principals' follow up discourse moves. Furthermore, discourse analytic methods required verbatim transcriptions of discussion (Ochs, 1979).

I sampled across settings where the principal facilitated, organized or participated in instructionally focused activities. My conceptual framework suggests that learning can occur in sessions focused on teaching teachers new ideas, but also when principals and teachers participate in activities or tasks that are part of their everyday work of instructional improvement. Therefore, I chose both types of settings for observations. These settings included staff meetings, weekly learning sessions where the principal organized or facilitated opportunities for teachers to learn new ideas or practices, teacher team data meetings, post-observation and evaluation conversations, intensive literacy learning sessions and school improvement planning meetings.

My approach to capturing observation data in these meetings included documenting verbatim notes of instructionally focused conversations that captured principals' talk with teachers. I also captured nonverbal actions between principals and the teachers they were interacting with at the time, including how principals and teachers were sitting, whether or not they took notes during the meeting, whether or not they referred to handouts or documents during meetings and what their facial expressions were. In full faculty meetings and smaller principal-teacher meetings, I collected verbatim notes on my laptop. I checked the accuracy of my notes with audio recordings of the meetings to make sure I adequately captured principals'

talk in response to teachers. However, during all staff gatherings, there were instances when principals moved about the room, listening to teachers' conversations and interacting with a few teachers while other groups talked nearby. I was unable to use my laptop. Therefore, I captured verbatim notes by hand on my notebook, supplemented when possible with audio recordings. In addition to the full faculty meetings or smaller group meetings, I also observed principals and teachers one on one. In those settings I only audio recorded those meetings to minimize the intrusion and I captured their nonverbal actions with field notes.

Other observations that supplemented my understanding of principal practice included those of principals conducting classroom observations. During those observations, I took field notes focusing on principals' actions, such as where the principal sat, whether or not the principal took notes, and when, or if at all, the principal talked with the teacher.

Since principals engaged in multiple activities and interacted with many teachers, I focused my data collection by choosing three teachers in each school and privileged interactions where those teachers were present. I captured the interactions between those teachers and the principals as well as the other teachers in their group. This included grade-level specific meetings, individual meetings and all staff gatherings. I attempted to maximize variation when picking the three teachers in each school criteria to ensure that I observed principals interacting with different types of teachers. Therefore, I selected teachers who participated in different types of activities (i.e. teacher leaders who participated on leadership teams or lead content teachers), teachers who spanned different grade levels and teachers who varied in years of experience. Interviews with the three selected teachers also allowed me to triangulate principals' actions. In Table 3.3 I detail the number and hours of observations in each setting.

Table 3.3. *Observation settings and hours*

	<b>Elwood Elementary</b>		<b>View Oaks Elementary</b>	
	<i>Number of observations</i>	<i>Total Hours</i>	<i>Number of observations</i>	<i>Total Hours</i>
Professional Development meetings	11	18.5	10	14
Data analysis meetings	4	3.5	4	5.16
Evaluation or Observation conferences	4	1.5	2	1
School Improvement meetings	5	6.5	5	11.74
Principal planning for professional development	1	0.53	3	1.5
Classroom observations	3	1.83	3	2.3
<b>TOTAL</b>	<b>28</b>	<b>32.36</b>	<b>27</b>	<b>35.7</b>

I captured my verbatim transcripts using minimal lexical data with guidance from Ochs (1979) and Wells & Haneda (n.d) transcription methods. The conventions I used for note-taking include: [ ] for contextual information, - to indicate an interruption, either by another speaker or by the current speaker for self-interruption, ... to indicate trailing off in talk, ? for intonation with high rise quality, ! for exclamatory utterance, ( ) to indicate words that are summaries of data and (( )) for verbalizations or nonverbal communication. I was able to denote nonverbal behaviors that would help me with my overall analysis. For example, I captured when principals and teachers nodded in agreement without saying “yes” or “I agree”. By denoting interruptions, I could indicate whether a principal or teacher cut off one another during discussions. Interruptions can suggest a power differential between participants.

### **Interviews**

I conducted two rounds of semi-structured interviews with both principals, which each

lasted an hour and a half. My conceptual framework suggests that what principals do is shaped not only by their personal experiences, but also by the norms and expectations in their workplace context, therefore my interviews probed on these topics. In the first round, I focused on the principals' professional backgrounds, how they understood the role of the principal and the school improvement initiatives at their schools. I asked these questions in the first round to gain a deeper understanding of their schools in order to help me focus my observations. For example, I asked questions about their professional histories, how they prepared for the role, their understandings of the principal role and what sources or experiences informed that role and then their rationale for school improvement initiatives. I probed particularly for influences and on what sources of influence principals based their decisions or actions. Furthermore, I probed about the various school improvement initiatives to identify different opportunities to observe principals interacting with teachers.

In the second round of interviews, I asked the principals to comment specifically on their work with teachers and also on their general approach in activities that I had observed over the course of the data collection. In each case, I used specific examples from my data and asked the principals to recount their rationale for those actions and how they understood what was happening in those interactions and why. I also conducted one brief 5—10 minute interview to ask the principals to reflect on specific interactions they had during the week. I used data from my observations in these short interviews. I used these methods for a couple of reasons.

Discourse analysis can be particularly subjective and depends on the researcher's interpretation of how people are interacting. Therefore, I wanted to validate my interpretations of principals' interactions with teachers by asking principals for their interpretations of why they engaged in particular actions (Mehan, 1979). Elicitations of how principals interpret their

interactions allowed me to confirm what I observed (Heller, 2001). Even though respective interviews do not always adequately capture a person's thinking, I used my observation data to help principals remember what had happened during the interaction. I provided them with examples from transcripts or from field notes or from examples of the agenda or data displays that they used with teachers in order to talk through what had happened during the interaction or what informed them of why they did particular things. Furthermore, I wanted to be able to connect principals' moves in their interactions to specific influences in the workplace context. By probing for their rationale about their interactions with particular teachers, I could triangulate their statements with other sources to explain what may have influenced principals in particular ways.

Whenever possible, I also engaged in brief informal discussions before or after meetings to gain any insight of the purpose of the activity or of what the principal thought of the event after it happened. These brief discussions helped me understand how principals considered their participation in different activities.

I also conducted two rounds of semi-structured 30—45-minute interviews with the focal teachers. In the first round of interviews with teachers, I probed their professional histories, how they came into teaching and how they understood school improvement process. I asked these questions to establish rapport with the teachers and also to triangulate the principals' understanding of teachers. In the second round of interviews, I mainly asked questions about the teachers' interactions with their principals across the broad instructional leadership activities, and I provided specific examples from the course of the year so that they could reflect and comment on those specific instances. I used these interviews mainly to triangulate my observations of the principals' actions.

## **Documents**

I collected documents as an additional data source. As mentioned in Chapter 2, expectations or rules for principals' practice are often conveyed through documents from the central office or state education agencies. Furthermore, these documents helped me understand the content of discussions between principals and teachers. Documents I collected included agendas, research-based articles, school achievement data, school improvement documents, notes from meetings and instructional frameworks and rubrics. I also collected the principals' weekly letters that they sent to their staff. In addition, I collected district and state education office documents that were related to instructional improvement, including their collective bargaining contract outlining professional development time, school improvement classifications from the state education office and the teacher evaluation framework. I used these documents to triangulate principals' leadership actions and also to identify sources of influence on principals' practice.

## **Data Analysis**

To analyze my meeting transcripts, which were the bulk of my data analysis, my approach was informed by theories of discourse, particularly classroom discourse analysis (Cazden, 1988; Mehan, 1979, Sinclair & Coulthard, 1975, Wells, 1996) and ethnography of communication (Saville-Troike, 1989). Classroom discourse theory analyzes the "communication system" that teachers set up in classrooms so that they can control the flow of discussion for students' learning purposes (Cazden, 1988, p.2). Ethnography of communication suggests how actors' ways of speaking are organized in patterns, and these patterns relate to social structure and are informed by cultural processes (Saville-Troike, 1989; Schiffrin, 1994). Combining these approaches allowed me to examine how principals' interactional patterns with

teachers are part of the social and cultural context. My analysis of my data while using these approaches occurred in two phases.

### **Phase 1 Approach**

To analyze my transcripts, I used micro-analytic methods grounded in classroom interaction analysis (Mehan, 1979; Sinclair & Coulthard, 1975, Wells & DICEP, 2001).

**Unit of analysis.** First, I separated out my transcripts into my unit of analysis. I separated out all the transcripts to isolate the instances of talk that had any type of instructional content. Since I only observed activities that had some sort of instructional focus, I kept most parts of the transcripts for analysis. Sections that I did not analyze for exchange patterns were announcements about events or technical information about school (i.e. getting a new playground or how to fill out student information folders to for following school year placement) and personal interactions between principals and teachers.

After I isolated the instructional content of my transcripts, I separated out the transcripts into exchanges. First, I separated out the transcripts into sections where principals elicited teachers' ideas or meaning making, what Sinclair and Coulthard (1975) call "teaching exchanges," or when teachers initiated exchanges on their own. Then I separated these exchanges into a different topic. Exchanges are further identified by a change in topic, and they contain multiple discourse moves. As explained by Wells (1996), exchanges are bound by topic and "independently contribut[e] new content to the discourse" (p. 78). For example, the principal may initiate an exchange where she solicits teachers' thinking about guided reading. One exchange might be about the purpose of guided reading while another exchange may be about the process of identifying and placing students into different groups.

**Coding.** After I separated all my transcripts into exchanges, I coded these exchanges

using Wells & DICEP's (2001) classroom interaction coding tree. This coding tree includes the concepts described in my conceptual framework to help me identify whether or not principals opened up or closed down teachers' ideas. It also contains various types of elaboration and evaluation moves, degrees of uptake and positioning of expertise. I coded the exchanges sequentially, not separate from each other since sociocultural theorists whom analyze talk suggest that what people say is not isolated from moment to moment, but that talk and meaning builds on itself across many social settings (Bakhtin, 1981). By sequentially coding the exchanges, I kept in consideration how the principal responded in the past, including within the meeting or in similar meetings prior.

In my first round of analysis, I coded a sample of transcripts across each of my observation settings for follow up moves, and I also coded the follow-up moves according to the degree that responded to teachers' ideas (Nystrand et al., 2001). I classified follow-up moves as having different levels of uptake: none, low and high. Follow-up moves with no uptake are ones that do not take up previous contributor's ideas at all. Follow-up moves with low uptake merely acknowledge the contribution (e.g., "okay" or "yes") or are related to the previous statement, but highlight his or her own thinking, not the person who responded prior. When a person follows up with high uptake, the content often includes the same words and ideas used by the prior speaker with no new ideas presented (Nystrand et al., 2001). Furthermore, when facilitators ask specifically for participants to provide their ideas, those moves also have high uptake. To illustrate my coding, see Table 5.2 in Chapter 5. I analyzed and categorized each principal's turn of talk, identifying specific discourse moves and the degree of uptake.

I went through an iterative process of analysis; refining the patterns of discourse moves I observed principals use. I especially kept track of when principals provided information with low

uptake and of whether or not principals asked teachers questions after the low uptake moves. I then used these patterns to analyze the rest of the observations. To determine my different outcomes, I used this flow chart, displayed in Figure 5.1 using different questions to help me analyze whether the exchanges were open or closed.

After I grouped my exchanges into various patterns, I decided on five different patterns: three closed and two open. I also noticed that principals engaged in certain types of moves depending on teachers' responses. After I coded each of the exchanges according to the different categories, I went back through my data and coded each exchange for the type of responses teachers made before principals' specific opening or closing moves.

After I completed my analysis of the different exchange patterns, I then made cross-school and within-school bar graphs that detailed the patterns of closed and open exchanges at each school, the types of teacher responses and distribution of types within and across schools. I used these charts as I engaged in analyzing my data for my second research question, looking at context to explain why these patterns unfolded in the way that they did.

To triangulate my analysis of principals' interactions in their schools, I also coded my observation and interview data for principals' explanations of their role and how they participated in instructional leadership activities, such as how they used data with teachers or their participation in post-observation conferences. These allowed for holistic explanations of my interactional patterns (Schiffrin, 1994).

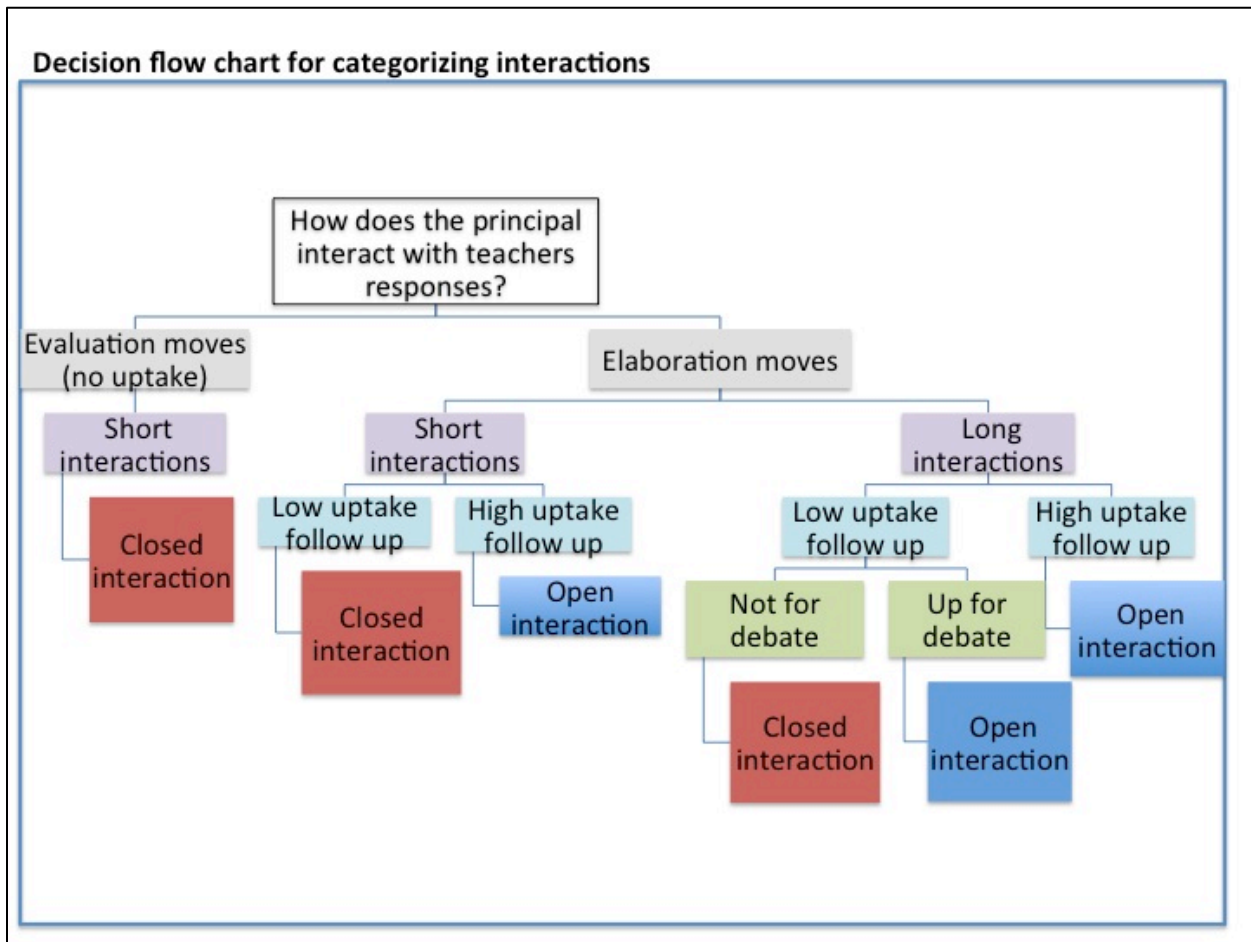


Figure 3.1. *Decision flow chart for categorizing interactions*

## Phase 2 Approach

To answer my third research question, regarding what conditions may explain how principals interact with teachers, I first coded my interview, observation data and documents looking for principals' explanations of their role, leadership actions and decisions that were related to instructional improvement. I also attributed principals' explanations to any source or rationale, generating codes from the external or internal factors mentioned in my literature review (i.e. internal sources: school resources, teachers and personal experience/skill, and external sources: central office, state education agency policies, other). My conceptual framework suggests that these external and internal aspects, such as expectations for principal

action, as well as the resources schools have to use for instructional improvement, create the conditions that shape or enable action and that make certain types of routines more appropriate or compatible.

However, my conceptual framework suggests that in order to link aspects of context to explanations of what principals do, I should analyze these factors according to the perspective of the person who is the subject of my study (Goodwin & Duranti, 1982). Therefore, to identify the sources that mattered to principals' interaction, I coded all parts of the meeting notes and interviews for when principals attributed a rationale of their actions to any of the internal and external sources mentioned earlier. I counted the number of times these sources were mentioned to derive initial hypotheses about how these mattered to both principals.

Subsequently, to generate explanations *why* these sources mattered and how they mattered to principals' interactions with teachers, I inducted two codes from principals' explanations for why they engaged in some actions more than others: "time for change" and "directed change." I also inducted another code pertaining to how principals explained their relationships to teachers' change effort: "displaying expertise." I recoded my interview, observation data and documents from the school site and the external sources using these content codes to generate explanations of how conditions mattered to principal-teacher interactions.

I created explanatory matrices displaying expertise, time for change, and directed change, and I also created matrices for each source of the external or internal influences, such as state policies, teachers, resources, central office, and personal experience (Miles, Huberman & Saldana, 2014). For each source and each explanation, I put either yes or no (i.e. "yes" for directed change or "no" for displaying expertise) (Miles et al., 2014). Then I compared these matrices with my patterns of exchange in each school and the extent to which those patterns

aligned with content of expectations or available resources in each school. While I cannot say that these guidelines caused principals to act in certain ways, the consistency of my findings and the alignment with theoretical explanations that state how and which guidelines may matter suggest a relationship between expectations and principals' overall actions with teachers.

### **Validity**

I aimed for validity in my analysis of principals' interactions with teachers by looking for agreement between my analysis and subject's interpretations. First, I triangulated my exchange types and the moves that the principals made by probing principals in interviews to explain their approaches in these events. I provided examples from observations and asked principals to comment on their actions in order to help me make sense of how they understood what was going on and why they responded in particular ways.

Second, because I was in both schools over a period of seven months, I observed that some of the same topics came up over and over again. I benefitted from being in the setting for a sustained amount of time, and I developed an understanding of the issues discussed by the principals and teachers regarding instructional improvement, such as the changes in paraprofessional schedules that forced teachers to rethink their literacy practices, the challenges of implementing of a new Math curriculum and other issues. Even though my analysis did not focus on the principals' specific views of instructional issues, I was able to hear principals articulate their views on many of the ideas with which they agreed and disagreed in different settings across the data collection period. For example, I was able determine whether or not the principal evaluated a comment a teacher had made during an exchanges because I heard the principal articulate her contrasting views in a prior exchange. These insights allowed me to determine when principal talk moves elaborated on or agreed with teachers or when they negatively

evaluated or disagreed with teachers, which are the main aspects of opening and closing moves.

### **Limitations**

My study has two main limitations. First, the nature of qualitative research design is by nature descriptive, and the findings cannot be generalizable to the schools beyond this study. These patterns of interaction do not suggest that all principals act in these ways. However, my findings build on theories of expert participation in learning interactions to include principals. I add to the literature by distinguishing how principals may open or close down opportunities for teachers to engage in meaning making through different types of discourse moves.

Furthermore, I cannot conclude that the data I collected and the subsequent analyses are representative of both principals' practice within these schools. I sampled across multiple activities in order to observe principals during various opportunities where they would interact with teachers. These analyses only represent the formal leadership activities I observed, not the informal interactions principals may have with teachers in the lunchroom or hallways. The absence of data of informal interactions may reveal other types of interactions that principals had with teachers or a different distribution of open and closed exchanges across both schools. However, because I used a small unit of analysis that captured the micro-interaction pattern between principals and teachers, and because these categories of patterns showed up across multiple events, my data suggests that I captured the natural interaction between principals and teachers despite the formality of the setting or activity.

## **CHAPTER 4: PRINCIPALS' INTENT AND OPPORTUNITIES TO INTERACT WITH TEACHERS**

In this chapter I start to answer my first two research questions, “When principals support teachers directly, how do they interact with teachers?” and “To what extent are their interactions aligned with teacher learning interactions?” by establishing that my study principals were cases of what I intended to examine, principals interacting with teachers specifically to help them learn or change. I do this by explaining how principals stated their intentions as instructional leaders to interact with teachers and to support teachers’ learning through direct conversations. Then I explain how principals had opportunities to interact with teachers across different instructional leadership activities, and finally I give a broad overview of my findings.

In sum, I found that both principals expressed their intentions to support teachers’ learning through direct conversations and that they had opportunities to interact with teachers in different instructional leadership activities. However, their interactions varied in the extent to which they opened up or closed down opportunities for teachers’ meaning making. I observed five different exchanges instead of the two exchanges I expected to see based on the categories in my conceptual framework. These exchanges lay on a continuum between principals’ transmission of ideas to teachers and principal-teacher co-participation in meaning making. Both principals mostly privileged interactions in the middle of that continuum.

While I use this chapter to introduce the subsequent chapters where I detail different types of principal-teacher interactions, my findings confirm the existing literature that implies principals have opportunities to interact with teachers across different instructional leadership activities.

As described in Chapter 3, I derived the first set of findings for this chapter by coding my

interview data for principal's explanations of their role and leadership actions. For the second set of findings, I separated out my transcripts into exchanges and coded them using my coding tree. After I created the various exchange categories, I coded each exchange by putting them into the different exchange categories. Then to generate an overall picture of the patterns and to compare across schools I created bar graphs.

I start this chapter by describing both of my study principals and their intentions to directly engage with teachers. Then I briefly explain the different categories of my interactions and the overall distribution of these patterns in both schools.

### **Principals' Intent To Interact With Teachers**

Both principals explained that, as opposed to prioritizing activities in their roles as instructional leaders as mostly organizing opportunities for teachers or creating an environment supporting instructional improvement, their main priority as instructional leaders was directly interacting with teachers to support teachers' learning or change. Moreover, the principals viewed their conversations with teachers as opportunities to help teachers think about and make changes in their practice.

Mary, the principal from Elwood Elementary, explained that her priorities as a leader were those that entailed being closely involved with teachers' instruction. When explaining leadership activities that she prioritized as a principal, she mentioned three activities focused on developing teachers' practice, "providing PD [professional development] and planning with teachers around what that PD [professional development] needs and looks like, and then the evaluation of the PD [professional development] in application." She suggested that the goal for her involvement in providing professional development to teachers was "helping teachers really think about their instruction in terms of making an impact with kids". She explained her role as

being responsible for driving teacher change and improvement at their school, and she went on to say, “If they [teachers] don’t know how to do something, then that’s my job to help them [teachers] ... to learn...”

Principal Mary highlighted that direct conversations with teachers were opportunities to support their learning. She stated that her intent is to be a principal that “[has] conversations with teachers rooted in our ability to make changes for kids.” When explaining why she organized learning opportunities in particular ways, she cited the importance of interactions for teacher learning by saying, “I try to be intentional about having opportunities for staff to talk about what they're learning and not just have a stand and deliver. There might be things where I'm presenting, but then I try and incorporate opportunities for them to make sense of that.”

The principal elaborated further as to why she thought interactions were important for teacher learning. She suggested that interactions,

[help] them [teachers] really understand what they're reading and hearing, but also give[s] them an opportunity to understand what other people are reading and understanding and thinking. We learn a lot from each other. I think that a questioning staff and having staff questions things is a good instructional strategy for everybody.

Furthermore, she explained in the following that interactions could allow for teachers to reflect and analyze their practice.

In the past I have done observations and then I write up, ““here is what I saw in your lesson and here is what I think was great and here are your next steps,” and it wasn’t a conversation and I feel like this is more of a opportunity for teachers to go through their thinking and reflect upon what choices they made and why and what steps they can take.

Similarly, Principal Julia of View Oaks Elementary explained how she intended to directly interact with teachers to support improvements in their practice. She explained that she prioritized “be[ing] in classrooms with teachers during instruction” and “talking with teachers about instruction” as an instructional leader because she saw those two activities as “most vital for students.”

The principal, Julia, expressed that one aspect of supporting teachers with their practice included direct conversations about practices that allowed for teachers to reflect on and analyze their teaching. She explained she desired being a “thought partner” with teachers so that they could “talk through teaching” and she could help teachers “open up” their practice. In one of her weekly emails to the staff, she reiterated this explanation of her role,

One of my priorities at school is participating in conversations with each of you around your students and your practice. [Professional development] and staff meeting times are opportunities for this work, and continue to be priorities for me.... my hope is that I can continue to learn about your teaching and support you to continue to reflect on your practice as well.

Even though the principal’s school was a high-performing school, she concluded that teachers’ instructional practice had room for improvement and wanted to support their continued learning. She elaborated in an interview,

I sometimes wonder how effective our teachers would be if they were in a different setting. I don’t know how important that wondering is because it’s not the reality; they’re here and they have our kids. We are very fortunate to have a very strong supportive family base. If we didn’t have that, I wonder how we would kind of pick up that slack in terms of support for

kids during the school day. That's more of a wondering, I think, then a need to do something about it.

In sum, both principals' explanations of their priorities as instructional leaders and descriptions of their approaches emphasize supporting teacher instructional learning and change through direct conversations. The principals' explanations align with the current research on teacher learning interactions where teachers hear about other ways of thinking and teaching, as well as reflect on current practice and the ability to articulate what they do and why in detailed form.

### **Principals' Ongoing Opportunities to Interact With Teachers**

Not only did both study principals explain their priorities to interact with teachers directly to support their learning, I also corroborated their intentions by observing principals interacting with teachers multiple times in various activities across my data collection period. In total I observed 67 hours of principals' practice and categorized 157 exchanges between principals and teachers that I classified as teaching exchanges, or exchanges where principals elicited teachers' thinking.

Since sociocultural learning theory suggests that everyday work tasks, as well as activities intentionally designed to teach new ideas, can be opportunities for learning, I observed principals interacting with teachers during both types of activities. This included learning sessions (one hour sessions as well as three hour sessions) where teachers learned new content, meetings where principals gave feedback to teachers in post-observation or evaluation conferences, meetings where teachers analyzed data to inform their subsequent instructional strategies and discussions about the school improvement plan. While these principals engaged in the same types of activities, they implemented them differently. Implementation varied by the

overall time spent in each activity, by how many times they engaged in certain activities and by whether or not they included certain teachers or staff to facilitate the activity. In spite of these differences in implementation, I observed a similar number of exchanges in both schools since both principals still directly interacted with their teachers during these activities. See Figure 4.1 for a comparison between both schools' number of exchanges in each activity and the overall total of exchanges.

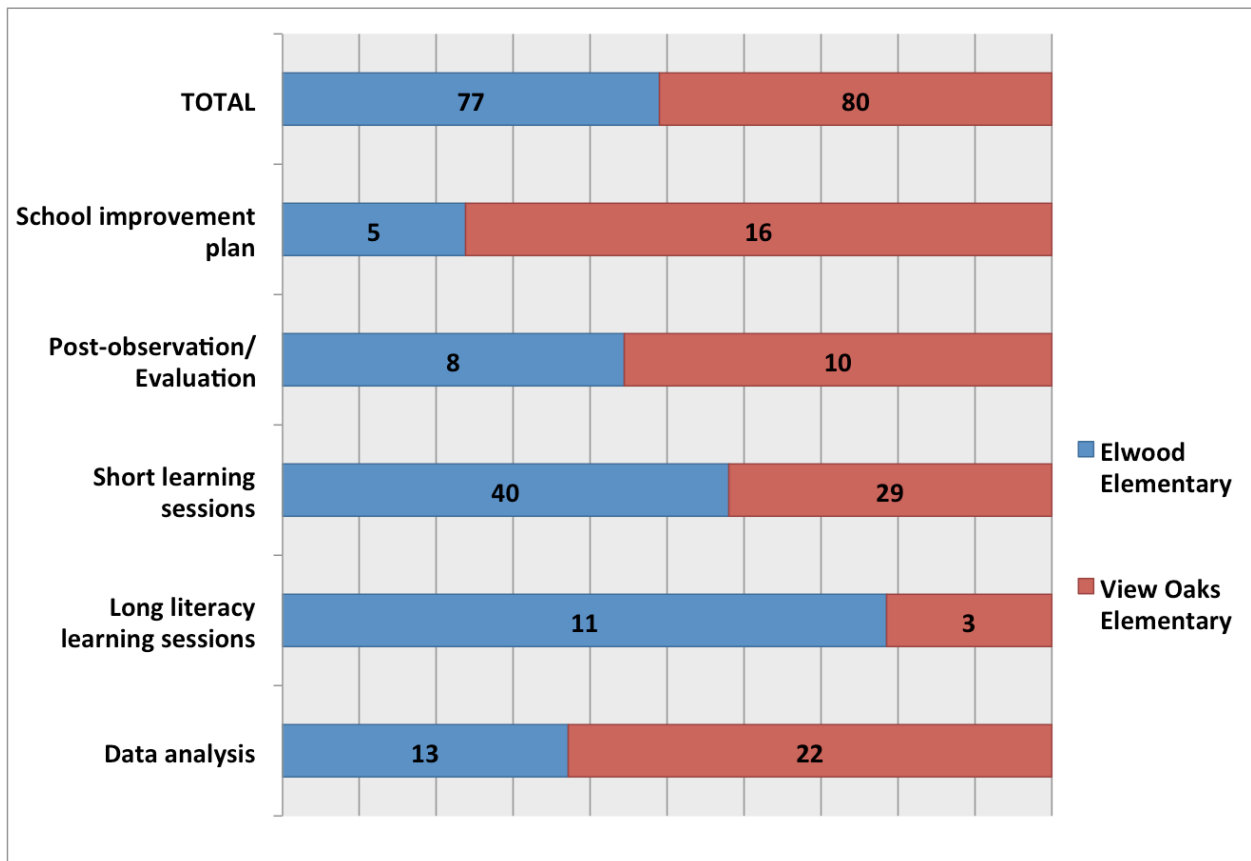


Figure 4.1. *Number of exchanges in both schools*

### Continuum of Principal-Teacher Interactions

Even though my study principals talked with teachers about their practice, this did not automatically mean that teachers had opportunities to learn new ways of teaching from those interactions. In Chapter 2, I explained that sociocultural learning theory considers interactions to

be settings for learning when activities allow for reflection or analysis of everyday practice so that teachers actively make meaning of their practice with others. Furthermore, sociocultural learning theory suggests that learning interactions occur when both principals *and* teachers contribute to meaning making.

Therefore, what exactly happened as principals interacted with teachers during these interactions? In my conceptual framework I suggested there were two outcomes, closed and open exchanges. In a closed interaction, participants do not discuss conflicting ideas and teachers' assumptions about teaching are not challenged. Also, principals may transmit information to teachers by giving them answers or corrections, instead of in engaging them in reflection or analysis on the conceptual or technical aspects of practice. In a closed pattern I hypothesized that principals would use more evaluation moves than elaboration moves and they would not solicit teachers' opinions, ideas or interpretations, especially in response to principals' contributions to the discussion. On the other hand, in an open interaction, participants would discuss and confront conflicting ideas, principals may challenge teachers' assumptions and beliefs and teachers may actively construct conceptual understandings of new ideas through reflection and analysis. Both the principals and the teachers would be active participants contributing ideas to the discussion. In my conceptual framework, I hypothesized that principals would use follow-up discourse moves that elaborate on teachers' ideas, specifically soliciting teachers' ideas and opinions.

However, most of the exchanges I observed did not fit either category of open or closed completely, but did fit certain parts of the categories depending on the configuration of discourse moves. The different configuration of moves allowed me to separate patterns according to these two dimensions: Whose idea was elaborated? The principals' idea, teachers' idea or both? And who did the elaborating? The principal, teachers or both parties?

As a result, I did not find only two types of interaction, but five types of interactions: three types of closed exchanges and two types of open exchanges. See Table 4.1 for the variation of these dimensions. In the Type 1 exchange, the exchange most closed to teachers' meaning making, the principal bypassed the teachers' ideas by evaluating the idea as incorrect and gave teachers the correct answer without further discussion. On the other end of the continuum in the Type 5 exchange, both the principal and teacher(s) elaborated on both parties' sets of ideas. The exchanges in between had some variation of these elements.

Table 4.1. *Description of Closed and Open Exchanges*

	Type 1: Closed	Type 2: Closed	Type 3: Closed	Type 4: Open	Type 5: Open
<i>Teachers' idea</i>	Principal shuts down teachers' idea	Principal elaborates on teachers' idea	Principal and teachers elaborate on teachers' idea	Teachers and principal elaborate on teachers' ideas	Principal and teachers elaborate on teachers' idea
<i>Principal's idea</i>	No elaboration of principals' idea	No elaboration of principals' idea	No elaboration of principal's idea		Principal and teacher elaborate on principal's idea

Overall, both principals demonstrated patterns that did not fall under either of one of the simple categories of open or closed. Most of the principals' patterns fell somewhere in between the two categories. The three patterns in the middle of the continuum (Type 2, Type 3 and Type 4) reflect 127 out of the 157 exchanges. Both principals rarely completely shut down teachers' ideas and transmitted their own (Type 1), but they did not engage teachers in active discussion of their ideas either (Type 5). The two patterns presented reflect only 30 of the 157 patterns. See Figure 4.2 for overall distribution of exchanges.

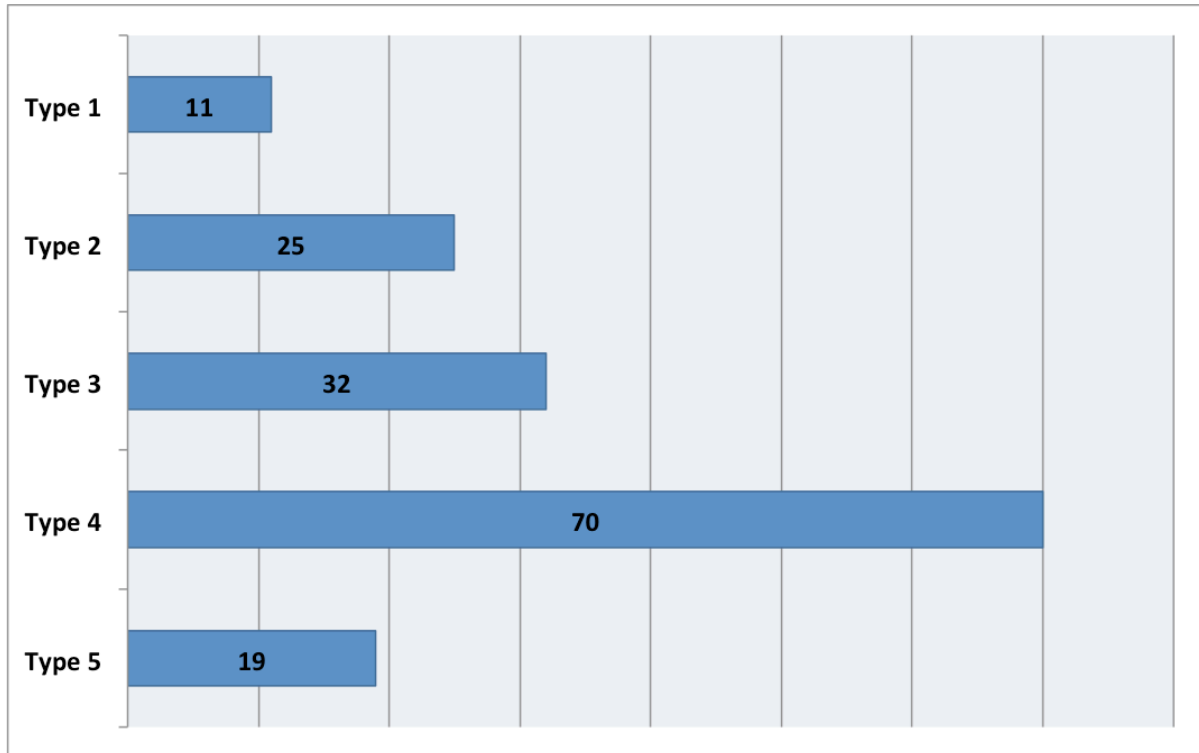


Figure 4.2. *Distribution of Closed and Open exchanges in both schools.*

### **Differences in Pattern Distribution Across Both Schools**

Even though I observed an overall balance between open and closed exchanges, this balance did not play out in both schools. I observed more open (54 exchanges) than closed exchanges (26 exchanges) in View Oaks Elementary and slightly more closed (42 exchanges) than open exchanges (35 exchanges) in Elwood Elementary. See Figure 4.3 for this comparison of the distribution of open and closed exchanges. Of the open exchanges in View Oaks Elementary, 75% were Type 4 and 25% were Type 5. In contrast, the principal of Elwood Elementary used all of the closed patterns to similar degrees.

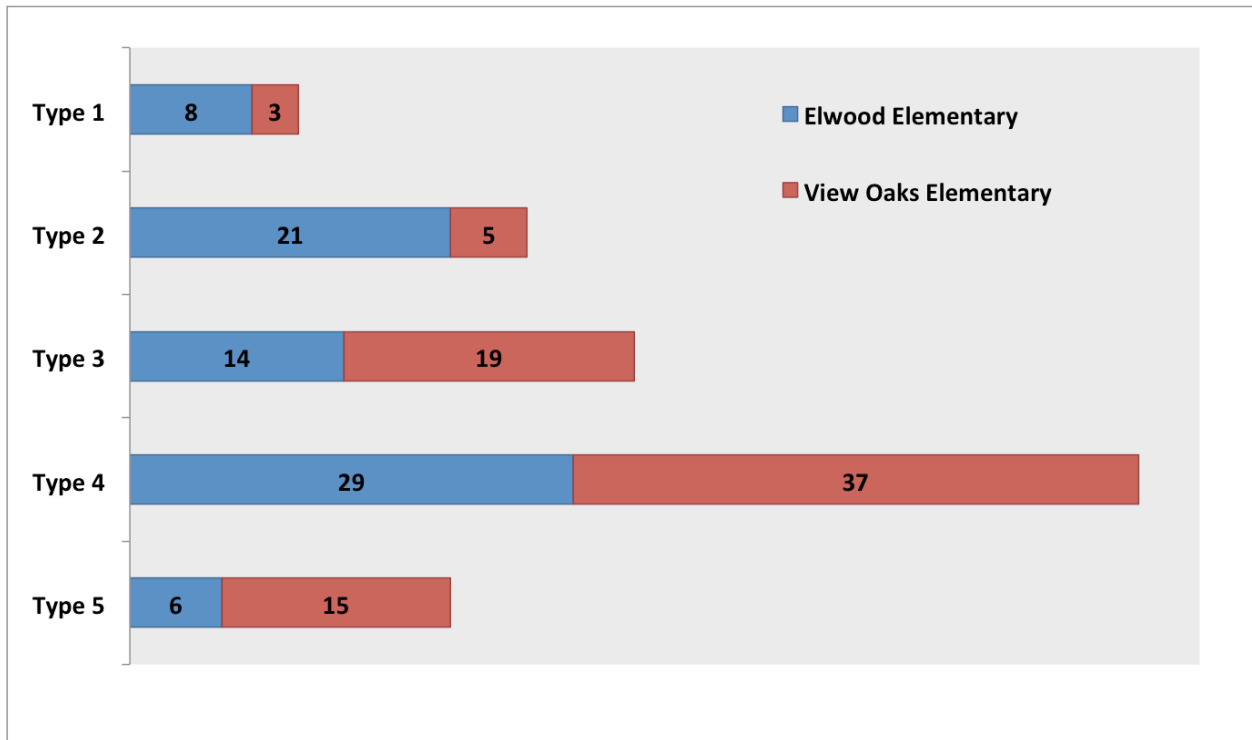


Figure 4.3. Number of exchanges in both schools

When examined from a perspective of using broad categories of open and closed, the principal of Elwood Elementary used more closed exchanges overall than the principal of View Oaks Elementary. See Figure 4.4 for this illustration.

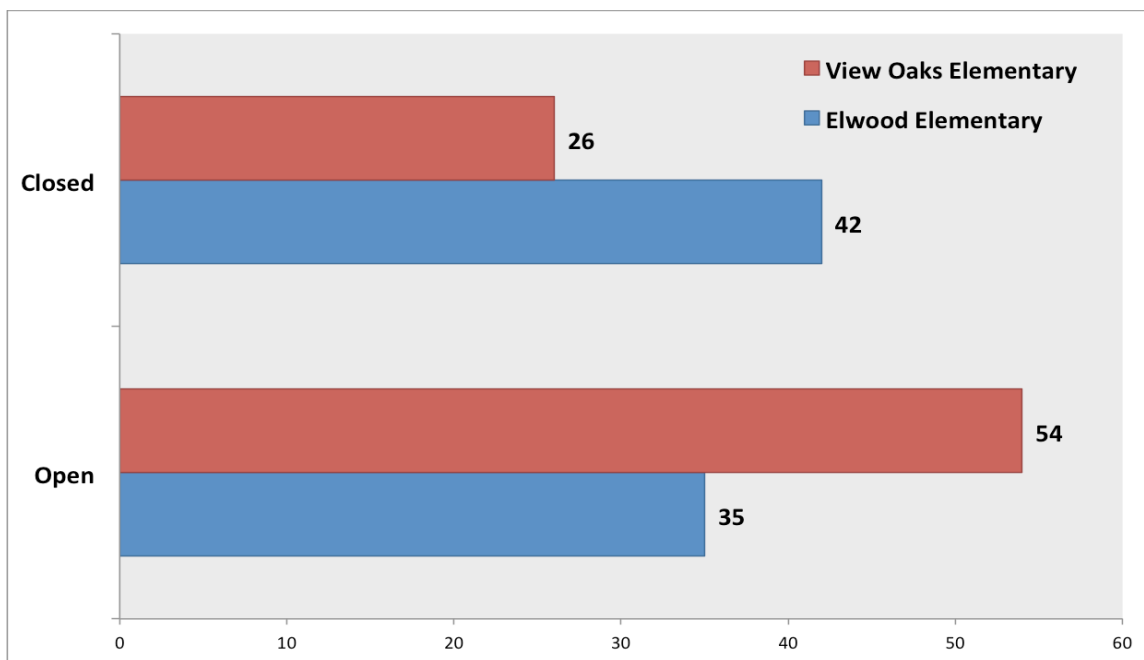


Figure 4.4. *Patterns of closed and open exchanges in both schools*

### **Chapter Summary**

In sum, I found that both principals explained their intentions to directly interact and support teacher learning and change through conversations. Observations of my study principals confirm principals' intentions to interact with teachers and talk with them about instruction. However, their interactions with teachers varied. Both principals' interactions varied on a continuum between the two types of interactions I described in my conceptual framework. In the next two chapters, I elaborate on these patterns in detail. In Chapter 5, I start by describing the interactions most reflective of the categories in my conceptual framework, Type 1 and Type 5. In Chapter 6, I describe the exchange patterns in between those two categories.

## **CHAPTER 5: PRINCIPALS' CLOSED AND OPEN EXCHANGES**

In this chapter, I continue to answer my first two research questions “When principals support teachers directly, how do they interact with teachers?” and “To what extent are their interactions aligned with teacher learning interactions?” by building on the last chapter’s macro-descriptions of the exchange types and by explaining in more detail principals’ interactions with teachers. I describe how the interactions unfold by detailing the different discourse moves principals made that opened up or closed down teachers’ ideas and, in the process, either enabled or limited opportunities for teachers to engage in meaning making about their practices or instructional ideas.

In the last chapter, I described principals’ intent to interact with teachers and subsequent opportunities to interact. Most of the interactions did not solely fall under the two categories of interactions described in my conceptual framework, but instead fell somewhere in between. In this chapter I explain the moves that principals made that resulted in closed and open exchanges. Furthermore, I observed a pattern between principals’ closing and opening moves and the types of responses teachers gave in the exchanges. Some of teachers’ responses focused on their pedagogy, but some focused on students or the resources or logistics related to teaching.

These findings add to and extend the current instructional leadership literature. First, these findings provide smaller analytical units to analyze the larger principal instructional leadership actions. By analyzing leadership practice in smaller units, I am able to elaborate on findings from other studies, which suggest principals vary in their interactions, with greater specificity and nuance that has not been done before. By analyzing the entire exchange instead of characterizing just the broad principal activities (i.e. feedback conversations or providing professional development) I was able to observe varied patterns of interactions between

principals and teachers and to describe how principals both closed down and opened up teachers' ideas in ways that aligned with the categories in my conceptual framework. These findings move beyond broader descriptions of principals' practice to uncover specific discourse moves principals made over the course of different interactions. They also suggest the importance of not only observing how principals implement activities more than solely quantifying time spent, but also aligning principal activity with existing research on teacher learning. In addition, these findings suggest that principals' patterns of discourse moves and overall outcomes of exchanges are also mediated to some extent by teachers' responses. Therefore, when analyzing and explaining the effects of principal practice, researchers should take into consideration how teachers participate in these interactions.

As described in my Chapter 3, I derived the findings for this chapter by first separating out transcripts into exchanges. Afterwards I coded each exchange using my interaction coding tree, starting with a few transcripts to create initial patterns and then refining and elaborating on these patterns as I coded the rest of the data. Using the coding tree, I refined and narrowed down the evaluation and elaboration moves I observed my study principals use. I also coded for uptake and how principals positioned their contributions. Once I found various patterns, I grouped them according to concepts in my conceptual framework.

### **Principals Closed and Open Discourse Patterns**

Even though both principals engaged teachers in discussions about their instructional practice, actual interactions between principals and teachers did not always unfold as substantive discussions about instructional ideas. Principals did not always open up teachers' ideas and engage in active discussions and construction of ideas.

In this chapter, I elaborate on the two exchange patterns I observed and I consider the archetypes of the categories in my conceptual framework. The open and closed exchanges elaborated on in this chapter do not make up the bulk of my data. I only categorized 11 closed exchanges and 21 open exchanges out of 157 exchanges. First, I explain the features of both exchange types, and then I elaborate on each pattern with detailed examples. Table 5.1 captures the features of open and closed exchange patterns.

Table 5.1. *Features of Open and Closed exchanges*

<b>Exchange type</b>	<b>Discourse moves</b>	<b>Uptake</b>	<b>Positioning of ideas</b>	<b>Categorization</b>
<b>Closed</b>	Counter Argument	Provides own idea	Non-negotiable	Bypassing
<b>Open</b>	Restate Counter argument Explanation (Ask) Opinion (Ask) Justification (Ask) Action (Give/Ask) Exemplify Confirm	Elaborates teachers' ideas Elaborates own ideas	Up for debate	Negotiation

### **Type 1: Closed Bypassing**

In the closed exchange, my study principals completely closed down teachers' ideas and did not provide extended opportunities for meaning making. I observed 11 exchanges of this type. Both principals bypassed teachers' ideas or concerns and did not elaborate on them at all, thus reflecting no uptake of teachers' ideas. In most instances, principals used an evaluation move that corrected teachers' ideas.

Principals often bypassed teachers' ideas by suggesting teachers' ideas were incorrect or not appropriate by using the counter argument evaluation move. In that move, principals

countered teachers' ideas by providing a justification for why teachers' ideas were incorrect or not appropriate for the discussion. Thus, the principals closed down teachers' ideas for further discussion. Following the counter argument move, the study principals moved on to another topic and did not solicit teachers' opinions about the principal's counter argument. The lack of solicitation also made the counter argument a closing move because the principals did not engage teachers in meaning making on their interpretations. I observed 8 closed exchanges in Elwood Elementary and 3 closed exchanges in View Oaks Elementary.

Furthermore, in 8 of the 11 exchanges, principals bypassed teachers' responses that centered on problems related to logistics/resources or students. For example, typical teacher responses included lack of time to engage in new instructional practices or students' inability engages in new ways of thinking that a new practice required. In three of the exchanges, principal's bypassed teachers' responses related to pedagogy. An example of teacher's response focused on pedagogy would be a statement regarding the conceptual purpose of conferring with students, or how when teachers teach students phonics as part of the balanced literacy curriculum. I name responses focused on students and logistics/resources as external facing and responses focused on pedagogy as internal facing.

I illustrate this exchange type below with the following example. This exchange was part of a larger professional development session delivered by the principal of Elwood Elementary, Mary, where she engaged teachers in a session about how to implement higher order thinking questions in their discussions with students. Preceding this next exchange, the teachers had read a component of the instructional framework used for teacher evaluation that details the types of higher level thinking questions "proficient" teachers have with students. After reading that section of the rubric, teachers discussed the component in small groups. Following the small

group discussions, the principal started the subsequent exchange.

The principal initiated the exchange, which is elaborated on in Table 5.2, by asking for teachers' thinking in Turn 1 by saying, "Anyone want to share their thinking out? A big ah-ha?" Teachers were not asked to merely recall what they read, but to offer insight or realizations they had about ideas on teaching higher level questioning, potentially ideas that the teachers had not thought of before or that contrasted to their own understanding. Thus, this question set up the discussion to be about teachers' understanding of their practice in ways that might deepen their knowledge. However, a teacher in Turn 2 responded that although she agrees with using higher order questions in the classroom, standardized tests ask the students to answer questions in a limited way, such that they are answering recall questions. I categorized the teacher's response as external facing, highlighting how materials, such as the standardized test, limit the development of students' thinking skills. In Turn 3, Principal Mary interrupts and cuts off the teacher and makes a counter argument move, explaining that the standardized test *does* ask students higher order thinking questions and that the teachers should be thinking about how they are building up all of students' thinking skills, which include knowing how to answer recall questions. Here, the principal explains why the teachers' thinking is incorrect and gives her own understanding of how teachers should be thinking about the relationship between standardized testing, teaching practice and student learning. The principal did not take up the teacher's thinking on the effects of standardized testing as part of the discussion regarding teachers' understanding about how to teach higher order thinking skills. Therefore, the principal's response reflected no uptake of the teacher's idea. Principal Mary bypassed the teachers' idea as irrelevant and did not include the idea as part of the conversation.

Table 5.2: *Type 1 exchange first example*

Turn	Text	Move	Uptake
1	MARY: Anyone want to share their thinking out? A big ah-ha?	Initiate	
2	TEACHER: The 3rd paragraph that's talking about how to get students to think in different ways and answering different types of questions and I'm okay with that. (But then what we ask them) to do in the MSP [standardized test] (she says something to the effect that questions on the standardized test asks students to answer a question regarding what's in the paragraph immediately above which is a recall type question). It's a limited thing-  ((The teacher keeps talking but the principal jumps in and starts responding to her statement.))	Response	
3	MARY: -Some of it is also analyzing two poems and reading a passage and (she gives another example of a question in the standardized test) there are higher-level thoughts. We're not teaching to the test and we're building up students' thinking skills. They can be thoughtful about analyzing their thoughts and that means having good recall [skills]. And they [students] should be able to answer those [recall questions].	COUNTER	None
4	TEACHER: I hope. ((She says this quietly and under her breath.))	Response	
5	MARY: We can't always live in evaluation. We have to start with recall and have to build the knowledge base. Some items [on the standardized test] live there and then move on. Look at the frameworks.	COUNTER	None

After the principal continued to counter in Turn 5, where she furthered her explanation for how she understood the range of skills students need, the exchange moved to another micro-topic. The principal closed off any opportunity for the teacher to discuss the principal's explanation. Since the principal did not provide opportunities for teachers to comment, this resulted in the principal telling teachers how to think about this issue. Thus, this exchange did not provide any opportunity for teachers to reconcile the implementation of higher-order questioning inside their classrooms with demands of the standardized test. Studies on teacher

learning suggest that change in action or beliefs may occur when teachers are able to grapple with the problems they encounter as they teach. Instead, the principal told the teacher the problem was not an issue.

Another closed exchange occurred later on in the same professional development session in Elwood Elementary. Teachers had finished reading an article explaining different types of higher order questions teachers could ask their students during discussions, such as asking students to evaluate ideas by asking “Do you agree or disagree?” Teachers had discussed these articles in small groups. The principal then engaged in a large group discussion about how teachers could implement these types of questions in their classrooms. The topic of the larger group discussion aligns with the description of active learning opportunities explained in my literature review.

At the beginning of the exchange presented in Table 5.3. The principal asked the teachers to share their suggestions regarding how they might incorporate higher order thinking questions in their literacy discussions. In Turn 2 one teacher responded that higher order questions may not be developmentally appropriate for students whom are still developing language. I categorized this response as external facing. The principal challenged the statement in Turn 3 with a counter argument, explaining that higher order questions *can* be developmentally appropriate and that even kindergarten students can synthesize and evaluate ideas. Similar to the previous example, the principal closed down the teacher’s ideas by evaluating the idea and also by not providing any opportunity for further discussion of the principal’s explanation since the exchange ended after the principals’ counter argument. Therefore, the principal transmitted the idea to the teacher and provided no opportunity for meaning making.

Table 5.3. *Type 1 exchange second example*

Turn	Text	Move	Uptake
1	MARY: Take one big ah-ha and one question if you had a question. Anyone want to share one big ah-ha?	Initiate	
2	TEACHER: Yes. Well, we're thinking that there is cognitive development continuum that parallels to the language acquisition level. For some levels [the questions] are not developmentally appropriate. So, you can ask up a level on the development continuum and the language continuum.	Response	
3	MARY: I do think we can get kindergartners evaluating and synthesizing things. So let's look for information on that.  ((The principal calls on another teacher who provides a comment, which starts the next microtopic.))	COUNTER	None

However, one exchange in this Type 1 category did not include a follow up move. In the only example of this type, the principal completely ignored a teacher's comment and moved on to another idea. I put this exchange in the closed category because the principal bypassed the teacher's idea and did not include it as part of the discussion. Prior to the example detailed in Table 5.4, the principal of View Oaks Elementary, Julia, asked teachers to share their appraisals of how the Response to Intervention (RTI) process supports the upper grade students and the appropriate next steps.<sup>3</sup> To design RTI supports, teachers use formative assessment data. In Turn 1 Principal Julia initiated a new exchange, explaining how students did better on the summative assessment than on the formative assessment. In this move she presented her confusion about different student achievement levels in these two different assessments and her wonderings about how they would perform in the next round of tests. In response to this confusion, a teacher started to provide a possible explanation for low student achievement levels by calling out

<sup>3</sup> Response to intervention is a system designed to provide learning supports to struggling students. During response to intervention, students are assigned to 'interventions' or learning supports designed for their area of need, and then constantly monitored to assess whether or not those supports meet those needs. Constant assessment, or progress monitoring, is the hallmark of the RTI system.

students' lack of motivation to engage in school work. In Turn 3, the principal interrupted the teacher's comment and provided a "next step" for supporting the upper grades' RTI process. The principal bypassed the teachers' response centered on students' ability or motivation and moved on with her own idea.

Table 5.4. *Type 1 exchange third example*

Turn	Text	Move	Uptake
1	JULIA: So, back to the data in (grade level), it looks like these kids when they were (primary) graders, their fall (summative assessment) is at 70% and then looking at (formative assessment) is 50%. So, I know that with (standardized assessment) you can't cheat it. You can't score better than you are. You can score worse! It's really hard to get a score that you're not deserving of. So I'm curious for the March (summative assessment), to see how that plays out. Because that's a big difference, 15% of our 60 kids. That's what 9 kids? That and 9 out of 2 classes is a pretty significant thing. So um...		
2	TEACHER: The biggest challenge, I mean these kids are capable, the biggest challenge is the motivation. They could care less about coming to school and doing the work. We are banging our heads against the board. I've never seen a kid so-		
3	JULIA: ((The principal cuts off the teacher)) - So what I wrote about where we are, I jotted some additional thinking about next steps. So the intervention blocks that we're doing 6th grade only. And using (formative assessment) to guide that. And then next steps for the intervention block, the RTI [response to intervention] team to help support the teachers and look at March (summative assessment) data further identify. And then next line is progress monitoring and we kind of already talked about that? For 6th grade. That if we have this bank and we do have a bank, just make them more accessible.	None	None

### **Type 5: Open Negotiation**

On the other end of the spectrum, both the principal and the teachers contributed their ideas to discussions in the Type 5 exchange. This exchange type featured moves that opened up teachers' ideas and also principals' ideas, even when principals' ideas conflicted or were unrelated to teachers' contributions. The study principals elaborated on teachers' ideas by

soliciting teachers' opinions and by providing examples or explanations connected to teachers' ideas. Furthermore, principals either explicitly asked teacher to share their thoughts in relation to principals' contributions or did not close down the discussion and move to another topic. I observed 6 exchanges in Elwood Elementary and 15 exchanges in View Oaks Elementary.

In contrast to the closed exchanges, most of teachers' responses in these open exchanges reflected responses focused on teaching practice, such as teachers' opinions about the purpose of assessments, how to develop better teaching objectives or the extent to which upper grade teachers include specific kinds of teaching points. Out of the 21 exchanges, 19 of them reflected these responses. In 2 exchanges the principal of View Oaks challenged teachers' responses reflecting the importance of resources.

In the first example, the principal of Elwood Elementary, Mary, and a teacher talk in detail about how to develop a high-quality instructional objective. This example is displayed in Table 5.5. Both the principal and teacher actively participated in this exchange. In Turn 1, Principal Mary solicited the teacher's opinion on further areas of improvement regarding setting instructional objectives for lessons. The teacher shared her potential future action in Turn 2. in Turn 2 and Turn 4, the teacher explained that she intended to state instructional objectives at the beginning of the lessons, but also sought to develop and explain objectives with specificity and a rationale that would resonate with students. I categorize these responses as internal facing responses because they represent the teacher's understanding of her practice. In Turn 5, the principal extended the discussion on the teacher's thoughts with high uptake by trying to give an example of the type of objective the teacher stated she wanted to develop. Halfway through the turn, the principal asked whether the example she gave was adequate and invited the teacher to confirm whether or not the explanation of the type of objective she might create was what the

teacher would use, “you [teacher] probably don't want to use the same-- but giving more specific about the skill than the big picture, ‘Well, you’ll be a better reader.’” Here the teacher took this response as an invitation and commented on the principal’s example of an objective by replying, “Right, that’s too vague.” Then, the teacher continued to build her own example of a high-quality instructional objective. While this exchange got cut short due to time, both the principal and teacher actively shared their ideas and elaborated on both sets of ideas without one person’s ideas dominating the exchange.

Table 5.5. *Type 5 exchange first example*

Turn	Text	Move	Uptake
1	MARY: So um, what are some notes we want to take around setting instructional outcomes?	Initiate	
2	TEACHER: Well, be mindful to state the objective. I mean I do post it. And I bet you 95% of the time I state it but I need to shoot for 100.	Response	
3	MARY: There you go. ((The principal is typing as the teacher talks.))	AGREE	Low
4	TEACHER: And I guess what I want to work on is the why. I would not say I’m 95% in the why. I would definitely say that is---there is room for them to understand. In fact I just found a thing, I’m going to look at it through this summer, a whole “Why are you doing this?” You know. And like I said I didn't have time to look at it thoroughly. But I thought, sometimes it is why, every lesson, I get the big picture of why you need to read well why you need to, but if you can be more specific, with this today-	Response	
5	MARY: Visualizing helps us see in the minds, because the reason why we do it because you visualize, you probably don't want to use the same-- but giving more specifics about the skill than the big picture, “Well, you’ll be a better reader”.	EXEMPLIFY Ask ACTION and EXPLANATION	High
6	TEACHER: Right. That’s too vague. That’s not specific enough. So I kind of would like to work on, being more specific why this particular lesson—because sometimes they do build on each other. And it is a bigger, for this unit even. But, I think kids do better when they think there is a genuine	Response	

	purpose versus “this is what I have to do because my teacher said.”		
7	MARY: Didn't you always hate that in High School, “Why are we learning this?” Because it’s math.	EXEMPLIFY	High
8	TEACHER: Cuz I said this is what I have to do.	Response	
9	MARY: Alright, lets pause here because it’s 10. Um I’ll finish up these notes and I’ll send it to you. You can add some notes to these if you wish and then we’ll call that good and sign these two pieces of paper and we’ll be done.		
11	TEACHER: Okay.		

In this next excerpt from View Oaks Elementary, Principal Julia and teachers debated the usefulness of a formative assessment and whether or not more teachers should use the assessment on a regular basis. The excerpt is presented in Tables 5.6 and 5.7. Similar to the previous example, both the principal and teachers shared their explanations back and forth. The principal asked for teachers’ ideas and also explicitly solicited teachers’ ideas in response to the principal’s contribution.

The principal started the exchange in Turn 1 by contributing her own interpretation about the regular use of a formative assessment called Fountas and Pinnell and by stating how she felt “it’s the single most informative assessment tool I [principal] ever used as a teacher.” However, she solicited teachers’ thoughts at the very end of that turn by stating, “So I need, what I need is to be prepared for any future system level conversations is to really know where we’re at.” Not only did she invite teachers’ ideas, she prefaced the conversation by saying that there was “no one right answer” to this topic, identifying that the outcome of the conversation was negotiable. Thus, she opened up the exchange for teachers to grapple with the issue of assessment and positioned her views as one of many possible answers to this issue. In Turns 2–27, teachers

shared their views; the principal did not add any information, but clarified, agreed with, restated and elaborated on teachers' ideas in Turns 7, 15, 19, 21, 23, 25 and 27 and re-initiated the discussion in Turn 9 by asking for other teachers to join the discussion. Subsequently, teachers shared their ideas, including that the assessment took significant time to complete, but had instructional value. Another teacher subsequently provided her interpretation of the usefulness of the assessment in Turn 10 and in Turns 19–22. After listening to this interpretation, Principal Julia used high uptake follow up moves in Turns 23, 25 and 27 and also highlighted and extended the teacher's thought process to demonstrate why the teacher found the assessment useful. In Turn 23, she also asked for confirmation on whether she appropriately characterized the teacher's thought process. Both the principal and teacher finish each other's thoughts in Turns 25–27, suggesting that indeed the principal was correct.

Table 5.6. *Type 5 exchange second example part 1*

Turn	Text	Follow up	Uptake
1	JULIA: Um, Fountas and Pinnell steps. Yeah. That's worthy of conversation. We're getting to a point of having these conversations system wide, where some principals are talking how often are you doing Fountas and Pinnell? Are you using Fountas and Pinnell? And am I not asking my teachers to be doing it and we're supposed to be doing? And I've been very attentive to that conversation and I have really strong feelings about that. I feel like so much power, in the Fountas and Pinnell. I feel like it's the single most informative assessment tool I ever used as a teacher. And it gets to a compliance thing? Because we have a window and we're supposed to do it and turn it in so (Data staff member) can make pretty graphs, that kind of thing, I fear that it will take all of the formative beauty away from it or at least cloud it? So that's where, that's the world according to (me). But from a system level we are getting to a point where it's getting to be a more common assessment piece. So I need, what I need is to be prepared for any future system level conversations is to really know where we're at that not that "I feel...as your principal" like there's one right answer but there's a strong rationale for where we at.	Give JUSTIFICATION	Ask Explanation
2	TEACHER 1: I have heard numerous times that people are so overwhelmed with everything else that it's on the back burner. I know with me it has. I was planning on next week to F&P again	Response	

	but I haven't touched it since fall.		
3	TEACHER 2: Yeah.	Response	
4	TEACHER 1: And I really like it. I like using it. I like the data.	Response	
5	TEACHER 3: You're going to hear that from everybody. We want to and we know the importance we're doing it because we understand the importance of it and don't because we have to.	Response	
6	TEACHER 1: Yeah.	Response	
7	PRINCIPAL: Good.	AGREE	Low
8	TEACHER 3: And it is a priority there.	Response	
9	JULIA: Uh huh. How about a (grade number) and (grade number) perspective.	RE-INITIATE	
10	TEACHER 2: It is like, it's my number one priority. It is what I do all the time. So, I also feel like I'm the only one. I know but I literally had the extra kit from the bookroom since October and no one has asked me for it. So I'm like, I'm just going to keep it.	Response	
11	TEACHER 3: Actually, (teacher name) the fiction one. She's come and asked for it.	Response	
12	TEACHER 2: But (teacher name) has the (grade number) grade kit.	Response	
13	TEACHER 3: She's going for the low ones.	Response	
14	TEACHER 2: She has a couple of low readers.	Response	
15	JULIA: You're the only intermediate one, right? That-Well that's not even-	CLARIFY	High
16	TEACHER 2: We might be sharing those kits. But um.		
17	TEACHER 1: I heard that a couple of times that teachers feeling so overwhelmed with everything else and that they're not feeling that secure with it? Like, they're still not as comfortable with it as say, just conferring with their students or fluency testing their students. Or, you know using those things that they've used for years.	Response	
18	TEACHER 2: So there are two things make it my number one priority. One, it's our assessment for our groups and that is what we base all our groups on. And number two, I was really sold on it when I did them all in October and did them all in January and they	Response	

all went up two levels. And I was like, this works!  
 ((The teachers and the principal start laughing.)) I believe!

19	JULIA: “It gave me the answers I wanted, therefore I will continue to use it.”	RESTATE	High
20	TEACHER 2: Yes. I was like, “wow, you couldn’t answer that to save your life in September but you can now!”	Response	
21	JULIA: That's huge.	AMPLIFY	High
22	TEACHER 2: That's when I was like, “I like this”.	Response	
23	JULIA: And it’s those two pieces that you said. Those two pieces go so well together. You are using it to guide the instruction and then it’s having that impact, showing that growth in instruction, right?	RESTATE CONFIRM	High
24	TEACHER 2: Yeah.	Response	
25	JULIA: If you just did it in October and you did it in January, so what if they went up two levels-	EXPLANATION	High
26	TEACHER 2: I would have been, like why?		
27	JULIA: You would not have been able to understand why.	RESTATE	High

The exchange continued as teachers discussed the usefulness of the assessment for over five turns of talk, which I omitted since it did not add any new content, but only elaborated on ideas already discussed. After five turns of talk, the principal interjected into the exchange with another high uptake move in Turn 28 by asking for confirmation of the ideas she heard and by asking explicitly for teachers to “push back” on her claim about the nature of teachers’ arguments both in support of and not in support of using the assessment that teachers consider to be a priority, but is too time consuming. A teacher responded to this request with her suggestion, and in Turn 30, the principal continued to build on both ideas, suggesting a future action that seemed to integrate the principal’s expressed view that the test was valuable with the teachers’

concerns about administration; this future action was to prioritize the administration of the test for some students, not all. I categorize this suggestion for a future action as a high uptake move because the principal repeated the teacher’s use of the word of “priority” from Turn 18 when she said, “I think it makes complete sense to prioritize,” in Turns 30 and 35 when the principal repeated the next steps the group decided by saying “higher priority of assessment”. In contrast, a low uptake suggestion for action would be completely unrelated to the teachers’ stated ideas.

Table 5.7. *Type 5 exchange second example part 2*

Turn	Text	Follow up	Uptake
28	JULIA: So I’m hearing, and push back on this because I might be clouding with my own piece but I’m hearing from around the table that it’s a priority to some degree, that we’re seeing it and saying that we should be using this at the very least, it’s not active resistance that this is not a useless tool ((Teacher 1: Absolutely)) Um, but there is a lot that is tied to that in terms of time, right? And it hasn’t been, and this is where I go back and forth because if I said “It’s January here’s the time you’re supposed to be doing Fountas and Pinnell” and that the upside of that it’s on everyone’s radars, right? But the downside it will turn into a compliance piece.	CONFIRM  EXPLANATION	High
29	TEACHER 3: If all of your strategic or all of your intensive kids down by “blank”. So piecemeal. That could be a priority that all try to meet? You know, and just push on that.	Response	
30	JULIA: Um, you know and I’m comfortable being really transparent with everybody. It’s because if what I’m hearing from hearing is representative and it is a priority then not saying, “thou shalt” and the time to? But just creating a space and awareness? For that on a regular basis and trying to scaffold the numbers and I wanted to hear what you’re saying. I think it makes complete sense to prioritize. And not every teacher is going to do every kid.	CONFIRM  Give ACTION JUSTIFICATION	High
31	TEACHER 3: It does go a little faster with those intensive kids. It’s not all thirty minutes.		
32	TEACHER 2: I’ll share the experience with me. I started out Fountas and Pinnelling at the level that they were. And then it was, “that was too easy”. And then I was like, I learned quickly, “okay, I need to start them 2 levels ahead and see how that goes”. And that ended up working really well. And I think Fountas and Pinnell needs to be a part of intervention conversation because I think it’s so-		

- 33 JULIA: Such a segue- but year.
- 34 TEACHER 2: Because I think that's working out really well for me right now.
- 35 JULIA: Um, ((She is writing " Use of F&P in interventions")) and then the other piece, "higher priority on the use of assessment with which kids, when". (((She types those notes on the board.)))      RESTATE      High
- 

In the last illustration of Type 5, I selected another example from View Oaks Elementary. A group of teachers and the principal were engaged in a discussion about deciding whether or not to purchase a similar professional development model that the school had bought for three grade levels during the current year for the coming school year. This excerpt is detailed in Tables 5.8 and 5.9. Though this started as a budget decision, the principal challenged the teachers' assumptions about instructional improvement and also provided opportunities for teachers to share their ideas about meaningful professional development. Furthermore, the principal provided opportunities for teachers to grapple with the principal's contrasting explanation of what she considered vital to teachers' instructional improvement. In both of the prior examples, principals and teachers contributed their ideas to arrive at a future action.

At the beginning of this exchange, Principal Julia explained the different options that teachers could have next year for professional development: (1) purchasing the same model that they did that year, which was that three grades would get intensive support from the literacy coach throughout the year; (2) purchasing a model where teachers would only get support on how to use Fountas & Pinnell assessment with their students, or (3) purchasing a studio model that the principal called "shorter bursts across six grade levels" in contrast to the current model---

yearlong support for only three grade levels. The discussion about the merits of the proposals, as well as other options, started with a teachers' assessment about the third option.

In Turns 1--16, the teachers provided in-depth explanations of why they found the professional development helpful, but not worth the investment. Teachers explained that working with the literacy coach during the intensive professional development felt like an evaluation and extra work rather than time focused on their own needs. They suggested to instead support students directly with the available funds, since the particular funds must be used to support struggling students. I propose these responses are external facing, focused on the importance of resources instead of teachers' instructional practice. In Turn 16, the principal probed teachers for further explanation regarding how teachers' work with literacy coach would not meet their needs by asking, "You feel like it's not that?" One teacher explained in detail what she found to be effective and ineffective about the intensive professional development. Two more teachers explained that the reason why working with the literacy coach was effective was because they had time to work with their grade-level teammates after the sessions.

The principal clarified teachers' statements in Turn 24 and confirmed their ideas in Turn 28 through the subsequent follow-up move,

And I think, what I just wanted to clarify is because I hear you say, that 'if we did that on our own' so when you say 'do that on our own' you mean, I think. I'm checking for this, like pairing people up and having time to observe each other, and we talked about it before, that class visit kind of model and time attached to that to talk and debrief and figure out next steps, right? Am I hearing that accurately?

Table 5.8. *Type 5 exchange third example part 1*

Turn	Text	Move	Uptake
1	TEACHER 1: Sometimes I look at the studio model for \$16,000 for whole school every body gets piece of it. And to be honest, those studio days are the days I feel like, I pick something up. I don't think the rest of it has been, it more feels like I have an evaluation going on all the time and it's not really, I'm not speaking a lone voice, I'm speaking a trifold voice? And, when I look at that and I start, and I don't know if you want to get into this right now but talking about it, the para time and I keep hearing echoed, you could see heads nod. If you look at the power, and you can ask first and second, but I believe that the para time has been critical. And what we say last year? We felt as much as we had all these different groups and RTI going on, we did not have a handle on those kids were in our own class. So pull them in, keep them in the fold and take that pulse. Get it going and this power in keeping them in with the paras is unequal with the resonating, "yes yes, that's what we need, that's what we want!"	Response	
2	JULIA: Mmm hmm.	AGREE	Low
3	TEACHER 2: I feel like the studio model and the structured support is really supporting teachers and I know that in turn it's going to support our students but we really do need someone working with our students and working to help, or doing something so we can see progress in our students. Um, I still think that we can do studio models but not necessarily something that we spend money on? But like, I don't know. Especially, you know, with the scores on DIBELS increasing and everything's just getting harder and harder, I think that we should spend money on the students and seeing something that's going to be directly working with students.	Response	
4	TEACHER 3: So are you talking like more para support then?	Response	
5	TEACHER 2: More para support simply because that's where-  ((Another teacher cuts of teacher 2 and asks the principal questions about the how the money can be distributed. He/she asks if the money could be used on other activities or configure the money differently.))	Response	
6	TEACHER 1: So we do have 2 <sup>nd</sup> 4 <sup>th</sup> and 6 <sup>th</sup> right here, maybe the question is how do we measure our success. [I think she means that they have a representative from each grade level that received the literacy professional development that year and possible can report out whether or not they felt that the model was successful for them.]	Response	

7	JULIA: That is the important piece.	AMPLIFY	High
8	TEACHER 3: I don't feel any more successful now than I did at the beginning of the year. To be honest, I really- um, we had a lot of disconnect at the middle of the year with things going on. So it kind of just stopped at one point and then picked up again. I mean, it's good to get the pointers I guess I get? And its more how I'm teaching than what the kids are learning. Does that make sense? All though I do like the feedback since I've never gotten that much, especially in college, to hear the feedback is good, but its not necessarily helping me figure out what it is the kids need. It's helping me become a better reading teacher I guess? But not necessarily	Response	
9	TEACHER 2: Helping the students	Response	
10	TEACHER 3: Helping the students. And so.	Response	
11	TEACHER 4: What (teacher 2) said earlier really resonates with me. And what you said earlier about evaluation, like I do feel it's one more thing I have to prepare for?	Response	
12	TEACHER 3: Right.	Response	
13	TEACHER 4: Instead of, like I oh great, she's [literacy coach] coming in to help me?	Response	
14	TEACHER 1: Yes. And we're working together on this and it's totally, setting a goal together on what it is, based on what we seen a need for.	Response	
15	TEACHER 4: Uh huh.	Response	
16	JULIA: You feel like it's not that?	Ask EXPLANAT ION	High
17	TEACHER 1: Not not, especially because there's not enough--it feels like a studio. Let me just say, with my idea of in the past of a studio. It's not like a structure of support even if yes, there have been, I honor and respect this person and whenever I see this person in action I always pick up an <b>important</b> thing that resonates and I can work with that. But, I don't know how, and I feel like I've had more time than anyone with her, just because of circumstances and my scheduled allowed it? And I- still feeling like we're just getting started and it's like the year is almost over and we have two	Response	

	more studio dates. I think it takes a long time to develop it? So is it justified for the amount of money that we spend. Is there a little more bang for our buck in assessment?		
18	TEACHER 4: To me the most valuable thing that we worked on was her sitting down with me and doing assessments together so I could go do something? And after we had so much support with assessments, what I need is time with my para to talk about what we're doing.	Response	
19	TEACHER 2: And with your grade level teammates.	Response	
20	TEACHER 4: Yea	Response	
21	TEACHER 2: I mean, I feel that even when I did the ELL studio that wasn't the structured support. Just that time. We're not necessarily paying for, are we are paying for (ELL coach)?	Response	
22	JULIA: Uh huh.	AGREE	Low
23	TEACHER 2: We are paying for (ELL coach). But then the most valuable time was when I could sit down with (teacher colleague) and say how is this helping our teaching and how is this helping our ELL students? And if we did our own studio models outside of-	Response	
24	JULIA: ((The principal jumps in))- Do you feel like that conversation would have been the same or different had you not had that experience of that experience, that studio experience?	CLARIFY	High
25	TEACHER 2: Well, I'm saying it did go well because of that experience-	Response	
26	JULIA: Okay, okay.	ACKNOWLEDGE	Low
27	TEACHER 1: The studio. Rather than longer term structured support and it's just a, finite, it's one focused grade. When we're looking at something that reaches everyone-	Response	
28	JULIA: And I think, what I just wanted to clarify is because I hear you say, that "if we did that on our own" so when you say 'do that on our own' you mean, I think. I'm checking for this, like pairing people up and having time to observe each other, and we talked about it before, that class visit kind of model and time attached to that to talk and debrief and figure out next steps, right? Am I hearing that accurately?	CONFIRM	High
29	TEACHER 2: Exactly.	Response	

After this response, the teachers went back to discussing how to allocate their resources and they suggested hiring paraprofessionals to work directly with the lowest performing students instead of spending the funds on a literacy coach. As stated in more detail in Table 5.9, the principal consequently challenged the teachers' position and put her own ideas up for discussion in Turn 30 by saying,

...just a couple of pieces because I have to hear my own voice, too. I hear what you're saying about wanting to put our supports directly with students. I think that one of the things we need to think about is, um, how we are building capacity- you know we're seeing a pretty significant trend here, right? And so, this trend, I don't have any reason to believe that it's going to change. And so if we're thinking about how build capacity to respond to more and more cuts?

The principal continued with this argument, elaborating on her justification, in Turn 32 by countering the teachers' claim, regarding benefits of the support model, with the suggestion that teachers *have* benefitted from increased knowledge of their students' needs in literacy. While she did not specifically ask teachers to comment on her argument, in Turn 35 she asked teachers to provide a proposal for professional development that she could present to the central office in her upcoming meeting. At the end of this discussion, in Turns 36—38, the teachers expressed their suggestion to purchase the studio professional development model so that every teacher would benefit from working with the literacy coach and also receive assistance on administering the Fountas and Pinnell assessment, to which the principal agreed.

Table 5.9. *Type 5 exchange third example part 2*

Turn	Text	Move	Uptake
30	JULIA: Yeah yeah, very. So again, there's all those reasons for it. So I wanna, just a couple of pieces because I have to hear my own voice, too. I hear what you're saying about wanting to put our supports directly with students. I think that one of the things we need to think about is, um, how we are building capacity- you know we're seeing a pretty significant trend here, right? And so, this trend, I don't have any reason to believe that it's going to change. And so if we're thinking about how build capacity to respond to more and more cuts? I think, while it's wonderful to be able to have people who we know and trust working directly with our kiddos that's not necessarily building our capacity to be able to do anything different when next year we get 5000 less, right? So I want to us to be thinking about that it's which is hard because that's kind of like multiyear planning it's emergency preparedness. Right? ((Teachers start laughing.)) And I, um, I also just want to like, encourage you all to be a little bit- like thinking about yourselves as professionals and- this sounds horrible- not just thinking about your kids. But you know, we're living in a district when we are as school is experiencing this [she refers to the budget paper] and where there are many other schools that have full time coaches and who have (names something I miss) who have this kind of support in place. And while I love working with each and every one of you, I know that there is no way I can match, for a lot of different reasons either skill set or time, that kind of support. So I don't want you guys to be selling your selves short and your need and um, your right to have some support happening. And I don't mean support because there's a need for something to be happening differently? But a need for support because your professionals and that's what you all-	ACKNOWLEDGE  COUNTER  JUSTIFICATION	High  Low
31	TEACHER 4: Professional growth. Yeah.  (They engage in a side discussion asking whether or not the principal will participate in the studio model.)	Response	
32	JULIA: Um. I hear the para piece and I agree with the para piece. I think it's a need and I think this year we figured and we mourned the loss of that certificated person? But I think it had some very positive consequences in terms being able to really know your kids and know what's happening with your kids and all the things that (teacher 1) mentioned. And we're seeing some successes with that and so I don't want to ignore that. Um, I think if there's a- if we said- if I was a voice for us and I went in and I said, here's where we're at, I need to have 7 hours of para time and I need to have that.	RESTATE  CLAIM + JUSTIFICATION	High  Low

33	TEACHER 1: Look at our success, you know, and “we want to build on it”.	Response	
34	JULIA: And, I need to have \$16,000 to do whatever we want to do.  [They continue to talk about the configuration of the para support and what it means for the distribution among all the teachers.]	Response	
35	JULIA: So I can say that. Like that’s not in the cards and I support that decision 110%. And then everything else if I can give a “where we might be leaning towards?”	Ask ACTION	High
36	TEACHER 1: It sounds kind of like the studio model?	Response	
37	TEACHER 2: The studio model.	Response	
38	TEACHER 3: Is that what I’m hearing?	Response	
39	TEACHER 1: Even if that studio model for one grade level that they’re screaming out with a need for assessment. Couldn’t that even match up so that one-tends to meet everybody’s needs.	Response	
40	JULIA: Totally.	AGREE	Low

My conceptual framework prompted me to notice open and closed exchanges and also helped me see examples like those listed above. However, these exchanges made up only 21 of the 157 exchanges I observed. What other types of exchanges did principals have with teachers? In the next chapter I describe the other patterns of interaction.

## **CHAPTER 6: VARIATIONS ON THE CLOSED AND OPEN EXCHANGES**

In this chapter, I continue to answer my first two research questions “When principals support teachers directly, how do they interact with teachers?” and “To what extent their interactions are aligned with teacher learning interactions?” by explaining how principals also engaged in exchange patterns that varied from my categories in my conceptual framework. I observed two more closed patterns and one more open pattern, and I explain these patterns and how principals opened up or closed down teachers’ opportunities to engage in meaning making about their practice. Principals’ patterns of closed and open responses in relationship to teachers’ responses follow the same pattern as the one in the last chapter.

These findings extend the findings explained in the last chapter about the variability of principals’ interactions with teachers and how teachers’ responses mediate principals’ moves in the interaction. Furthermore, they extend the literature on learning interactions by developing a continuum of interactions between transmission and co-construction. These findings emphasize that exchanges vary not only by participation, but also by whose idea gets taken up and discussed.

I start by briefly explaining the different variations of the categories of closed and open. Then I elaborate with detailed examples, starting with the two closed exchanges and ending with the open exchange.

### **Continuum of Exchanges**

As mentioned in the previous chapter, I observed and classified three more categories of exchange. I classified two additional closed exchange patterns and one additional open exchange pattern. Both of these patterns varied slightly from the prototypical categories of open and closed that I explained in my conceptual framework. First, I will briefly explain these exchange patterns and how they reflected aspects of the closed and open exchange categories. Afterwards, I

elaborate on these variations with detailed examples. Examples of each exchange pattern make up the bulk of this chapter.

As mentioned in Chapter 4, I place all of the exchanges on a continuum ranging from closed to open. The two categories explained in Chapter 5 are at opposite ends of the continuum. I place the other three patterns inside the continuum. See Table 6.1 for the different features of the five exchange types.

Table 6.1. *Variation of closed and open exchanges*

<b>Exchange type</b>	<b>Principals' Discourse moves</b>	<b>Principal's Uptake</b>	<b>Principal's Positioning of ideas</b>	<b>Open or Closed?</b>
<b>Type 1</b>	Counter Argument	Provides own idea	No solicitation of teacher's thoughts	Closed Bypassing
<b>Type 2</b>	Agree Action (Give) Explanation (Give) Justification (Give)	Provides own idea	No solicitation of teacher's ideas	Closed Answer Giving
<b>Type 3</b>	Exemplify Action (Give/Ask) Assessment (Give/Ask) Reformulate (Give)	Elaborates teachers' ideas Provides own idea	No solicitation of teacher's ideas	Closed Indirect Correction
<b>Type 4</b>	Exemplify Information (Ask) Explanation (Ask) Context (Give) Action (Give/Ask) Amplify Restate/Summarize	Elaborates teachers' ideas	Principal does not give idea	Open Elaboration
<b>Type 5</b>	Restate/Summarize Explanation (Give/Ask) Justification (Give/Ask) Action (Give/Ask)	Elaborates teachers' ideas Elaborates own ideas	Solicitation of teacher's ideas	Open Negotiation

I found two additional closed patterns and one additional open pattern, and I will briefly elaborate on each category. I labeled the two variations of the closed exchanges as Type 2 and Type 3. In the first variation of the closed exchange (Type 2), the study principals did uncover teachers' problems of practice or areas of confusion. But unlike the first pattern, no conflicts were present---the principals did not evaluate or correct teachers' ideas. The principals agreed with the issues teachers presented, but elaborated on the ideas themselves without engaging teachers' meaning making, therefore transmitting ideas to teachers. In the second variation (Type 3), the study principals solicited teachers' suggestions, opinions or explanations and provided examples to illustrate teachers' ideas, but then disagreed with teachers' ideas at the end of the exchange. Despite how the teachers would elaborate on their ideas, the principals still transmitted their ideas to teachers. In the variation of the open exchange (Type 4), principals did not actively share their own ideas, but elaborated on teachers' ideas by soliciting teachers' ideas, giving examples and highlighting how teachers' ideas were important. I suggest this reflects aspects of the open exchange because teachers were allowed to share their ideas and making meaning, but principals did not contribute their ideas. I elaborate on each pattern below.

### **Type 2: Closed Answer Giving**

In the second closed exchange pattern, the principals took up the teachers' concerns instead of bypassing them as they did in the Type 1 closed pattern. However, I classified this exchange as closed because the principals briefly elaborated on teachers' concerns or issues by giving the teachers the correct answer instead of soliciting their ideas or explanations. Even though teachers' concerns were taken up as the subject of discussion, the principals made meaning of the idea on their own without engaging teachers in meaning making. Therefore, principals still transmitted their own ideas to teachers. I observed 26 exchanges in this pattern.

This pattern typically started when teachers would identify problems or places of confusion. The teachers brought up these problems or areas of confusion when discussing conceptual foundations of new ideas or the implementation of practices. In 14 of 26 exchanges in this category, teachers' problems or issues related to insufficient resources or students' lack of understanding. However, in 12 of the 26 exchanges, teachers brought up specific areas of confusion related to teaching, such as the confusion between the purposes of different types of small groups teachers can use during literacy instruction. In this pattern, the principals agreed with these issues or problems but would follow up by giving a future action or interpretation accompanied with a justification for why the principal's suggestion was appropriate. These suggestions were related to teachers' problems but highlighted the principals' thinking of how to solve the problem, not the teachers' thinking. Thus, principals' moves demonstrated low uptake. After the suggestion, teachers often agreed with the principals' proposals.

In this pattern, the principals closed down opportunities for teachers' meaning making multiple times. First, the principals did not ask teachers to elaborate on their problems, concerns or confusion and instead jumped to providing a solution. Second, the principals did not solicit ideas from the teacher who presented the problem or from other teachers in the group. Third, the principals did not ask teachers whether the principals' solution was appropriate or not. Despite not requesting responses, teachers often agreed with the principals' solutions. Thus the principals' suggestions were positioned as the most appropriate solution. However, the principals also provided explanations or justifications for their suggestions. Therefore, while the principals transmitted their ideas, they did so with conceptual explanation.

I provide two examples from Elwood Elementary and one from View Oaks Elementary to illustrate this exchange type. In the first example displayed in Table 6.2, Mary, the principal

from Elwood Elementary, facilitated a discussion with teachers about implementing guided reading groups,<sup>4</sup> a literacy practice introduced to the teachers in the school a few years prior. In this specific discussion, the principal explained how to test for students' reading levels in order to put them in appropriate reading groups. As a discussion of testing practices occurred, a teacher initiated the next exchange, which was unrelated to the process of testing students, but it was about a problem he/she faced in the classroom when implementing guided reading groups. In Turn 1, the teacher explained his/her concern that he/she had to hold back students whom were reading past their grade levels because the advanced grade level books were not appropriate for them. This teacher's concern revolved around students not having appropriate books to read, a response centered on lack of resources. The principal automatically agreed with the teacher's concern in Turn 2. However, instead of probing deeper into the problem, the principal followed up by providing a solution and explanation that was tangentially related to the teacher's statement---keeping kids in a book at a lower reading level but working on their comprehension skills. This move had low uptake because while the principal continued the discussion about working in lower level books, the principal shared her thinking and did not elaborate on the teacher's thinking. The principal continued to elaborate on her contribution in Turns 4 and 6, providing additional justifications for why she suggested that students stay in lower reading level books to improve their comprehension skills. The exchange ended with the teacher nodding in agreement to the principal's suggestion, not with the principal asking for teachers to provide their own solutions or their ideas related to the principal's solutions.

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<sup>4</sup> Guided reading groups are teacher-lead small group reading instruction where students are grouped according to their reading levels and work on fluency and comprehension. Guided reading requires students to be in the same reading instructional level, different letters of the alphabet identify specific levels.

Table 6.2. *Type 2 exchange first example*

Turn	Text	Move	Uptake
1	TEACHER 1: Teaching at a lower grade, my concern is that I have a couple of kids at ‘O’ and ‘P’ right now. I’m holding them back because (something to the effect that the books at O and P are not appropriate for second graders). There are a ton of books that they are going to miss.  [Normally students who are at “O” and “P” reading levels are in the third grade, not in the second grade.]		
2	MARY: Yea, you want kids reading good literature. We don’t need to push kids through, we know students as readers and that they can be in an ‘N’ book a bit longer. I can read fluently (but in comprehension) I need more skills and so in guided reading I might be an ‘O’ (but something to the effect that the student may have other needs).	JUSTIFICATION ACTION EXPLANATION	Low
3	TEACHER 1: (She says “yea” and that some of books at the higher level are not interesting for students in lower grades.)	Response	
4	MARY: (Primary grade students) should read developmentally appropriate books. <i>To Kill a Mockingbird</i> is not developmentally appropriate (for primary grade students).	ACTION JUSTIFICATION	Low Low
5	TEACHER 2: (She says that there was a conversation in another arena about students reading <i>Catcher and the Rye</i> because it was at their reading level but the book was not developmentally appropriate.)		
6	MARY: Even if they understand the basics the student is not getting the deeper meaning (of the story). (She says something to the effect that teachers can work with students in a lower book to develop their comprehension skills even if their reading skills are higher.)	ACTION JUSTIFICATION	Low Low
7	((Teacher 1 nods as the principal is saying the above statement.))		

The action paired with explanation/justification moves were the only contribution the principal made in this exchange. By providing a future action, the principal closed down the opportunity to expand on the teacher’s problem and to facilitate the teacher’s possible ideas on how to deal with the issue. Furthermore, the principal did not solicit teachers’ opinions about the suggestion. In fact, the principal’s solution was the only one mentioned in the exchange. Thus,

the principal told the teacher what to do without allowing the teacher to come up with possible ways to think through the management of reading groups according to literacy needs.

This same pattern occurred in another exchange during the same professional development session about guided reading. Teachers were in small groups discussing with their colleagues how to implement guided reading groups in their classrooms. As the teachers discussed in small groups, the principal walked around, listened to and monitored teachers' discussions. As one group of teachers talked, the principal walked up and engaged teachers in the next exchange displayed in Table 6.3. One teacher presented an issue related to the logistics of managing multiple guided reading groups and explained how he/she did not have time to finish the book he/she was reading with students during the guided reading groups. Similar to the last exchange, this teacher's problem dealt with the logistics of managing the guided reading groups, rather than relating specifically to his/her pedagogy. In Turns 2 and 5, Principal Mary responded by giving a future action related to the concern; she suggested that the teacher did not "have to finish the book" with the students during the reading group, but that students should finish the book during independent reading time. The principal also provided a justification for her suggestion, explaining that in primary grades the literacy instruction is more important than having students finish the book. While the principal did not use any elaboration moves to solicit teachers' ideas, the teacher responded by agreeing with the principal's suggestions. By giving the teacher a way to deal with the logistical problem, I suggest that the principal closed down the opportunity for that teacher and the others in the group to talk more deeply about primary literacy teaching, managing guided reading groups and how to manage problems themselves.

Table 6.3. *Type 2 exchange second example*

Turn	Text	Move	Uptake
1	TEACHER 1: The time and you know it's hard to get to all those groups. (The teacher is talking about the logistics of meeting with all of her guided reading groups in the allotted literacy block. She says something to the effect that in her guided reading groups the students get "halfway throughout the book" and then she has to let the students go off and "finish" the book on their own.)		
2	MARY: I don't think it matters and I care more about literacy instruction and the book that (students do in a share aloud). You don't have to finish the book. You can teach to the skills and not finish the book. That's more important at primary grades, than the follow through. If you are teaching the skills or the strategy...(she says something to the effect that students do not need to finish the book.)	ACTION JUSTIFICATION	Low
3	TEACHER 1: Then that's okay. I'm not going to meet you one more time to finish (the book).	Response	
4	TEACHER 2: They should finish the book-	Response	
5	MARY: ((The principal cuts of the teacher.))-during independent reading time, not just finish it during the group.	ACTION	Low
6	TEACHER 1: That's good.  ((Exchange ends as the principal walks away.))	Response	

In the next example from View Oaks Elementary displayed in Table 6.4, Principal Julia and teachers discuss the trend in student achievement scores for their entire school to derive implications for their school improvement plan. In Turn 1, the principal initiated the exchange by asking teachers what they noticed in the data between the two years of student achievement scores. The teachers responded in Turns 2 and 3, explaining that all grade levels' achievement scores were decreased in literacy. In Turns 5 and 6, one teacher hypothesized that teachers' actions were the source of the declining scores, not the materials (i.e. problems with standardized

tests) or students (i.e. student ability). In Turn 7, the principal responded to the teacher’s statement by suggesting actions teachers could take school-wide to remedy that issue: teachers’ participation in intensive professional development as well as using data to target interventions for students across grade levels to address student achievement. The content of this move had low uptake since it related to teachers’ suggestions that teacher actions were to blame, but the principal displayed her thinking about what they should have done to remedy the problem. By using this move, the principal closed down further development of teachers’ ideas.

Table 6.4. *Type 2 exchange third example*

Turn	Text	Move	Uptake
1	JULIA: Uh huh. Are you noticing a difference between the 2 years in anyway?	INITIATE	
2	TEACHER 2: They’re going down. Everybody.	Response	
3	TEACHER 1: Yea. We were, 6th was at 51 to 55, 55 to, oh 55, 48 to 46 and 60 to 45 looking at the cohorts. And that’s in reading. So you can look at- I don't know—that one is alarming to me.	Response	
4	JULIA: Uh huh. I agree.	AGREE	Low
5	TEACHER 3: It has to be something that we’re all doing.	Response	
6	TEACHER 2: Across the board.	Response	
7	JULIA: Uh huh. So I think, what I made a very general statement here, but I think it’s an important one that based on (standardized assessment) data and we know later when we look at math and we celebrate some things, that specifically in intermediate based on this data, but literacy needs to be an area of continued focus. This is an area that we need to be thinking about and fine tune and work on. And that is certainly a big piece of the reason for leadership team’s recommendation to be thinking about [intensive professional development] in literacy across grade levels next year. That’s one key piece. We need to be thinking about using this data, especially when we get spring DIBELS in and already starting to think about what does it make sense for that targeted intervention time across grade levels. What need to be priority and how are we going to zoom in on that.	ACTION JUSTIFICATION	Low

### **Type 3: Closed Indirect Suggestions**

In the third closed exchange pattern, the study principals opened up teachers' ideas for discussion. However, I still classified this exchange as closed because at the end principals provided alternative actions or interpretations from their own perspectives, but they did not open up those ideas for discussion. Therefore, principals still transmitted their own ideas to teachers without engaging teachers in meaning making. This exchange type was almost equally distributed between both schools. I observed 14 exchanges in Elwood Elementary and 19 in View Oaks Elementary.

This exchange type typically started out with principals' requests for teachers to share their thoughts; these included teachers' assessments about student learning, a hypothesis for why students improved or rationale for teachers' future action. Principals followed up on teachers' responses by giving examples or asking teachers to further explain their ideas. Sometimes the study principals extensively elaborated on teachers' ideas using multiple elaboration moves. However, at the end principals gave their own interpretations of ideas or their suggestions for actions that were unrelated to teachers' responses. After these statements, the principals did not solicit teachers' responses to those suggestions or interpretations. Of the teachers' responses in this exchange pattern, 22 of them centered on resources/logistics or students whereas only 11 were centered on teachers' practice.

I illustrate this pattern in the example displayed in Tables 6.5 and 6.6. This exchange took place during an end of the year conference in Elwood Elementary. In the first section of this exchange, Principal Mary opened up teachers' ideas in various ways. In Turn 1, the principal requested for a teacher to share his/her thoughts about the next areas of focus for the teacher's reading literacy practice. The teacher responded by suggesting that he/she wanted to focus on

increasing guided reading. Principal Mary, continued to develop the teacher’s ideas in Turn 3 by saying that the teacher’s response of having students mimic reading was the strategy of modeling for students how to read. The teacher explained that he/she wanted to have students reading more text. The teacher’s responses focused on using materials with students and getting students to engage in more actions, both student-centered and material-centered responses, instead of focusing on teacher’s practice. The principal’s subsequent turns built on the teacher’s ideas in Turns 13 and 15. The principal provided examples using observation data to enhance the teacher’s explanation of wanting students to read chapter books. Then in Turn 17, the principal asked for clarification regarding the teacher’s prior statement about students reading with partners, “So partner reading in the sense that you are co-reading books together and having discussions about them. Like little mini book clubs, but just with two people.” The principal provided more details and explanations than the teacher did, making this statement a low uptake move. In that move, the principal provided her own interpretation about what partner reading looked like. However, by asking for clarification, the principal solicited whether her interpretation of partner reading aligned with the teacher’s interpretation. These moves opened up both the teacher’s and principal’s ideas for discussion.

Table 6.5. *Type 3 exchange first example part 1*

<b>Turn</b>	<b>Text</b>	<b>Move</b>	<b>Uptake</b>
1	MARY: What do you see as your next steps for reading?	INITIATE	
2	TEACHER: ((There is a pause for 12 seconds. The principal is typing.)) Well even though I did a lot of guided reading, I would like to do even more. But at some point, get to that point where the kids are really reading more than. I did that a couple of my highest groups twice, and they would more or less mimicking me, which is where you need to start-	Response	
	(Cross talk with the Principal that was missed.)		

<b>Turn</b>	<b>Text</b>	<b>Move</b>	<b>Uptake</b>
3	MARY: It's a model, yeah.	NAME	High
4	TEACHER: So go further with that. ((Pause for a couple of seconds.)) And I really like to teach them how to partner.	Response	
5	MARY: Mm, hm. So it used to be a big thing with-	EXPLANATION	
6	TEACHER: And I don't mean in the open court way. I don't mean that at all. If you're looking at the Daily 5 they're talking about being read to and reading- but more so that when they're--- it's more focused. They do to a lot of partner reading but it's more just grab a book that you like and look through it. Rather than being more specific with it and more intentional with-	Response	
7	MARY: Yeah, I haven't heard about partner reading since we're with Open Court.	EXPLANATION	High
8	TEACHER: I don't see Open Court the way they did it as actual partner reading.	Response	
9	MARY: It was just sitting and reading-	EXEMPLIFY	High
10	TEACHER: Sitting and reading to each other- that's not what I mean. Like right now, the challenge—what you came in and saw, our last unit is the idea to read longer. So I challenged everyone.  ((Principal Mary is typing as the teacher is talking.))	Response	
11	MARY: Yep.	AGREE	Low
12	TEACHER: We're all going to read chapter books right now.	Response	
13	MARY: Yep. And I'll tell you when I sat down and asked kids, that was one of the answers that three out of the four kids said. That, "well I'm supposed to be reading a harder book and we're getting into chapter book" and they couldn't quite say why-	EXEMPLIFY	High
14	((The teacher laughs.))		
15	MARY: But at least they have the foundation that they should be reading more.	JUSTIFICATION	High
16	TEACHER: Yea. Yea. Well good for them. That is our last unit. And -so some of their, some of them had deers in the headlights. They're like, "Am I supposed to do that". And I	Response	

Turn	Text	Move	Uptake
	challenged, since we have AR and you're have to take a test. So for the first time- you can read with someone for the <b>first</b> time. You choose the book you read together.		
17	MARY: So partner reading in the sense that you are co-reading books together and having discussions about them. ((She is typing.)) Like little mini book clubs but just with two people.	REFORMULATE CLARIFY  ACTION	Low
18	TEACHER: Mmm hmm.	Response	

As the discussion of the next steps continued, Principal Mary added more information to the exchange about the nature of the teacher's practice in Turns 19--22, but the ideas were unrelated to what the teacher shared earlier. I have omitted those four turns of talk, but I take up the exchange below in Table 6.6 starting with Turn 23. In Turn 23, the principal brought the discussion back to the teacher's next steps and shared her own interpretation of them. The principal explained that she believed that the teacher's next steps should be working on different components of balanced literacy and on how to fit read-aloud time into the literacy block. Her suggestions were focused on specific teacher learning and actions. However, the principal did not explain how this related to what the teacher shared about partner reading. Also, while guided reading was a part of balanced literacy practices, the teacher stated that he/she wanted to do more guided reading, not necessarily improve his/her understanding or practice related to balanced literacy. I argue that since the principal's ideas did not relate to what the teacher stated specifically about the next steps, the elaboration move had low uptake. Although in Turns 26 and 28 the teacher offered his/her personal opinion on why he/she liked some aspects of reading aloud to students, the teachers and principal did not collectively discuss why the principal's suggestion was appropriate for the teacher's next steps.

Table 6.6. *Type 3 exchange first example part two*

Turn	Text	Move	Uptake
23	MARY: All right, well. ((She pauses for four seconds.)) I think, I think your next steps are really the same things as everybody's. Getting the big idea of Balanced Literacy and what it looks like and you have a lot of great components in there and next year we'll be taking more of a backwards glance in to how the read aloud fits. [The teacher nods.] You know when we had open court we had read alouds outside of our reading block and we've never really thought about now that Open Court is gone where does read aloud fit? We have this mini lesson idea and read aloud is in there but it's not the read aloud that we used to do.	ACTION + RATIONALE	Low
24	TEACHER: Yea.	Response	
25	MARY: So getting back to that idea where does read aloud really fit in the big picture of everything and shared readings and all that kind of good stuff.	EXPLANATION	Low
26	TEACHER: I'm more of a fan of shared reading than read aloud.	Response	
27	MARY: Yea.	AGREE	Low
28	TEACHER: Than-- reading aloud to demonstrate my thinking, I enjoy.	Response	
29	MARY: That's what that is.	AGREE	Low
30	TEACHER: Than just sitting there and reading a loud to kids. I've never enjoyed that.	Response	
31	MARY: The research has shown that it's a waste of time.	JUSTIFICATION	Medium
32	TEACHER: ((Teacher laughs)). That's where the love of reading should come from.	Response	
33	MARY: It's more the interactive read aloud that you'll be hearing more about a lot.	EXPLANATION	Low
35	TEACHER: Okay. It sounds like a computer thing.	Response	
36	MARY: I also have heard it called interrupted read alouds-	INFORMATION	Low
37	TEACHER: Oh that's good too-	Response	

Turn	Text	Move	Uptake
38	MARY: It's the idea of modeling independent reading looks like and using all the skills.	INFORMATION	Low
38	TEACHER: (A little bit of cross talk.) I think that's a good description, although it sounds rude. But interactive or interrupted, those are good, okay, if that's what it is then I'm more excited than just reading to them [students]. It – they [students] just get so bored by that.	Response	
39	MARY: They're [students] not-they're not thinking about the text.	EXPLANATION	Medium
40	TEACHER: They're [students] just listening to me.	Response	
41	MARY: Or not.  ((The teacher starts laughing.))	EXPLANATION	High

Even though the principal asked the teacher to explain his/her ideas for the next steps in literacy practice, the principal's unrelated suggestion at the end of the exchange acted like an indirect correction. Perhaps the principal had those next steps for the teacher all along and would have provided them whether or not the teachers' ideas in the discussion related to the principal's thoughts. While both parties contributed to the discussion, ultimately the principal's suggestion did not get discussed. Therefore, the principal also determined the teacher's next steps without discussing with the teacher whether or not these next steps were appropriate.

A similar pattern occurred in View Oaks Elementary during an end of the year conversation. The discussion centered on a teacher's literacy practice and on areas to either improve or continue forward in the coming year. I have detailed the exchange in Table 6.7. While Principal Julia solicited the teacher's ideas and agreed with those ideas during the beginning of the exchange, the principal proposed different ideas about the teacher's areas of work at the end of the exchange. These ideas were unrelated to the teacher's ideas. Furthermore, the principal did not solicit the teacher's opinion about the principal's proposed areas of work.

In Turn 1, the principal solicited the teacher’s intended next steps in literacy instruction by asking, “So thinking about next year and thinking about next steps and thinking about the work that’s happened in this year. What are you excited about? What are you thinking about?” The teacher’s stated next steps in Turn 4 included planning additional lessons with her colleague with texts that would align with the district’s literacy frameworks. I suggest this response focused on the teacher’s use of materials, not necessarily on teacher’s practice, such as continuing to confer with students on an ongoing basis. In Turn 5, the principal asked the teacher for clarifying information. Then in Turns 7 and 16, the principal agreed with the teacher’s proposed next steps about developing more poetry lessons and grammar lessons. After the teacher elaborated on her ideas at length in Turns 15 and 17, the principal proposed other next steps in Turn 18. These next steps were different than what the teacher explained. The principal suggested that the teacher should craft appropriate mini lessons according to students’ learning needs. The principal interjected, “So the time and energy that you’re putting in in thinking about and crafting those mini lessons and what are those questions that I’m going to use with kids. Just at that at a granular level.”

Table 6.7. *Type 3 exchange second example*

Turn	Text	Move	Uptake
1	JULIA: So thinking about next year and thinking about next steps and thinking about the work that’s happened this year. What are you excited about? What are you thinking about?	Request ACTION	
2	TEACHER: Okay.	Response	
3	JULIA: What are you continuing on?	Request ACTION	
4	TEACHER: All of those quality texts that we have for the frameworks and now that I’m just getting this better feeling about the read aloud and mini lesson and revisiting them. I have used a couple of the books for many of those lessons but there are so many rich lessons that are just waiting to be unfolded. So (teacher colleague) and I have already planned a number of times that we’re going to sit with the	Response	

frameworks and we're going to plan some lessons right now together. In the sunshine, in the backyard. And all that. ((Julia flips the page and continues to write as the teacher is talking about next steps.)) But I think-

5	JULIA: With the specific texts. Is that what you're thinking?	CLARIFY	High
6	TEACHER: Yes, the ones that are the same. We all have the same.	Response	
7	JULIA: Okay, got it.	ACKNOWLEDGE	Low
8-14	(Brief exchange between the principal and teacher about the video resources that teachers have to use. The principal clears up the teacher's confusion about the different types of videos resources.)		
15	TEACHER: So next steps would be planning those lessons together. I'll tell you that I think there is richness in the poetry and I have some plays that I've copied and I see power in that maybe once a week, to try to fit that in? So I need to supersize one of those and make some posters because I'm noticing that the transition we do the little sing songing ((she starts snapping)) they live it they move it and they love that.	Response	
16	JULIA: Nice.	AGREE	Low
17	TEACHER: The other thing about the morning message that was never really in there I love the blending board but to be honest- at this part of the year the kids are getting 100 percent of their spelling. And (Phonics curriculum) has really helped that, I believe, that I'm putting grammar lessons in there that I think are important, too. And more of that. We're at word word word and instead of sound sound sound anyway. And those are different things to do there. So I'd like to see that in a scope and sequence more. Their little page just throws out an idea it doesn't have much so I want to put what we could go to for ourselves? This sheet is "oh look at that it's one week" or it's two weeks. Even quick grammar lessons on a yearly -	Response	
18	JULIA: Uh huh, Uh huh. Yea. Well I think one of the things that I've noticed this year and I've seen this year as a result of all of the efforts is that zooming in and narrowing in on what the essential pieces are for your kiddos. And again we are seeing the results of that, right? So the time and energy that you're putting in in thinking about and crafting those mini lessons and what are those questions that	ACKNOWLEDGE  ACTION	Low

	I'm going to use with kids. Just at that at a granular level.		
19	TEACHER: Yes, and changing it to "I can". You know that's one thing that has helped with the teaching point, too.	Response	
20	JULIA: Yes, yes and how do we keep everything moving in the same direction.	AGREE ACTION	Low
21	TEACHER: Without having it be a theme. ((They start laughing.)) Because (Literacy coach) doesn't like that.	Response	
	[The conversation then moves on to a different topic, what it means for teachers to have themes in their literacy lessons that is not related to content but related to the type of thinking work that students are doing.]		

Similar to the first example, the principal asked the teacher to explain his/her ideas for the next steps in literacy practice, but after the teacher's ideas were elaborated on, the principal's unrelated suggestion at the end of the exchange acted like an indirect correction to the teachers' response about planning more lessons. Again, the principal's ideas for the teacher's next steps may have been determined before the teacher provided his/her own ideas. During one interview after this particular interaction, Principal Julia explained her desire to have teachers focus on their practice, not the use of materials. I suggest that the principal's suggestion closed down any opportunity to co-construct the teacher's next steps together because the principal did not engage in a discussion with the teacher about crafting mini lessons. Even though the teacher responded to the principal's next steps, the teacher's response centered on the idea on teaching points, not discussing how perhaps mini lessons are a necessary focus for the teacher's practice.

In the last example, I highlight another pattern similar to the one above. This example took place during a discussion in View Oaks Elementary where Principal Julia and teacher assessed the impact of the actions outlined in their school improvement plan. The principal started the exchange, displayed in Table 6.8, by asking teachers to connect the increase in

literacy scores to actions in their school improvement plan. In the first turn, she referred back to a comment the teacher made earlier in the conversation about implementing an action in their school improvement plan with fidelity and then connected that action to literacy scores. In Turns 2 and 6, the teacher referred to the 30-minute intervention block, which the school redesigned that year, and the use of a phonics curriculum to serve as explanations for why scores increased.<sup>5</sup> The principal then agreed with the statements in Turns 3 and 5 with an “okay.” However, in Turn 7, the principal countered the teacher’s explanation by providing a different argument, “So thinking about what happened during your intervention block and how much that was a factor, and I’ll also push like thinking about that’s just a small part of all the work that’s been happening in literacy for you guys.” The teacher agreed with the principal’s rationale in Turn 8, but then asked whether the principal’s interpretation of the statement “work that’s been happening in literacy” was the same as his/her interpretation: “You mean that we spend so much time in each other’s room and talking about all of it.” The principal challenged this interpretation in Turn 11 by first restating the teacher’s explanation that the 30 minutes was an “important piece of” the success teachers realized in their classrooms, but then continued to elaborate on her previous counter argument about the importance of the 90-minute literacy block, suggesting that without the 90 minutes, the 30-minute intervention would not have made a difference. She also said, “And by itself, with everything else removed, I don’t think we would have seen that.”<sup>6</sup> Thus, in

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<sup>5</sup> In the prior year, the teachers would send students needing intensive support outside of the classroom to either work with the interventionist or a paraprofessional during the 30-minute intervention block. However, during the present school year, the staff that worked inside the classroom with the students and teachers had more control and knowledge of what was occurring during the intervention time. The school had seen gains in literacy that year, and in earlier discussions teachers had referenced the new intervention structure as a cause. However, some grade levels, including the teacher who was part of this exchange, participated in intensive literacy professional development for the entire year, which Julia references as some of the “work that’s happening in literacy this year.”

<sup>6</sup> In earlier meetings and conversations, the principal constantly reinforced that the 90-minute teaching block of literacy was as important, if not more so, than the 30-minute intervention time. She expressed that her goal for

both of the follow up moves in Turns 7 and 11, the principal agreed with the teacher’s reasoning and allowed for elaboration of the teacher’s idea, but then added another explanation for why the scores increased. The principal’s statements conflicted with the teacher’s explanations. While the principal asked for confirmation by asking “Right?” she did not engage teachers in meaning making about the importance of the 90-minute reading block vs. the 30-minute intervention time, thus closing down opportunities to elaborate on teachers’ ideas and the principal’s idea.

Table 6.8. *Type 3 exchange third example*

Turn	Text	Move	Uptake
1	JULIA: So based on action plan what can you connect that with? You mentioned doing something like fidelity. ((She says this directly to a teacher who mentioned earlier that the school is following their intervention plan with fidelity.))	INITIATE Request EXPLANATION	
2	TEACHER: Well, you know that thirty minutes! That’s where we need to converge today to find out.	Response	
3	JULIA: Okay.	AGREE	Low
4	TEACHER: Each of us, have. We don't always go to G drive to look at each other’s stuff. We talk about it and you know. But we made changes in January. [The G-drive is shared network space where teachers can access their data on their students receiving intervention.]	Response	
5	JULIA: Okay.	AGREE	Low
6	TEACHER: And I know something, I can just throw something out there. You and I both did [Phonics Curriculum], right? ((The teacher addresses this question to the other teacher in her team.)) And for me that was a big thing.	Response	
7	JULIA: So thinking about what happened during your intervention block and how much that was a factor, and I’ll also push like thinking about that's just a small part of all the work that’s been happening in literacy for you guys. Right?	RESTATE COUNTER ARGUMENT CONFIRMATION	Low

teachers that year was to think about the 90-minute literacy block and how their actions directly impacted students’ literacy skills.

Turn	Text	Move	Uptake
8	TEACHER: Oh yes.	Response	
9	JULIA: Oh yea, that other stuff! ((The principal laughs.))		
10	TEACHER: You mean that we spend so much time in each other's room and talking about all of it.	Response	
11	JULIA: And that other 90 minutes that you are teaching reading, everyday. Right? ((The principal is laughing.)) So pointing back to like, really, what was it. And I would venture to say that 30 minutes is one important piece of that? And by itself, with everything else removed, I don't think we would have seen that. I don't know? But. So thinking about that-	COUNTER ARGUMENT	Low
12	TEACHER: And having more control over all of that like we did this year.	Response	
13	JULIA: So DIBELS growth, and I'm going to put here "(grade level)" since that's what we looked at specifically. Although there are other grades that we can be saying the same things for. Um, indicates, it's a success. And we're going to be thinking about what it is specifically a factor of. ((The principal is typing as she is talking.))	RESTATE	Low

In these previous examples, which are typical of the other exchanges I classified in this category, I argue that even though the principals asked for teachers to share their thoughts about various aspects of their practice and elaborated on those ideas to some extent, the principals did not provide opportunities for teachers to grapple with the principals' contributions, which were unrelated or different than the ideas the teacher provided. In contrast to the earlier exchanges types explained in this chapter, in this exchange type teachers were able to share their thoughts on the issue at hand in multiple turns of talk. But the principals' proposals for actions or analyses were not discussed. In fact, the principals seemed to indirectly correct teachers' ideas since they were unrelated and therefore were not up for discussion.

#### **Type 4: Open Elaboration**

Although I observed both principals use a range of exchanges, both principals predominantly used this next exchange type. Similar to the open exchange explained in Chapter 5, principals elaborated on teachers' ideas. However, in this exchange, principals rarely added new information to the exchange. Most of their elaboration moves had high uptake, meaning they were directly tied to what the teacher said previously. When principals provided their own ideas, they provided contextual information or framed the ideas under discussion and not their individual interpretations or opinions. I observed 66 of these exchanges that I call open-elaboration: 29 of them in Elwood Elementary and 37 in View Oaks Elementary.

Furthermore, most of the principals' elaboration moves came after the teachers' responses that reflected teaching actions or conceptual ideas related to practice. In 64 of the 66 exchanges, teachers' responses focused on conceptual instructional ideas, not on how teachers used materials with students or on how students could not engage in the material. In the other two exchanges, teachers' talked about logistical concerns, such as time management.

Exchanges in this pattern did not always start with the principal or teacher initiating a discussion. On some occasions, principals used elaboration follow up moves as they facilitated or interjected themselves into teachers' conversations. In the next examples, I illustrate three different ways principals elaborated on or extended teachers' ideas in these exchanges.

In the first example, I illustrate how the principal of View Oaks Elementary elaborated on a teacher's idea as teachers analyzed data and the school improvement plan to make connections between both. This excerpt is displayed in Table 6.9. In this example, Principal Julia elaborated on the teacher's ideas by highlighting the teacher's thinking process through providing explanations and examples. The content of the principal's moves directly related to teacher's

ideas, having high uptake.

In Turn 1, the principal initiated the exchange with a request for a teacher's hypothesis on whether the data reflected effectiveness of their school improvement plan, and added, "So looking at our action plan in literacy and looking at the data that supports either yes it worked or no it didn't work. What did we notice?" A teacher responded in Turn 3, explaining how the different displays revealed different growth levels. The teacher suggested that the school-wide data did not show much growth, but that individual classroom data showed "growth in moving kids" from not meeting benchmark or "intensive" to meeting benchmark. The principal amplified the teacher's response as significant in Turn 6 by saying, "You're making at least two important points." The principal then went on to explain why she believed the teacher's thought was important---highlighting the fact that the teacher got two different impressions of whether or not students were growing based on two different pieces of data. The principal explained, "Each piece of data is part of the story. Right, you can't just look at one and make assumptions of what's working and is not." This move had high uptake because the principal's explanation originated with the teacher, not the principal. The principal continued to exemplify the teacher's point in Turns 8 and 10 by giving specific examples from the data. In Turn 8, the principal elaborated by saying, "On the DIBELS growth fall and winter this year you had 20 kids to start the year as intensive and you were able to move nine of them moved up by winter," and then restated the teacher's earlier point about the growth of students by claiming that students grew by "almost 50%" and that it was a "huge gain." Thus, the principal's elaborated on teachers' thinking, asking for the teacher to confirm the principal's thinking and extends the teacher's idea further.

Table 6.9. *Type 4 exchange first example*

Turn	Text	Move	Uptake
1	JULIA: So looking at our action plan in literacy and looking at the data that supports either yes it worked or no it didn't work. What did we notice?  ((There are a lot of low conversations happening right now at individual tables. A few seconds pass where people do not respond to the principal but are talking in low voices.)	INITIATE	
2	JULIA: So we have one table share. ((She calls on a couple of teachers to share their ideas.))	RE-INITIATE	
3	TEACHER: Well on this DIBELS growth from fall to winter. This particular page is the one we like to look at most because it shows our exact number of students that were intensive and the movement of that and we want to celebrate that growth in moving kids from intensive. But it was the 2nd page we looked at and it was a good thing because we first looked at the longer overview by cohort that gave us our target and we felt a little disheartened. We felt, "Oh my goodness, it didn't feel like that there was much happening". So, I guess, it's when you look at specifics, and there we are and we were ready to go and see, there we are, there's evidence that that happened. When we get under those layers- those big numbers that throw you off-	Response	
4	JULIA: Sure.	AGREE	Low
5	TEACHER: Then this points to directly to the importance of doing something with fidelity and having the evidence to show it.	Response	
6	JULIA: So you're making at least two important points, (Teacher name). Each piece of data is part of the story. Right, you can't just look at one and make assumptions of what's working and is not.	AMPLIFY EXPLAIN	High
7	TEACHER: Yes. We were sitting there having this feeling that it was a little doom and gloom but when it came into focus with looking at a more specific piece, it looked better.	Response	
8	JULIA: So you are looking at (grade level) this year, in particular, which is where I'm imagining your heads are. In the, on the DIBELS growth fall and winter this year you had 20 kids to start the year as intensive and you were able to move nine of them moved up by winter. So almost 50% and that compared to previous years is a huge gain. Right?	EXEMPLIFY  CLAIM	High
9	TEACHER: So, and understanding that we're looking at this with that tightened number, that bigger number.	Response	

10	JULIA: And this page is all the bigger number.	INFORM	High
11	TEACHER: So it's relative to that that we made gains?		
12	JULIA: Yea. And this is just winter, right? This is old stuff and we're in the middle of the spring.	INFORM	High

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However, not all exchanges were as long as the exchange above. Some exchanges were smaller where the principal only used in one or two moves. In fact, in all of the Type 4 exchanges in Elwood Elementary, Principal Mary only used one or two moves. In the exchange displayed in Table 6.10, Principal Mary initiated a discussion by asking teachers to propose specific areas to focus on for their intensive literacy professional development that teachers were starting in a few weeks. She asked, "What questions do you still have of what this model might look like for you guys?" Half the grade levels had already engaged in these sessions during the first half of the school year, and the rest of the grade levels would begin their sessions after the winter break. In Turn 2, one teacher asked whether he/she could focus on the practice of how to structure students' independent reading time. In the second turn, the principal built on the teacher's idea of independent reading by connecting this focus to a prior grade level's work. The principal used those examples to flesh out what that focus may look like for teachers during the professional development session. In Turn 3, the teacher agreed with the principal's example and provided additional thoughts on how to assess whether students' independent reading makes a difference to their achievement or not. In Turn 4, the principal added to the teacher's idea about assessing the value of independent reading by repeating the teacher's concern as well as elaborating on the idea with an example from a prior grade level's work.

Table. 6.10. *Type 4 exchange second example*

Turn	Text	Follow up	Uptake
1	TEACHER: (She says something to the effect that she was talking about the topic she is about to propose in the discussion with other teachers prior.) Is there anything such as independent reading in terms of sitting and reading independently...versus independent practice and (something about reading text attached to the frameworks.) We just keep running up against the minutes of- is that something that we can work on or talk about?	Initiate	
2	MARY: ((While Teacher is asking the last question, the principal says “yea” a couple of times. After the teacher stops talking the principal responds.)) Yes, that’s definitely something...[The teachers continues to talk and I don’t get exactly what the cross talk is.] That was a big aha for the 5th grade having that identification of what does it mean to independently read anymore? We have groups, we have conferring, we are asking kids to work on a specific skill that we taught that day, when do they read and practice all these skills? So in the last third grade session we talked about what does it look like for independent reading to be independent reading and how do we keep kids thinking about all the reading work and not just the one skill I taught today. So we have had some great conversations about that and have some structures in place.	AGREE  EXEMPLIFY	High
3	TEACHER: That would be helpful. And then how do assess whether the reading is actually a good use of their time. If they're not progressing then why are you doing it?	Response	
4	MARY And why are we doing? That’s the conversation they’re having right now- the independent reading and how do we assess that and the guided reading groups too. Okay. Keep thinking of those questions.  [The principal moves on to the next task.]	RESTATE EXEMPLIFY	High

In the last example of this type, I provide an even smaller exchange, displayed in Table 6.11. In this exchange, Principal Julia in View Oaks Elementary asked the teacher to elaborate on her ideas during discussion about a new instructional framework to be implemented by the district as part of the teacher evaluation system for the upcoming year. The teachers and principal were in small groups, reading and learning about the various components defining high quality

teaching. In order to learn about the different rating levels (unsatisfactory, basic, proficient and distinguished) in small groups, the teachers and principal had to come up with evidence of classroom practice that would demonstrate each rating level. After the teacher shared various suggestions for evidence of managing classroom behaviors, the principal, in Turn 2, asked the teacher to elaborate on what the teacher meant if teachers saw students’ “strong self-monitoring” of work stations in the classroom. In response, the teacher elaborated on the idea, explaining various ways that they might observe for students self-monitoring of behavior in the classroom. Thus, the principal opened up teachers’ ideas by probing for deeper explanation.

Table 6.11. *Type 4 exchange third e*

<b>Turn</b>	<b>Text</b>	<b>Move</b>	<b>Uptake</b>
1	TEACHER: We started out looking at this is teacher (something about student leading the culture.) ((She is referring to Domain 2 component C which is Managing Classroom Behaviors.)) I don't want to say that for each one- that's inferred that it was teacher saying. This was hard for us for some examples giving for proficient. Our scenario moving to group active- small or different groups. We said manage class procedures- kids wander if unsatisfactory. Students are not in right location and it's pretty chaotic. At basic level, kids get to the correct place but also chit chat. Most kids might be there but not know what to do. Moving from most to most to proficient where not even say one or most. Student's know their task and then distinguished is a whole feeling or culture or responsibility to have a efficient work and kids are internalized. Work station runs smoothly and strong self monitoring.	Response	
2	JULIA: What would you see for students to have the strong self monitoring?	Ask EXPLANATION	High
3	TEACHER: (The teacher says that students know where to get the materials and the location where they are supposed to work. The teacher says that students can figure out what to do even if they have problems and that they are able to “accommodate no matter the environment”. The teacher says that students can remind each other.) So the kids are redirecting each other without cues. But we said in proficient we would see some of that and have it going but not overall feel for everybody. It's kind of tricky.	Response	

In this chapter and the previous one, I answered my first two research questions by describing the five different patterns of talk between principals and teachers as they discussed instructional issues and by describing the extent to which principals' patterns opened up or closed down opportunities for teachers to discuss those ideas. The principals' interactions with teachers varied across a continuum between two different types of interactions, interactions where principals did not allow teachers' meaning making of ideas to actively participating with teachers to construct understanding. I suggested that teachers' responses mediated principals' responses to some extent. The responses focused on students or materials met closed moves more often than the responses focused on instructional ideas or teachers' specific teaching actions did.

While both principals used all five patterns to some extent, I highlighted in Chapter 4 that the principals used some exchange types more than others. Moreover, I observed more closed patterns in Elwood Elementary than I observed in View Oaks Elementary. Why? Based on the principals' intentions to interact with teachers to support their learning, I hypothesized that I would have observed mostly open exchanges. In Chapter 7, I provide a couple of explanations. I suggest that the differences between the conditions in both schools may explain why principals may have privileged more open or closed patterns.

## **CHAPTER 7: EXPLAINING DIFFERENCES BETWEEN BOTH SCHOOLS' OVERALL PATTERNS**

In the last two chapters, I explained the various types of exchanges I observed between principals and teachers. These patterns included different moves used in their interactions where principals either opened up or closed opportunities for teachers to make meaning of either the principal or teachers' ideas.

In this chapter, I answer my third research question, "What conditions, if any, shape how principals interact with teachers?" by describing the similar and different conditions in both schools to explain why principals did not always open up teachers' ideas despite their intentions to interact with teachers to support their learning and change. I do this by offering two explanations. Principals' patterns of closed exchanges were not completely random. Both principals were more likely to close down teachers' responses when responses focused on students and resources and were less likely to when they focused on pedagogy. One explanation for the presence of more closed exchanges in Elwood Elementary than in View Oaks Elementary can be explained by the larger number of teacher responses in that category.

However, why did principals close down those responses at all? I explain that different resources and expectations for instructional improvement may have created different conditions that either helped or hindered principals' participation in teachers' instructional improvement in both schools. Through my analysis, I suggest that in Elwood Elementary accountability pressures may have created conditions where teachers had to learn and demonstrate change quickly and where the principal could exert control over the change processes. Since these pressures were tied to sanctions, the urgency may have limited the amount of time the principal gave to teachers to grapple with ideas, and it also gave the principal authority to shut down ideas more often.

These conditions made closed exchanges more appropriate. View Oaks Elementary, in contrast, did not have those pressures, which may explain why there were more open exchanges. However, the lack of accountability pressures paved the way for the school's conditions to be shaped by multiple expectations from different sources. In particular, normative pressures related to appropriate principal authority over teachers' change processes created conditions that made it appropriate for teachers to be in control of the change processes, as opposed to the principal. Therefore, it is possible that when the principal faced conflicting ideas from her teachers, instead of confronting these ideas head-on, these conditions resulted in making certain types of closed exchanges more appropriate. This may explain why I observed exchanges where the principals indirectly corrected teachers' ideas. This explains to some extent why the principal in View Oaks Elementary used the closed exchange in the middle of the continuum, while also using open exchanges.

These findings extend the literature on instructional leadership in a few ways. First, the literature on learning suggests that whether or not actors have time for social interaction can matter to the types of interactions people have as well as the learning outcomes of the interactions. However, I suggest that time for learning specific content as well as time to demonstrate learning or change may also matter to the types of interactions principals have with teachers. When principals do not have much time for teachers to pick up specific ideas and to demonstrate how they have implemented those practices, the principals may privilege closed interactions. Second, these findings suggest that despite principals' overall intentions to interact with teachers to support their learning, knowledge and skill about instruction, conditions in school may be incompatible with learning interactions.

To derive the first set of findings for this chapter, I coded each exchange for the type of teacher response, counted up the number of exchanges in each category and then separated them out by exchange type and school. Then to explain conditions in schools, I coded my interview and observation data for instances when principals attributed a rationale to their actions. I derived explanations of these relationships and triangulated these explanations using documents to substantiate claims of how policies or other expectations mattered to instructional improvement. Then I created explanatory matrices displaying the patterns of closed or open interaction at each school and whether the resources and expectations in each school aligned with the norms in each pattern. I do not attempt to suggest that these expectations or resources caused principals to act in certain ways, but that the patterns in my data match up with the relationships between context and action explained in my conceptual framework.

I start this chapter by explaining how teacher responses may have mediated principals' closed exchanges. I follow this explanation by focusing on the different conditions in both schools. Even though resources and expectations from the central office could have created similar conditions in both schools, the presence of accountability policies in one school but not the other created varying conditions.

### **Closing Exchanges Mediated by Teachers' Responses**

As explained in the previous chapters, I characterized teachers' responses in both open and closed exchanges. In closed exchanges, teachers' responses often focused on students and materials or logistics, not teacher's practice. In 33 of the 59 closed exchanges, teachers' responses referred to students or materials/logistics. See Figure 7.1 for the relationship between teachers' responses and the exchange type. Principals responded to those types of responses by flipping the argument or statement to reflect a focus on pedagogy. Principals told teachers about

actions that teachers could take within their practices to remedy the problems with students or materials instead of fixating on the problems themselves or deflecting them as inconsequential. Furthermore, teachers rarely challenged principals' interpretations or ideas in these exchanges.

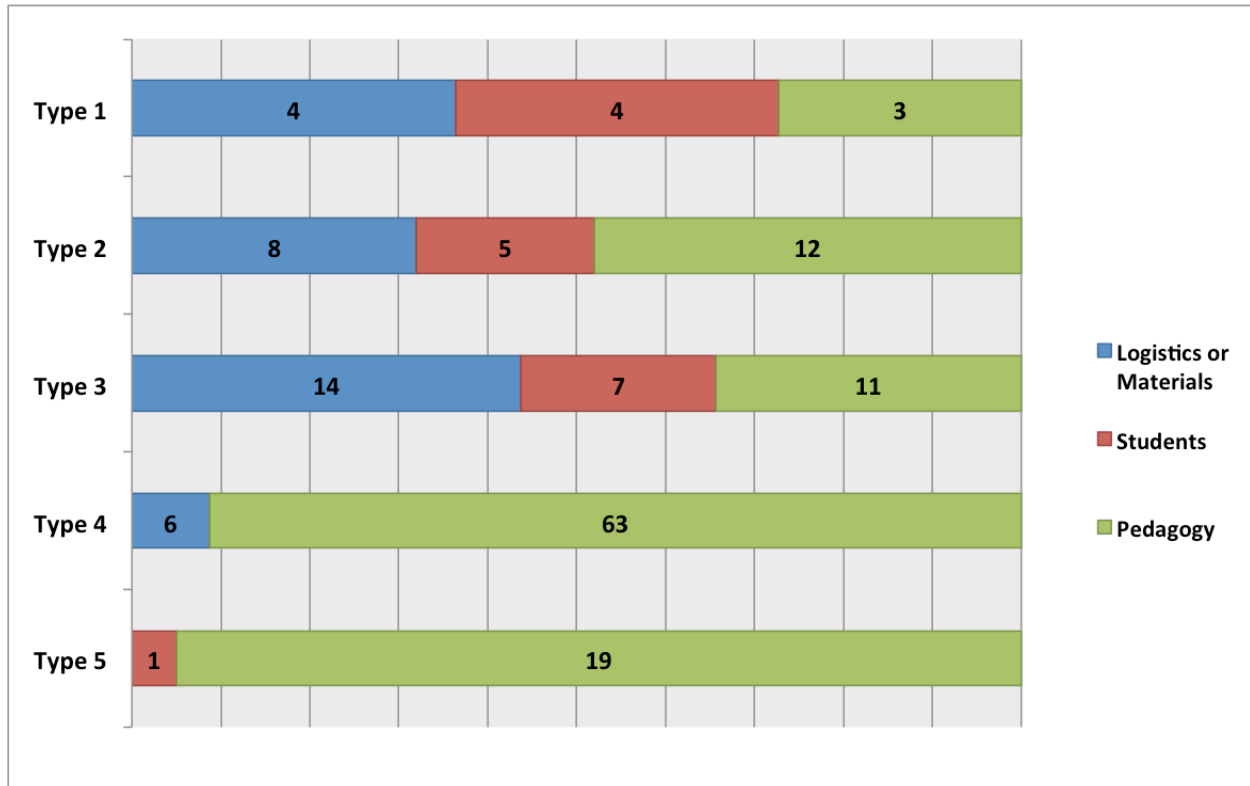


Figure 7.1. *Teachers' responses and exchange type*

In contrast, teachers' responses in most of the open exchanges (from 82 of the 89 open exchanges) focused on pedagogy, either the conceptual ideas related to new instructional practices or the explanations of how teachers taught. Principals typically responded to those types of responses with opening moves, such as elaborating on teachers' ideas. These findings suggest that principals' patterns of discourse moves and distribution of closed and open exchanges are somewhat related to how teachers respond as they discuss instructional issues with principals.

This relationship also remained when I examined the patterns of responses and the closed patterns within each school. In Elwood Elementary, 27 of the 42 closed exchanges contained responses focused on use of logistics/materials or on students' lack of ability or understanding. In View Oaks Elementary, 15 of the 26 closed exchanges contained these types of teacher responses. These exchanges reflect that both principals mostly elaborated on teachers' ideas when teachers' responses focused on their own practices, and that they rarely challenged or negotiated teachers' responses in these discussions referring to students' ability or centered on the use of resources or lack thereof. Those responses were typically closed down. Furthermore, these figures also reveal that I observed slightly more external facing responses in Elwood Elementary than in View Oaks Elementary. See Figures 7.2 and 7.3 for a comparison.

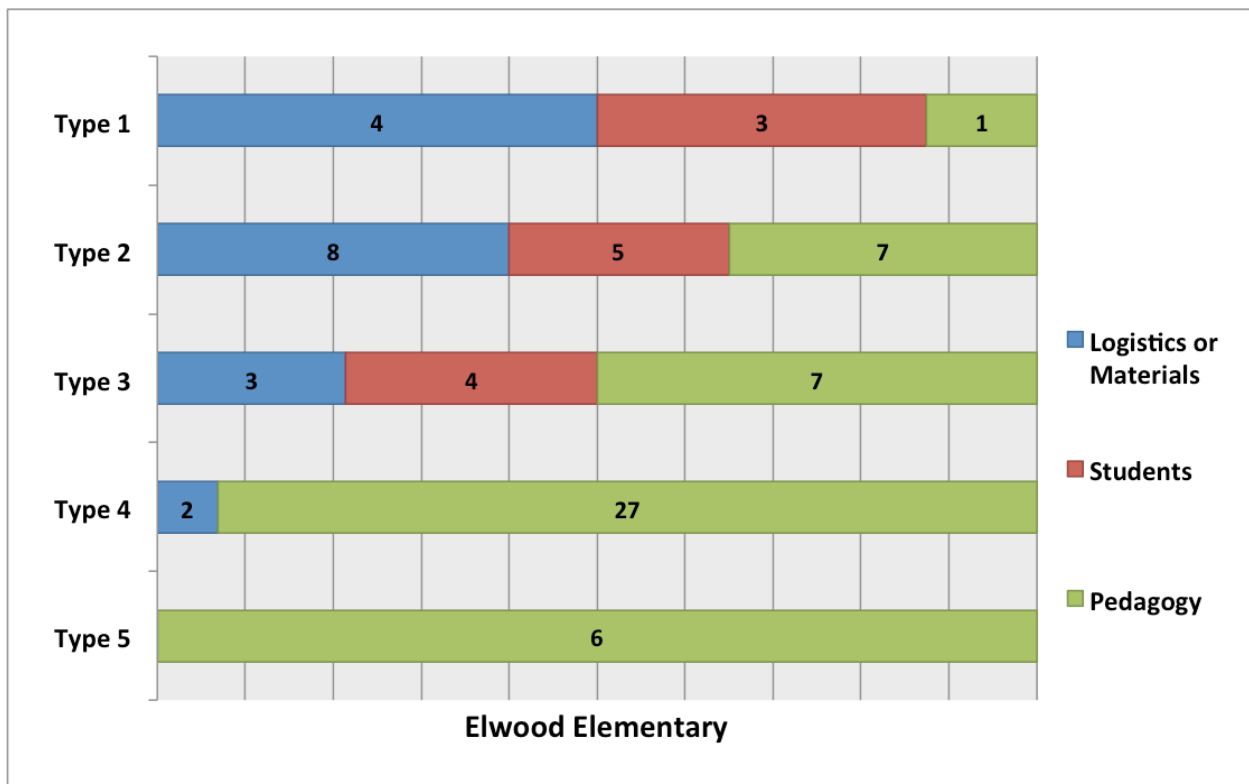


Figure 7.2. Nature of teachers' responses in Elwood Elementary

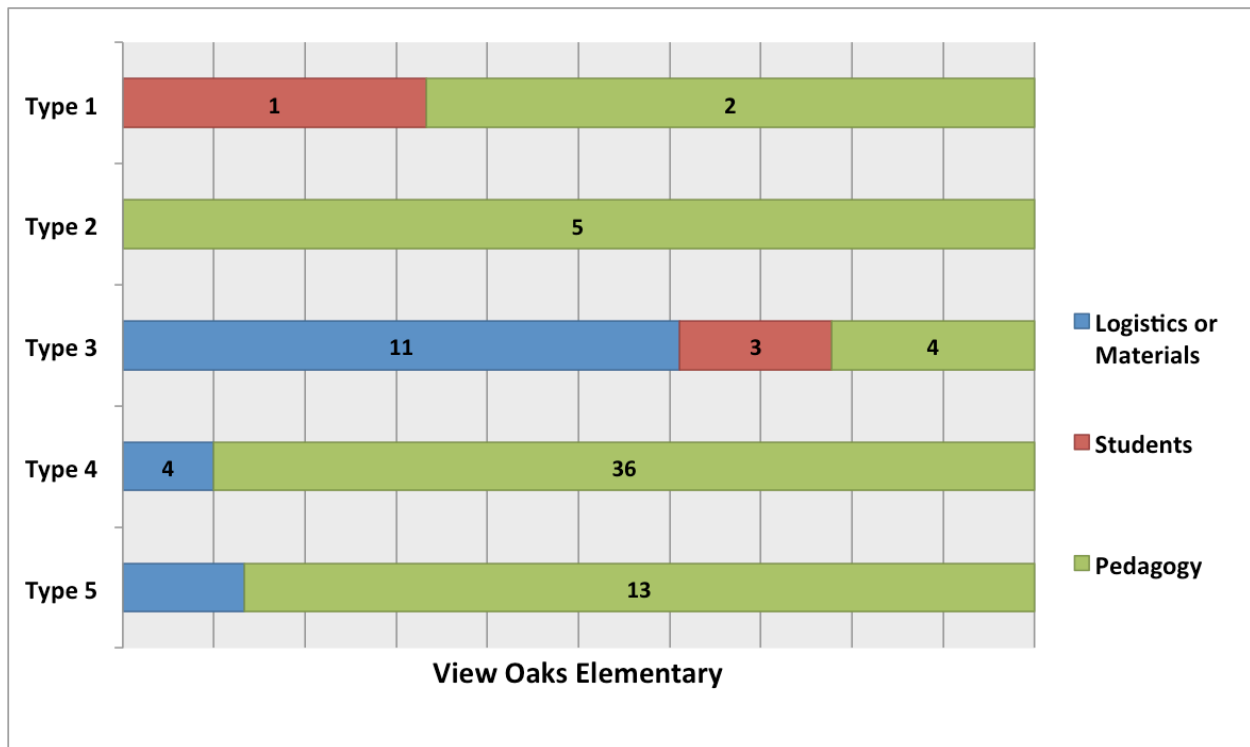


Figure 7.3. *Nature of teacher responses' in View Oaks Elementary*

Principal Mary of Elwood Elementary used more closed exchanges overall than Principal Julia View Oaks Elementary, especially the types of exchanges that were at the beginning of the continuum. Why? One explanation may include the slightly smaller amounts of external facing teacher responses in View Oaks Elementary. Perhaps if Principal Julia of View Oaks Elementary moved to Elwood Elementary, I might have observed the same distribution of exchanges in Elwood Elementary as I did with Principal Mary. However, my conceptual framework also calls attention to the parameters placed on principals by expectations and resources in the school district context and how those may have shaped principals' open and closed patterns at their schools. I explain those conditions below.

### **Expectations and Resources Creating Different Conditions in Each School**

Why did both principals close down teachers' responses? To explain what may have shaped principals' interactions with teachers in particular ways, my conceptual framework called

attention to the rules that placed guidelines on principals' and schools' instructional improvement activity, such as formal job descriptions, informal norms or school improvement guidelines. These sources could shape activity by also limiting or providing certain resources that were available to schools, as well as by providing guidelines on how those resources could be used. In my conceptual framework, I suggested that the sources of these expectations could from formal central office or state accountability policies as well as informal teacher norms about appropriate participation. I explain how these actors and their accompanying guidelines for action, as well as provision of resources, can be used to provide one explanation for why I saw closed exchanges in these schools.

Through my analysis, I found that both schools seemed to face the same expectations from the central office to focus on instruction in their interactions with teachers and also on the time principals had to engage with teachers. Yet they faced different formal expectations from state actors and different informal norms from teachers. These expectations related to what teachers had to achieve through the improvement process as well as how the principal should participate and shaped principals' interpretations of what schools had to accomplish within a particular time frame and their authority over what teachers learned. I now explain how these different expectations created conditions in schools that made closed exchanges more appropriate in some cases.

### **Central Office Expectations Emphasizing Focus on Instruction**

Both principals seemed to face similar expectations from the central office to focus their leadership activities on supporting teachers' instructional improvement. These expectations came through informal expectations from their supervisors, as well as professional development

offered through the central office that focused on principals' skills when interacting with teachers about instruction.

Principal Julia, from View Oaks Elementary, expressed expectations from her supervisor, which included being in classrooms two hours a day and that they were expected to “work on” instruction with teachers. The principal suggested that these expectations were reinforced whenever her supervisor came to visit because they would talk about the quality of instruction and also go into classrooms. She explained that her supervisor was “modeling” being focused on instruction in ways that she should be as a principal since she was always talking about instruction with her supervisor. Furthermore, the principal would send weekly instructional letters to her staff, mirroring how her supervisor would send weekly instructional letters to the principal core.

Principal Mary, from Elwood Elementary, expressed similar expectations from her supervisor to focus on supporting teachers' practice. She credited her supervisor for emphasizing her instructional work with teachers,

I think the district has been a good support in helping influence those three things [providing professional development, planning of professional development and evaluation of effectiveness of professional development]. Like I said, the principal's role has changed quite a bit over the past few years. Instruction has become the forefront, and that's a district message. That's not something that necessarily all schools have embraced, although I would guess that most of them have in this day and age of accountability, but that's been a district influence. My supervisor this year is phenomenal. I really appreciate her leadership, and she reinforces those components with me all the time.

In addition, both principals attended central office professional development sessions that provided more focused expectations about their interactions with teachers, particularly how principals should provide ongoing feedback to teachers. Both principals' professional development opportunities focused on how to do quick observations and give teachers meaningful feedback, not solely during scheduled observations, but also informally during the course of the year. Principal Mary credited these sessions to helping her think differently about the evaluation conversations and how they should be more "two-way" than "one-way" in cases where she would ask teachers more questions about their practices rather than telling them what they should do.

Central office policies also allocated time for learning sessions through collective bargaining agreements. Principals had opportunities to meet with teachers once a week during the professional collaboration time; these opportunities were to be used for school improvement purposes. Therefore, both schools seemed to face the same expectations regarding their instructional leadership practice as well how much time should be allocated to those efforts. These expectations suggest that, theoretically, both principals should have used open exchanges to support teachers' learning of new ideas or I would not have seen such differences between both schools' distribution of exchanges. Then why did I observe closed exchanges when I also observed open exchanges?

Due to its accountability status, I argue that Elwood Elementary faced expectations that set parameters on the time that Principal Mary and the teachers had to demonstrate the changes that were outlined as implementation steps in the school improvement plan. My analysis suggests that the principal interpreted these accountability guidelines in a way that provided limits on teachers' engagement with ideas so that teachers had to quickly implement the new ideas. In

addition, the interpretation of these guidelines also shaped the principal's control over teachers' change processes. These conditions, therefore, made the principal's closed exchanges appropriate because in closed exchanges principals can tell teachers what to think or what to do without leaving it up for negotiation. Below, I explain these two different sets of expectations, one for time to make changes in practice and the other for the principals' role in the change process, and I go on to explain how these conditions made it appropriate for principals to engage in closed exchanges.

### **Principal-Directed Immediate Change**

Expectations from the state accountability office placed on Elwood Elementary, often conveyed through tools or resources, asked for teachers to make deep changes in their practices beyond implementing the central office's existing Math curriculum and literacy frameworks. Yet the same policies did not create conditions to engage in deep meaning making around new practices because they required the principal and teachers to demonstrate immediate changes. In essence, the urgency created by accountability to raise test scores in order to exit out of school improvement status the following year by use of research-based practices that asked for deep changes in practice created conditions that may have allowed for limited meaning making opportunities. Therefore, these timelines perhaps created conditions that were incompatible with negotiation of differences in opinion and elaboration and meaning making of also problems or areas of confusion.

Accountability expectations seemed to matter to the principal of Elwood Elementary. Principal Mary constantly referred to these rules when expressing her rationale for her leadership actions. Literacy scores declined over the past few years prior to the data collection period. The principal ascribed this decline to the new literacy frameworks instituted by the district in the

prior years. The principal continually referred to low test scores during the data collection period in observations, documents and interviews as reasons for her plans for professional development. For example, when explaining her rationale for engaging in the intensive literacy professional development taking place at her school, she said, “Because our scores in reading were decreasing, because we were labeled as [a school with accountability status], I knew that we needed to spend our support team dollars on literacy....”

**Policies requiring changes in teachers’ practice.** Not only did test scores seem to influence an overall focus on literacy, the principal used other documents that conveyed specific areas of focus that teachers had to learn and demonstrate change. Principal Mary referenced these documents as a source of ideas when explaining her interpretation of the timeline teachers had for change, as well as her participation in those change processes. These documents conveyed expectations for teachers to use research-based practices that were attributed to raising student achievement, but in a limited amount of time. Below, I will explain the content of these tools and how the principal considered them to be sources to inform instructional improvement efforts.

A few different tools from the state accountability office recommended research-based practices teachers needed to learn and therefore shaped the content of Elwood’s multiple instructional improvement efforts. Since Elwood was labeled to have a particular status in their state’s accountability system, an external evaluator conducted a needs assessment to assess the level of instruction at the school and made research-based recommendations for areas of change. Furthermore, state indicators for successful schools, as well as a school improvement-planning tool from the state education office that managed accountability, named other research-based practices that effective schools should use to improve instruction. All of these tools provided

guidelines for Elwood Elementary's school improvement plan. Principal Mary explained that using these indicators to plan different aspects of professional development "wasn't an option" for her school and that these tools highlighted "what great schools" do. In one of her weekly letters she elaborated on the influence of these documents,

Last week, our [school improvement team] and [school leadership team] members took the results of the [external evaluator] classroom observation results, the current [school improvement plan] action planning work and [state education office] created indicators of success that all schools considered emerging, focused or priority are using to guide and strengthen the School Improvement plans. From these three components we identified work that currently aligned to our action plans, work that could be a next step to deepen our work and other items and indicators that could guide our work even later down the line.

As such, these tools provided the school with a focus on specific areas for teachers to learn and were evidenced in the content of the collaboration times and principals' observation of teachers. For example, the school improvement rubric stated that one aspect of high quality instruction associated with student achievement gains included teachers' differentiating their lessons according to pre- and post-tests. Elwood Elementary included this indicator in its school improvement plan where it stated that teachers were to plan lessons according to pre- and post-tests given to students in math and literacy. The needs assessment from the external evaluator provided another area of emphasis. This assessment emphasized teachers' lack of higher-order thinking questions in their classrooms and recommended this area for implementation. In its school improvement plan, the school included the practice of teachers using higher-order thinking questions during literacy and math instruction. In Elwood's professional development plan, one learning session was focused on incorporating higher-order questions in literacy,

another session focused on incorporating those questions in math, and another learning session explained how teachers should add “why” components to their objectives in teaching points to support deeper level thinking in literacy. The principal explained again how these practices were tied to the external needs assessment in one of her weekly letters,

As we look at our [classroom observation data] from the [external needs assessment] we see data results indicating that the application of learning skills and concepts was the most difficult to discern in our teaching. A theory developed that if we included in our clearly articulated objective the reason “WHY” we are learning a new skill students will be able to apply their learning to other academic and life skills. Understanding the why of a learning objective can support students in seeing the value of their learning and knowledge of use for later. I encourage you to try this in your instructional planning and teaching, begin giving students a brief why explanation about the skill or concept you are asking them to learn and practice, an easy way to add the application and connections of learning for our students.

**Policies limiting time to demonstrate change.** These accountability tools not only conveyed areas of change, but also expectations for the depth of change Elwood Elementary should have made in a specific time frame. Accountability measures, such as the labels given to schools, determined how much schools had to increase their student achievement scores in order to get out of a particular status. Furthermore, the state-given school improvement plan tool asked schools to flesh out the issue of how the school would focus on certain aspects of improvement more deeply than they had done in the past, including how they would specifically implement their plans with a “30-day time frame, a 60-day time frame, 90-day time frame” as well as identify when tasks were to be completed and what it would look like if outcomes were achieved. In one particular indicator from Elwood’s school improvement plan, outcomes

included “Rigorous, aligned instruction” where “90%” of teachers were to use differentiation strategies daily during literacy instruction “based on student understanding of key concepts and learning objectives.” These measureable outcomes included various student achievement goals. Students in grades 3--6 were expected to make expected growth levels in standardized test scores. These documents detailed not only what and how teachers should teach, but also that teachers should demonstrate proficiency in those practices by a certain timeline.

Principal Mary expressed this urgency reflected in the accountability policy when explaining her expectations for teachers to learn and demonstrate what they had learned from the school improvement initiatives. The principal interpreted these policies in a particular way, placing expectations on teachers to use new ideas and to make immediate changes in their practice, linking teachers’ changes to an increase in test scores. She expressed these expectations to the literacy coach when discussing planning for one learning session, “If we’re not open to changing instructing, we will not change the outcome of data and the only way to change the data ergo change teaching instruction.” The principal also conveyed these expectations to teachers. In one weekly letter to teachers, she explained her specific expectations of teachers’ implementation and demonstration of using intentional learning objectives, which was an area of their school improvement focus,

This school year I have asked each of you to increase the intentionality into your lessons by ensuring that you have clearly articulated and posted learning objectives. I have seen evidence of learning objectives in 90% of the classrooms during my walkthroughs and classroom visits. We continue to ensure our instruction is focused and organized; using clear learning objectives helps us to do so. We also know that clearly stating lesson objectives to

students helps them to understand the purpose of their learning as well as giving us a basis for analyzing the level of cognitive thinking we are expecting from the learners.

During a learning session on guided reading groups, the principal articulated this same type of outcome of wanting teachers to immediately implement these practices. In response to a teacher's comment about the difficulty of managing different guided reading groups, she stated how she wanted teachers to implement reading groups immediately and to not be hesitant to do so,

Let's set a goal of setting up one group. And getting one group up and going and [something to the effect that teachers will realize that doing one group is] not so bad. This isn't happening everyday of the school year. Another goal is say have one group and two guided reading sessions between now and end of March.

Evidence from teachers' reactions about the pressure also suggests that the tools used from the state accountability office to direct instructional improvement created conditions in the school that required teachers' constant learning and implementation of new practices. Some teachers at Elwood expressed discontent about the schedule of learning sessions and wanted the learning pace to slow down. In the school improvement team meeting, members suggested to the principal that teachers wanted to make the use of staff meeting time revert back to traditional purposes, such as "nuts and bolts" issues about the school, instead of using it for learning purposes. Teachers also suggested that they needed more time to grapple with new practices to figure out how to implement the new practices rather than spending time learning new ideas. During one school improvement meeting where the principal was not present, one teacher lamented, "It didn't seem like it was a lot of time to look at data or to meet as a team. I know we had some grade level days, but then it used to be there was PD [professional development] and

then go with your team to work on this. And I told [Mary] about this.” Another teacher, in an interview, expressed how new practices or ideas got dropped from teachers’ implementation since they did not have enough time to talk about these ideas when more and more ideas piled on,

I really don’t feel like we have this school-wide focus. We’ve talked about questioning, but we tend to talk about something and then it’s just left behind, and off we go. “But we’ve been working on questioning all year,” because we had one staff meeting about it. Some people will put it into a common practice, but then others are like, “Well we didn’t talk about it again so I don’t have to do it,” kind of thing. I think sometimes our school-wide focus is getting a little lost, because there’s so many things.

Thus, accountability policies created conditions in Elwood Elementary that required teachers to make deep changes in their practice immediately, therefore putting guidelines on the time that schools had available to realize changes. The principal interpreted these expectations in a way that limited the time teachers had to engage with new ideas before implementing them in their practice, and she conveyed these expectations to the teachers. Teachers also explained how they lacked time to interact with one another to grapple with what they were learning. These findings suggest that the principal interpreted this urgency to be limiting teachers’ meaning making, especially when teachers’ responses were in conflict with the principal’s ideas.

**Expectations for principal controlled change.** In addition to the timeline for change, the principal also faced external expectations regarding her leadership practice. Accountability policies in Elwood Elementary provided the principal with specific leadership expectations. Principal Mary used these expectations to inform her construction of what to do as an instructional leader , specifically taking the burden of improving instruction as her responsibility.

In one interview the principal explained why she emphasized certain areas of her practice that she attributed these sources and how it shaped her ideas of what she should do,

Well, I guess I'm kind of putting my eggs in that basket and hoping that's what's going to make a difference for kids. Conversations with my supervisor about what I do and pushing that to the next level helps me form those goals. Reading magazines, reading professional development texts, getting into classrooms and recognizing that if, boy. I'm not correcting this or helping them [teachers] learn more about this, who is, and just knowing that a lot rides on my shoulders. I feel like that's going to give us the biggest bang for our bucks.

When asked about who she attributed her understanding of what she needed to do as an instructional leader, the principal mentioned on many occasions during interviews how she received her ideas from a book that principals of schools under the same accountability status read in their professional learning communities. This book outlined effective instructional leadership practices that were credited to making an impact on teachers and students. In the last interview of June of that year, she mentioned how this book was at her "bedside, partially open." When teachers balked at having drop-in observations being used as formal evaluations, the principal continued on this practice despite teachers' resistance because she explained that these observations would help her focus on instruction and support teachers. She again attributed this practice to external sources, suggesting these guides transcended informal norms she faced from teachers,

I think the [Leadership book] book talks a lot about how professional development is an essential in those continuing conversations with kids or excuse me, with teachers about their kids really drives what good schools do. When you look at the nine characteristics of successful schools from [State office of education], principals being directly involved with

curricular decision making and instructional planning and implementation is one of those nine indicators of success.

The principal interpreted those expectations of principals being directly involved with teachers' instructional change process as monitoring what teachers were learning, making sure teachers came away from their interactions with the correct understanding of instructional ideas. When discussing the difference between facilitating learning sessions with content mandated from the district, unrelated to the school improvement plan, and facilitating learning sessions focused on content in the school improvement plan, she explained "I didn't want to jump in and give my opinions about things like I would other [school improvement learning sessions]." She provided a specific example from one learning session of how she would jump into conversations, reflecting a closing move that limits the discussion of teachers' ideas,

So at the higher level of thinking one, if I sit in with table- whether having discussion times or any [learning session] that's more instructionally focused, if somebody said something that I maybe disagreed with, I would feel like I wanted to push back and I can say, "Well that's interesting, but I would really encourage you to think this way about it and I interpreted the article this way was that."

Furthermore, she explained that she communicated her vision of what she wanted for teachers to learn not only through direct conversations, but also in her weekly letters she sent out to teachers every Monday. For example, in an interview, she suggested that she used these letters as opportunities to emphasize content that she provided the week before, "There were times when I would hear something and I would respond to it in the weekly news. If I didn't have the answer or if I had a different way of thinking or I just wanted to make sure that a point was clear." In another interview, she referenced how she responded to a teacher's comment about the

developmental appropriateness of higher-order thinking for kindergartners during a learning session more pointedly in the following week's letter.

As demonstrated, external policies regarding school improvement placed expectations on Elwood Elementary to increase student achievement as well as to increase teachers' use of instructional strategies. These policies also placed expectations on principals' facilitation of teachers' change processes. Both sets of expectations created conditions in these schools that potentially made with closed exchanges appropriate. Closed exchanges are efficient ways of communicating information with a right or wrong answer. Elwood Elementary had a quick timeline for change and policies also, gave principals authority to be involved with teachers' change instructional change process. Principal Mary's interpretation of these expectations included limiting the time teachers had to learn new ideas and implement them in classrooms, as well as being an expert when interacting with teachers. Therefore, perhaps when teachers shared ideas that perhaps the principal did not consider appropriate or correct, closed exchanges were effective ways of transmitting fixed or correct information that should not be negotiated.

### **Teacher-Directed Incremental Change**

In contrast, View Oaks Elementary was not under any accountability pressure and therefore did not face expectations to increase test scores or change teacher practice immediately. Even though these pressures did not exist, Principal Julia still considered her teachers' practice in need of improvement and engaged teachers in various learning opportunities. Based on the above explanation about the conditions created by accountability pressure in Elwood Elementary, I would have expected only open exchanges in View Oaks Elementary, despite the varying teachers' responses. However, I also observed closed exchanges in View Oaks. Why? I first establish that View Oaks Elementary did not face external expectations for school improvement

nor a particular timeline, but then I explain why, in spite of this open-ended timeline that aligned with conditions that made open exchanges appropriate, I also observed closed exchanges.

**Lack of timeline for teacher change.** Lack of external timelines tied to sanctions in View Oaks Elementary allowed for internally driven timelines. In contrast to Elwood where school-improvement tools from the state guided what to change and in particular time frames, Principal Julia of View Oaks Elementary often expressed teacher readiness to engage in change as criteria for selecting the school's focus for improvement and did not mention other tools or resources from the central office or state education agencies. The principal mentioned test scores as a rationale for placing emphasis on literacy instruction in the school improvement plans, but since test scores were among the highest in the district, no needs assessment was conducted nor was the school given additional tools for use. Instead, guidelines for change came from informal norms about appropriate teacher participation. For example, the school had agreed upon instilling common literacy practices the year prior, but this emphasis on common literacy practices were not attributed to school improvement rubrics or research-based tools from the accountability system. The principal elaborated on how the school came up with the four common literacy practices,

We did some walkthroughs last year related to math and literacy and just had teams of teachers visit each other's classrooms and just kind of talk about what they saw. That was the door opening for us identifying those four components that we felt should be the [View Oaks Elementary] way, those are the things that we should be doing in literacy every week. We should expect that for our kids in any classroom. And so that was how that was established and I think there was a lot of ... people felt good about that, people want to have that baseline

of this is the expectations, okay I get it. It was the right thing for us and it still is the right thing for us.

The principal constantly expressed teacher readiness as criteria for discussing particular areas of improvement with teachers. She referred to this again when planning for a math-focused learning session with her lead teachers, suggesting that perhaps teachers were currently ready to have a conversation that year about emphasizing certain math instructional strategies as opposed to a year ago,

JULIA: Then let's think about the core math instruction and give people a chance to process what they remember from [math expert] and I'll hope that will lead into a conversation the leadership team wanted to have about a common picture of math instruction. There are the four things in literacy, the mini lesson with clear teaching points, the differentiated small group instruction, opportunities for student talk and conferring, right? So that gives us a frame for what is happening in literacy and we don't have something like that math. I don't think the time was right last year.

TEACHER: I feel like we used to.

JULIA: I don't think a year ago we could have had that conversation and so the time is right again. I'm envisioning that tomorrow afternoon is that conversation but what's the process of that tomorrow? The [debrief] process for [math expert] and that can lead into what is the short list of math instruction.

Principal Julia also expressed a slow pace for teacher change. In contrast to Principal Mary's explanation of wanting teachers to implement ideas immediately in their practice, Principal Julia expressed she wanted teachers to come to realize ideas on their own at their own pace instead of needing for her to tell them what they did wrong or what they needed to fix. For

example, when planning for a professional development session with the district literacy coach, she expressed to the coach her concern regarding some of the literacy instruction observed in classrooms and that she wanted to challenge teachers' text selection practice. She explained that she wanted teachers to think through "when to best to utilize the text in the work within this week" as opposed to teachers using an "anchor text," a practice that she saw teachers use "ten years ago." She explained her frustration to the coach and her desire to stop teachers during instruction with the statement, "At some point that I need to say to some teachers, 'I'm not understanding your point here.'" However, she expressed that she wanted the opportunity for teachers to think more deeply about the text selection during the upcoming learning session by saying, "I much rather them to think through that [text selection] and make the adjustments on their own. I would love for this to be an opportunity for them to do just that."

As explained above, conditions in the school created opportunities for a slower pace of change according to teachers' readiness to engage in certain conversations. The content of the school improvement plan was developed according to what the teachers and principal thought were appropriate areas of focus for their school, and teachers could come to understand and learn new ideas at their own pace. The school improvement plan contained limited areas of focus that teachers had to improve. View Oaks Elementary's school improvement plan only had three areas, and only one area specifically referenced how teachers should teach. Additional areas were more action-oriented, such as "paras provide 30-minute intervention." The principal explained the more narrow focus of the outcome that year, having teachers pay more "attention" to their 90-minute core literacy block instead of focusing on the 30-minute intervention time. She expressed, "My goal for that is for teachers to be thinking about that time period during their day and what are they doing to most impact student literacy growth."

Since View Oaks did not face expectations tied to sanctions, the school could consider different rules or guidelines to shape school improvement efforts. The principal attributed her decisions about the school improvement efforts to teacher readiness and not to other external tools or expectations. The lack of pressure to change may have created conditions for extended meaning making opportunities between principals and teachers. Overall I observed more open exchanges in View Oaks Elementary that align with these conditions, but I also observed closed exchanges.

**Expectations for teacher controlled change.** While lack of externally driven direction and timeline of school improvement may explain open exchanges, they do not explain why there were closed exchanges. Teacher readiness for change may only work when both the principal and teachers are in agreement or if the principal has no direction he or she wants to set. If the principal has different ideas about change but internal norms about appropriate principal participation suggests principals' lack of authority, then those conditions are in conflict. I suggest these were the circumstances in View Oaks Elementary. The principal considered informal norms regarding appropriate authority over teacher's learning process. These norms coupled with the lack of urgency to change quickly created the conditions that made the principal's non-confrontational response, or lack of response to surfacing conflict, more appropriate than direct negotiation.

These norms of appropriate leadership authority surfaced when the principal discussed her appropriate participation in the school improvement process and individual teacher's learning process. First, Principal Julia spoke of informal norms about appropriate principal-teacher relationships when explaining her overall school improvement approach. Instead of always going to teachers directly, she explained she intended to "foster" the work of the instructional

leadership team so teachers would engage in changes on their own, not because she told them to do it. The principal elaborated on this rationale when explaining the nature of her participation,

Because I want there to be the idea of shared leadership. I think there's a lot of smart conversations that happen in different groups, our RTI [Response to Intervention] group, our PBIS [Positive Behavioral Intervention and Supports] group, our leadership team, a lot of smart conversation. I would love to be able to use those voices and I think it serves a lot of purposes. I want them to own that work. I want teachers to own that work and I want them to see that one another owns that work and that it's not just something that I'm trying to push, or it's goal of [Julia's], but it's something that's the right next thing for us as a school.

Not only did these norms show up in her explanations of the school improvement process, they also arose in norms that shaped the extent to which she expressed her ideas during principal-teacher interactions. She explained why she chose not express her ideas in interactions with teachers all the time. The principal explained that it was “not effective to go through the principal” all the time when engaging teachers in efforts to change their practice. She suggested that ideas to change or do things differently “land” differently on teachers depending on the source, and thus she desired to limit how much she expressed her views. She explained she wanted teachers be more autonomous when engaging in learning sessions to direct their own learning, and so she subsequently provided them with opportunities where they could direct what they wanted to learn, instead of having the principal be in charge of their learning.

For example, in reference to one particular exchange about a teacher's literacy practice, the principal mentioned, in subsequent interviews, her desire for the teacher to use her math practice to inform her literacy practice. Only after the teacher shared her realization that she could pre-assess students' literacy skills before putting them into small groups, a method similar

to the teacher's math practice, did the principal mention the idea. The principal described her intent in that conversation for the teacher "to come to these realizations on her own around the connection and maybe how [teacher] looks at math instruction a little bit differently than she looks at reading instruction."

Instead of explicitly displaying her expertise or ideas in her interactions with teachers, the principal would recruit teachers to convey specific messages to other teachers. The principal explained that she utilized teachers at the school to communicate the message to focus on the practices mentioned in the school improvement plan, which the entire school agreed should be components of every teachers' literacy practice; she went on to say, "I've got a handful of teachers who are strong at that and I can kind of use them as leverage for grade level team conversations. Kind of plant, 'This might be an opportunity for you guys to talk about what we talked about at [professional development sessions] two weeks ago,' or something and bringing that back in." I observed one particular data meeting where the principal brought two teachers to talk to and share their assessment practices to another grade level group, whom she thought were using assessment practices that were "not working."

Thus, expectations on appropriate principal displays of authority possibly made principals' direct confrontation with teachers incompatible with the norms regarding appropriate principal-teacher relationships. Principal Julia explained this relationship in interviews. Even though the principal claimed she limited displays of her expertise, she also explained that she did not want to always bypass incorrect interpretations or ideas. The principal elaborated on her approach to such instances, saying that it was a "dance" between honoring teachers' ideas and also directing their learning in a specific way. She explained her tactic to be partially agreeing with them, but also suggesting an alternative point of view. She went on to say,

If the teacher is sharing an interpretation, their interpretation which might be different than others', might be different than mine then I will try to re-voice that because there's always something that's there that is the basis for that, but trying to just kind of circle back around and bring it back to what I'm hoping will be the major kind of salient point for teachers.

INTERVIEWER: WHAT DO YOU MEAN BY RE-VOICE THINGS?

I wish I could think of a specific instance. If it was two weeks ago, I probably would be able to. If a teacher, this is totally hypothetical, I'm making it up, but if a teacher was talking about ... Oh, this isn't hypothetical, this is actual. If a teacher was talking about a use of a particular assessment and how here she was finding success with only using a portion of that assessment and saying, "Really, this is all we need to do. Here's the assessment, it's this big but I'm just going to use this part and that's giving me the information I need." Then I might re-voice and say, "Yeah, that's a really important part of that assessment and I'm so glad that's working for you in this particular situation, but I want us all to be really thinking that this assessment was created as a whole for a particular reason and it's important for us to not, you know, not start equating this slice of it with the assessment system as a whole." That might be an example for it.

Perhaps these expectations and resources available in View Oaks Elementary created conditions that were compatible for meaning making since teachers were not faced with an urgent timeline for change. However, the lack of time pressure and also the informal norms that the principal limit overt displays of control over teachers' learning process also made it appropriate for the principal to indirectly deal with conflict as opposed to confronting teachers' ideas. This explains to some extent why I observed more Type 3 closed exchanges than the other more closed variations.

## Chapter Summary

In summary, accountability pressure in Elwood Elementary created conditions that allowed for the principal's monitoring of teachers' meaning making processes, making sure that what teachers received from the principal's interactions was the correct content that they needed to implement immediately, instead of allowing for teachers to grapple with their ideas, assumptions or beliefs about teaching. Closed exchanges were more appropriate in the situations when conflict or different ideas emerged that would perhaps take too long to negotiate. In contrast, View Oaks Elementary used internal guidelines, such as readiness to learn certain ideas, to determine the specific areas of learning that guided school improvement efforts. But the lack of urgency coupled with appropriate norms regarding principal's display of expertise created conditions where it was more appropriate to confront teachers indirectly when conflict emerged.

## CHAPTER 8: SUMMARY AND IMPLICATIONS

As policies continue to identify various areas to improve the quality of teaching and learning in schools, state and local policy makers, who recognize principals as key agents of teachers' professional learning, are asked to ensure that principals develop and provide ongoing job-embedded learning supports for teachers in order to meet policy demands. Subsequently, districts provide principals with professional development and other resources so that the principals can support teachers. Yet the current research on principals' efforts to support instruction mainly describes principals' actions and to what extent principals' actions focus on instruction instead of examining to what extent those actions support teachers' learning or change. Given that the main focus of principal instructional leadership is to support teaching and learning improvements at school, this sole focus on principal action without attention to teacher learning seems incongruous with desired outcomes. The leadership field can draw from a rich body of literature on teacher learning and high quality teacher professional development to conceptualize principals' practice, yet current leadership research does not use these findings to examine how principals may support teacher learning. A few studies are on the right track and are beginning to focus on to what extent those principal-teachers interactions afford different learning opportunities for teachers. But the findings from those studies are still limited due to methodology. Those studies either use teacher or principal self-report or they limit descriptions of principal practice to broad statements as opposed to detailed descriptions. Therefore, the literature on principal instructional leadership stops short of describing principal practice and of assessing to what extent principals' supports help to support teacher learning, leaving little guidance to assist practitioners or policy makers in pinpointing why and how principals' efforts to support teachers may or may not lead to desired improvements in teaching and learning

school-wide.

My study addresses this gap and examined at how principals may support teacher learning by examining the extent to which principals' interactions with teachers provide teachers with opportunities to engage in meaning making about instructional issues. I relied on observations, instead of teacher or principal self-report, to elaborate on how the overall pattern of principals' discourse moves in a topically bound interaction may either extend or limit teachers' meaning making of instructional ideas. By choosing two schools with principals intending to be instructional leaders in the same district but with different policy contexts I was able to explore the relationship between context and principals' interactions with teachers. I provide a summary of my findings below.

### **Summary of Findings**

Both principals expressed their intentions to talk with teachers about their practices in order to support teacher learning, as opposed to solely monitoring teachers' behavior. Using a conceptual framework that highlighted both meaning making interactions and transmission interactions, I hypothesized I would observe two types of interactions, or possibly just one, since I selected to study two principals that intended to support teachers' learning. Instead, I found five different types of interactions. These interactions varied in the extent to which they closed down or opened up both the ideas for discussion and the opportunities for teachers to make sense of ideas. I highlighted five patterns instead of two patterns because these patterns allowed me to differentiate who did the meaning making and also whose idea was the subject of the meaning making exchange. By doing so, I was able to highlight a couple of nuances: (1) even though principals provided meaning making opportunities, principals still ended up prescribing actions or interpretations, and (2) teachers had some opportunities to grapple with ideas even if the

interactions did not reflect the open category in my conceptual framework. In the closed interaction patterns, principals ended up telling teachers what to think or what to do without giving explicit opportunities for teachers to engage with the teacher's idea, the principal's ideas or both. In the open interaction patterns, principals' provided teachers with opportunities to elaborate on teachers' ideas and, in some cases, principals' ideas as well. These findings suggest that even when principals intend to provide opportunities for teachers to make sense of instructional ideas, they may tell teachers what to think or what to do, which according to theory may limit teachers' learning.

According to my conceptual framework, which suggested that exchanges are jointly constructed between respondents, I found that teachers' responses also mediated the opening and closing moves made by principals in their exchanges. I found a pattern between the content of teachers' responses and principals' opening and closing moves. When teachers' responses brought up issues with materials or the logistics of teaching, or focused on what students could do or were not doing, principals were more likely to respond with closing moves. However, when the content of teachers' responses reflected ideas of pedagogy, regarding how they were teaching or specific instructional ideas, principals were more likely to respond with opening moves. These findings highlight that teachers are partially constructing with principals how the interaction unfolds.

Instead of focusing on individual principal skill as a reason to explain why principals used exchanges that did not allow for teachers' meaning making, my conceptual framework called attention to the expectations and resources in the school context and how those factors may have made certain exchanges more appropriate in each school's particular condition. Even though both principals intended to interact with teachers to support their learning and meaning

making of ideas, they both used closed exchanges. One principal also predominantly used more closed exchanges than open exchanges. Why? I argued that extended meaning making exchanges were incompatible with certain conditions related to school improvement. In one school, state accountability policies placed guidelines over what teachers had to learn within certain time restrictions as well as provided formal expectations regarding the principal's practice and responsibility over whether or not teachers made those changes. The principal's interpretation of these policies included the principal's sense of authority over teachers' change process as well as the amount of time teachers and the school had to demonstrate change in practice. Thus, closed exchanges were more compatible than open exchanges, especially when teachers' responses or interpretations were not aligned with the principal's responses. Although the other school lacked such expectations, the principal used multiple guidelines to inform school improvement process and roles. Some of those expectations from which this principal drew aligned with the norms of open exchanges, such as extended time for learning and change. However, the principal interpreted informal norms regarding principal-teacher relationships in such a way that she considered displays of the principals' explicit control over teacher learning process as inappropriate. These conditions aligned with closed exchanges, explaining to some extent why the principal of View Oaks Elementary used certain exchanges in her interactions with teachers.

### **Implications for Research**

My findings have several implications for how researchers study principal instructional leadership practice. First, my study highlights the importance of theoretically connecting principal practice to teacher learning instead of assuming that when principals engage in certain actions, teachers automatically learn, change or improve. As demonstrated in my findings, principals engaged teachers in a range of activities under the banner of instructional leadership,

but their interactions varied, particularly in the extent to which principals provided meaning making opportunities. These findings provide a jumping-off point for future studies attempting to link the two subjects of leadership practice and teacher learning/development by demonstrating how the field can understand leadership practice with more nuance and variation through the use of findings from teacher learning and development as ways to understand what principals do. Future areas of leadership research can benefit from using the vast knowledge base on teacher learning to conceptualize the studies of principal instructional leadership that focus on other aspects of principals' practice. For example, the literature on high quality teacher professional development highlights how focusing on representations of student thinking can be a source of learning for teachers and how experts can facilitate that aspect of their practice (Kazemi et al., 2004). Further studies on principal instructional leadership practice may highlight the extent to which principals engage teachers in ongoing inquiry about their work anchored in analysis of student work.

Even quantitative studies of principal instructional leadership can focus on the teacher learning implications of principals' practice, as opposed to merely identifying the number of times principals interact with teachers. For example, Camburn's (2010) study surveying the extent to which teachers report having opportunities for reflection during professional development opportunities used survey items that identified outcomes of reflective practice, such as whether opportunities allowed teachers to "pay closer attention to particular things they did in the classroom" or whether teachers could focus on an instructional problem over an "extended period of time" (Camburn, 2010, p.475). Researchers have suggested that when teachers uncover details of their practice, focus on solving one instructional problem over a semester or school year, and use artifacts of their practice, such as student work, those interactions are associated

with teacher learning (Gallimore et al., 2009). Therefore, researchers studying principal instructional leadership can use these studies to frame future studies of instructional leadership practice.

These findings also implicate the use of sociocultural learning theory when examining principal practice and the extent to which principals support teacher learning. My study began to conceptualize principals as more expert others that facilitate teachers' meaning making through conversations. Concepts such as assisted performance (Tharp & Gallimore, 1988) or guided participation (Rogoff, 1995) can be useful to further conceptualize how principals may guide teachers' learning not solely through interactions, but through kinds of supports that principals may provide teachers. Tharp and Galimore (1988) highlight how learners apprentice into new practices where experts guide their learning through assistance strategies, such as modeling and metacognition, and experts may tailor the level of assistance based on individual learning needs. Or Rogoff's (1995) conceptualization of guided participation might provide researchers a way to analyze the extent to which principals guide teachers' learning that steers teachers' learning of new ideas or practices that supplements a focus on principals' face-to-face interactions with teachers to include principals arrangement of activities for teachers where teachers may interact with other people or engage in learning activities on their own. Using these theories to conceptualize the role of more expert others in guiding learners' processes will further elaborate on the dimensions of principal practice as they support teachers' learning.

Learning theories can also posit how tools, both conceptual and physical (Grossman, Smagorinsky & Valencia, 1999), may mediate how principals interact with teachers and the outcomes of learning interactions (Werstch, 1988). While my study did not focus on tools, learning theory suggests that tools mediate how people participate in and what they learn from

interactions (Vygotsky, 1978; Werstch, 1988). Studies examining teacher professional learning communities highlight the use of protocols and how these protocols shaped the extent to which teachers surfaced and challenged each other's practices during conversations (Curry, 2008; Levine & Marcus, 2010). As mentioned in my findings chapters, teachers' discourse during different exchanges focused on materials or logistics or students' inabilities as opposed to instructional practice. Further studies can examine the tools principals use during their interactions with teachers and how the use of those tools may mediate certain types of interactions.

Beyond my conceptual framework, I was able get underneath broad leadership activities and characterize the nature of leadership practice with nuance by using a smaller unit of analysis. This unit of analysis allowed me to highlight variation in principals' practice. This is in contrast to the current studies that mainly quantify and isolate leadership activities and determine whether or not principals focus on instruction. However, by only looking at the smaller units of interaction, I could not explain how principals' interactions with teachers varied over the course of an entire discussion or across longer periods of time. Perhaps principals provide different opportunities for meaning making over the course of a conversation, throughout the course of the school year. Possibly, a principal may engage in more open exchanges regarding particular topics at the beginning of the school year and towards the end of the school year engage in more closed exchanges, or vice versa. In one of my school's, the principal provided teachers an opportunity at the end of the year for teachers to have conversations about teachers' cultural responsiveness and sensitivity to their students. Even though the principal may have closed down opportunities during the school year related to that topic, the principal then provided teachers with a longer discussion at the end of the year. Other studies can build on this unit of analysis by

examining a string of exchanges in one conversation or compare exchanges about the same topic across a time period as opposed to isolating discrete interactions. Doing so may reveal different patterns about principals' interactions with teachers that may vary by activity or content area.

My analytic approach informed by discourse methods allowed me to study principals' micro-actions and specific learning moves that principals may use their interactions with teachers. However, I used concepts and methods based on the dynamics of classroom interaction, which may not be adequate to examine adults interacting together for adult learning purposes. Other discourse analysis approaches may be useful to highlight other aspects of interactions. For example, this approach did not allow me to conceptualize the moves that teachers made during the discussions, yet I found a pattern between the nature of teacher's responses and principals' closing moves. Conversational analysis methods can highlight how principals and teachers allocate turn-taking responsibilities to each other during conversations. This approach will illuminate the types of moves teachers make during interactions and why certain moves are paired with principals' responses (Sacks, Schegloff & Jefferson, 1974). In addition, critical discourse analysis (Fairclough, 1989) coupled with classroom discourse analysis (Kumaravadivelu, 1999) may uncover the power dynamics in principal-teacher interactions, especially when principals' and teachers' ideas conflict with each other. In my dissertation, I highlighted how principals respond with counter arguments that challenge teachers' responses. However, I did not focus on the ideas themselves or how principals and teachers may wield power in different ways. Critical discourse analysis may highlight which ideas are contested and which ideas are not; it may also highlight the moves that principals and teachers use to exert power when negotiating instructional ideas. These methods may reveal different patterns and dimensions of interactions that may highlight ways that teachers may reject meaning making

opportunities about certain subjects.

### **Implications for Practice**

These findings have a few implications for practitioners who focus their efforts on school leadership and school improvement. For practice, findings suggest that school principals, district administrators and support providers focus on specific aspects of principal practice, especially when aiming to shift or improve principal practice to support teacher learning. To start, how can principal professional development providers and district administrators better articulate instructional leadership activities and the types of learning outcomes they seek? Current definitions of instructional leadership and subsequent job descriptions identify activities principals should engage, such as planning professional development based on observational data or engaging teachers in data analysis. However, my findings suggest that principals may interact with teachers differently during those activities, and these initial findings suggest that interactions may have varying implications for the type of learning that may result. Instead of merely naming leadership activities, how can these tools or rubrics describe the learning purpose of principal practice and subsequent teacher learning outcomes? For example, data analysis activities may be used for different purposes and outcomes. To what extent are principals engaging teachers in inquiry around their practice using data and other types of student work, as opposed to using student achievement data to merely identification of particular standards that students have not met? Rubrics can include such distinctions; for example, they can include distinctions between principals' engagement of teachers in inquiry about the nature of student thinking by using data and other artifacts, as opposed to using data to decide which students receive interventions. By using teacher learning as a lens for articulating a definition of instructional leadership and the practices associated with it, these rubrics may become more

aligned with the type of outcomes sought from these practices: improvements in teacher practice and student learning.

Use of learning theory also allowed me to conceptualize what factors may influence the types of learning exchanges principals have with teachers. This may inform how support providers think about the factors that shape principals' actions. In my analysis, I uncovered the contrasting expectations placed on principals regarding the process for and outcomes of teachers' participation in instructional improvement practices as well as appropriate principal participation. Therefore, when supporting principals' instructional leadership practice, support providers may want not only to support principal actions, but also to help principals articulate the theory of teacher learning that principals operate from and to provide resources, such as research articles or interactions with other principals, to shape principal understanding of their role in alignment with district initiatives.

Moving beyond using learning theories to conceptualize principal practice, my findings suggest specific ways for principals and support providers to analyze principal practice. My findings captured the variation in principal practice and also found that principals use some types of interactions more than others. I suggested that the use of certain types of interactions were routine actions that principals typically used when engaging teachers in discussions. Conceptualizing principal interactions with teachers as routines allows for support providers to identify not only what principals do, but also their typical pattern of engagement across various activities. Therefore, when thinking of areas for principal growth instead of conceptualizing principals growth or learning as taking on *new* strategies, how can we support principals' disruption or shifting out of *old* routines into routines that may support teacher learning?

My findings also can help practitioners move beyond conceptualizing principals' routines

to isolating the specific sequence of moves school principals may make. As highlighted earlier, even if principals request teachers' thinking by asking a question, principals may end up closing down meaning making opportunities. If professional development providers use the concept of an exchange as the unit of analysis for principals' practice, as opposed to the discrete actions that principals make, then perhaps these providers could support principals' sequence of moves in an interaction allow for teachers' meaning making in that particular interaction. Beyond asking open-ended reflective questions, what is the sequence of moves that principals may use to enable teachers to reflect and analyze their practice? How are those sequences differentiated according to teachers' needs or experience?

While these implications hone in on principal practice, principal support providers may also want to consider teachers' readiness or ability to engage in instructional change when support providers help principals articulate the types of learning opportunities they can craft for teachers. As highlighted in my dissertation, at times, teachers' responses to principals' questions reflected concerns about logistics or materials about teaching or explanations for why students could not learn certain content. Studies focusing on teachers' participation in instructional improvement suggest that the organization of the teaching profession leads teachers to focus more on "short-term perspectives" as opposed to "long-term, systemic change" when engaging in educational change (Hargreaves & Shirley, 2009, p. 2506), what Lortie (1975) named presentism. Presentism plays out when teachers focus on quick tangible fixes, such as resources, instead of longer term systemic changes, like improving instruction (Hargreaves & Shirley, 2009). Therefore, principals and their support providers may consider teachers' orientation to be a way of engaging in long-term systemic change, as opposed to mostly focusing on the short-term quick fixes, when engaging teachers in activities and linking these activities to sustained

student-learning increases.

### **Implications for Policy**

These findings also implicate a few policies for school improvement, particularly those that focus on accountability and principal evaluation. These implications suggest that policies move beyond providing teachers and principals with time to focus on instruction and focus on the time principals have to work with teachers on learning specific ideas or teaching strategies. In Chapter 7, I suggested that accountability policies placed expectations on schools and teachers to incorporate research-based practices in order to raise student achievement. These changes were in addition to the implementation of complex literacy practices and a new math curriculum dictated by district policies. As demonstrated in my findings, these pressures to learn many practices quickly in order to raise student achievement may have created conditions in one school that made closed exchanges more appropriate. One principal interpreted these expectations as making sure that teachers made immediate changes in their practice after little discussion or exposure to these strategies, as opposed to engaging with new strategies over a longer period of time. These findings suggest that policymakers also take a learning approach when crafting policies that require teachers to shift their instructional practice and identify how principals can create learning conditions through their leadership practice. Perhaps district and state policies implementing the federal accountability guidelines should support principals in creating conditions for teachers to engage with a few aspects of their instructional practice over longer period of time as opposed to being asked to change many aspects of their practice in shorter periods of time. Instead of going for breadth, how can these policies consider the depth of the changes teachers need to make and attend to the timeline teachers may need for those

changes? How do district's policies provide expectations and resources for principals to consider these conditions when designing and enacting school improvement initiatives?

Policymakers' learning focus may also extend to policies that place responsibilities on principals' participation in school improvement. As I explained in my findings, principals, at times, did not provide opportunities for meaning making when discussing instructional issues. However, overall, principals engaged in activities that research associates with school improvement, such as discussing data with teachers or providing professional development to teachers. Both principals suggested that policies and expectations from the district and the state shaped their focus on instruction, but these expectations and policies did not have an explicit focus on teacher learning. The new principal evaluation policies may benefit from including teacher-learning outcomes in order to focus principal activities on teacher learning instead of having principals only consider other factors that may increase student achievement but not teacher learning, such as principals increasing the number of paraprofessionals working one-on-one with students. To what extent are principals evaluated on their efforts to support teacher learning and improvement? If principal evaluation policies seek to evaluate whether or not principals improve the quality of teaching and learning in schools, by including teacher learning outcomes in principal evaluation policies, this may create stronger ties between these policies and the types of outcomes policymakers seek.

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## Appendix A: Sample Observation Protocol<sup>7</sup>

### Verbatim observation protocol

During full faculty, teacher meetings or principal meetings, I will take verbatim notes of conversations and low inference descriptions of actions or interactions that I do not capture verbatim. Observation data are a central part of my study that aims to understand principal learning. My rationale for this approach to note-taking is that these meetings, principals and teachers will be discussing and building their understanding of topics related to instruction. How people frame comments or pose ideas matters to how people learn in those interactions. Therefore, verbatim transcripts capture the conversations to be used later to analyze how discourse patterns affect learning.

### Overall Reminders

- My job is to observe and to record, not to interpret. If I start interpreting what I am seeing during an observation I risk missing what is actually happening.
- When in doubt, record it.
- I will do what I need to do to capture the meeting but will not interrupt the meeting or participate. I will reserve any questions I have for breaks, after the meeting, or during debrief interviews.

### Before the Meeting

- Confirmation my attendance. Before the first meeting of each kind (e.g. staff meeting, grade level meeting) I will e-mail the meeting convener to confirm my attendance and the location. If necessary, I may continue this practice throughout data collection. For the first meeting, I will ask for a few minutes to introduce myself. Here is a draft introduction script:

*Hello, my name is Nitya Venkateswaran I am a doctoral student at the University of Washington in Seattle. I want to take this opportunity to tell you about my research study and explain what I am doing here.*

*My dissertation looks at how principals figure out how to support their teachers. I want to emphasize that this is not an evaluation, and that instead I'm trying to understand the broad processes as principals and teachers manage multiple demands on their practice.*

*I've arranged with [school leader] to sit in on several of these meetings over the year. While I'm here, I will mainly observe and take notes on what these meetings are all about. Sometimes you'll see me with a pad and other times with a laptop. I'll try to do whatever is least distracting.*

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<sup>7</sup> Adapted from: Rainey, L., Venkateswaran, N., & Honig, M. I. (2010). *Meeting observation protocol: WT Grant project: Research use as learning*. Internal guidance document.

*Confidentiality: All of the notes I take are confidential. That means I take them on a password-protected laptop and cannot share with anyone else, including anyone else in this school or in the district. In anything I write about these meetings in my dissertation will not identify any particular person or school. I am looking at trends.*

*Please feel free to let me know if you have any questions or concerns.*

### **At the meeting**

- Arrival time. I will arrive at each meeting 10 minutes before the start to set up and greet the convener. Late arrivals are distracting to the meeting participants and they may view such arrivals as disrespectful.
- Take handouts if appropriate. If there are handouts available I will ask if it is okay if I take a set. I will write on the back page the data and place from which I retrieved it.
- Take attendance. As people arrive I will note who is in attendance. If possible, I will also note who is missing.
- Start taking notes right away. I will start observing as soon as I arrive by taking narrative notes about the scene, or any conversations between participants.
- Introducing myself. At the first meeting I attend I will introduce myself either formally or informally.

### **Taking Notes in Large/Whole Group Settings**

- Verbatim notes.
  - Take verbatim notes of what people say as they say it. Do not edit for grammar, inappropriate language or anything else. Use the following format for distinguishing speakers and what they say.  
*BOB NELSON: I think you all are doing a terrific job.*  
*JOE SMITH: I'm worried I am not able to type nearly fast enough.*  
*BOB NELSON: ((He is smiling.)) That's okay. Do the best you can.*  
*((Joe Smith walks around to another small group.))*
  - Use shortcuts when taking verbatim notes (e.g. use people's initials to track their comments, abbreviations for frequently used or cumbersome words) and mark missed text with "..."
  - There is no need to use quote since I will assume that all text not in brackets is a direct quote.

### **Cleaning my Notes**

- Immediately or within 24 hours, I will clean my notes by going through them and taking out all the shorthand. Immediate cleaning of notes is essential since the process is likely to jog my memory of parts of the meeting my may not have recorded but could get into the notes if I capture my memories early. To facilitate cleaning, I will clean my notes in waves. In the first wave, I will focus on removing shorthand and adding in missed data. In subsequent waves, I will add in agenda items and summarize powerpoint slides, etc.
- I will use Ochs (1979) and Wells & Haneda (n.d) transcription methods to detail my transcripts. I note-taking include: [ ] for contextual information, - to indicate an interruption, either by another speaker or by the current speaker for self-interruption, ...

to indicate trailing off in talk, ? for intonation with high rise quality, ! for exclamatory utterance, ( ) to indicate words that are summaries of data and (( )) for verbalizations or nonverbal communication. I was able to denote nonverbal behaviors that would help me with my overall analysis

- I will start each set of notes with the following information:
  - \* Meeting: [insert formal meeting name]
  - \* Date:
  - \* Scheduled/Actual Meeting Time:
  - \* Location:
  - \* Note type: [indicate verbatim or handwritten notes]
- After the header, I will note who was missing and who was present
- Replace all initials with full names (e.g. capitals for all speakers).
- Clean up all your shorthand. If I missed capturing some talk verbatim but while cleaning remember the gist, I will write it in.
- I will add in any bracketed text I think might be useful for clarifying what people are saying and what they mean since I will likely be reading and analyzing these notes months later and may not understand the context. For instance,

*JOE SMITH: That sucked. [ Here I think Joe is referring to the professional development session last week that involved all the principals. I think what he thinks sucked was that the speaker was not very knowledgeable.]*
- For any powerpoint presentations I will include the slide content and summarize figures/graphs.
- I will put agenda items into narrative notes at appropriate section in meeting notes using brackets.
- I will spell out abbreviations the participants use in brackets. For example if a speaker says GE add brackets that say [General Electric].

## **Appendix B: Interview Protocols**

### **Semi-structured interview round #1**

#### ***Individual & school background protocol***

##### *Introduction:*

*Thank you for agreeing to talk with me. I'm studying how principals learn to do their job from in the context of their day-to-day work, specifically how principals work towards improving student achievement by supporting teachers. I'm not evaluating what you are doing, but rather trying to learn from you about your experience with your principal or teachers at this school.*

*Before we start, I want to explain the consent form to participate in this study. This consent form is an agreement between you and me about the confidentiality agreement. I won't be naming or identifying you or this school in the study. [Give them a consent form and have them sign it.]*

This first interview focuses on your background and how you approach your job at this school.

### **First Round Interview Protocol**

#### ***Professional Background and training***

- What is your current professional position at this school?
- How long have you been in this position?
- How did you come to be in this position?
- What were you doing professionally before you came to [district]?
- How long in district?
- How would you describe your professional training? (Probe on specific schools or areas of certification i.e. math, special end)
- What are two main experiences that have shaped how you approach your job?
  - Why are those the most important experiences?
  - To what extent do those experiences impact your day-to-day work?
    - If they do impact, in what way? Probe for concrete examples.

#### ***Supports for position***

- To what extent do you feel prepared for your position? Why?
  - What experiences do you feel prepared you for this position?
  - Why those? (Probe for rationale and concrete descriptions of how those experiences)
  - (If applicable) In what ways did those experiences not prepare you for this position? Why do you think that is?
- What do you find comes naturally or easy to you as [principal/teacher]? Why?
- What do you find more difficult or challenging to you as [principal/teacher]? Why?
- Where do you go for help/assistance if needed?
  - Why? How often?
  - What are the areas of support?
  - To what extent does [name assistance source] help you?
    - How?

- What about [source] do you find supportive?
- *To what extent do you receive support from the central office?*

### ***Descriptions of practice***

- *What are the most important duties of your job?*
  - *How do you know those are the most important?*
- *To what extent do you engage in those aspects on a day-to-day basis? Think of Tuesday or Wednesday of last week. Did you engage in any of those aspects? Why or why not? How typical was that day?*
- *What is one aspect of the job you like the most? Probe for examples.*
- *What do you like least? Probe for examples.*
- *What is one of your biggest professional achievements? Why did you choose that one?*

My next set of questions focuses on your school- the initiatives, curriculum, organization of staff, to get a better understanding the context of day-to-day life at this school.

- How would you describe [school's name] educational program?
  - Probes: What is the curriculum used? What is the instructional approach? What are the services and programs that your school offers?
- How would you characterize the students at this school?
- How many staff does this school have?
  - How long they have worked together?
  - How would you characterize the strengths of the staff at this school?
  - How would you characterize the weaknesses of the staff?
    - How do you go about
- What do you think are the 2-3 main factors that make a school successful in educating students?
  - Why those?
- To what extent do you think your school has those factors?
  - Why or why not? What are 1-2 examples of that?
- What are your 2-3 main goals as a school this year?
- How did you come to focus on those goals?
- What role do you have in meeting those goals?
  - What role do teachers [or principals] have in meeting those goals?
  - Ideally what would the role be [in case respondent says there are barriers to certain people participating in certain ways]?
- How did you come to figure out what you and others would do to figure out how to meet those goals?
  - What were one or two main influences in how that was decided?

If interviewing a principal:

As you know, I'm interested in learning about how a principal engages in day-to-day work. I'm hoping to observe you working with your teachers to get a better sense of how teacher-principal relationships might affect how principals go about day-to-day work.

- Who are two-three teachers that you interact with the most?

- Where do you interact with them? What do you do?
- Would you be open to me observing some of those interactions?

## **Prebrief and debrief interview protocols**

### ***Cognitive interviews***

These cognitive interviews phases will probe participants for details of their practice as they interact with one another, what they understand about boundary objects or practices, and what they consider what affects their interactions and understanding. Interviews will take place approximately four to five months apart to capture how participants express changes in their interactions and their practice.

My main approach is to ask the same set of questions for two interactions. I will adapt this protocol as necessary for the respondents.

*Script: Thank you for taking the time to meet with me. As I've explained earlier, I'm interested in how principals learn how to work with teachers, in the context of their day-to-day work. I'm interested in how that process happens and what factors might influence what they learn. I'm going to ask you a series of questions based on the interaction that just occurred.*

### **Prebrief**

- What is the most important goal your want to accomplish in this meeting? OR what did you think the goal was for this meeting?
  - Why?
  - How are you going to go about doing that?
    - To what extent have you planned what is going to happen in this meeting? (i.e., is there an agenda or a plan that you have for how the time will be spent?)
    - Why did you plan that specifically? What informed you to do \_\_\_\_?
- How would you describe your approach to working with this principal/teacher?
- What do you hope happens after this meeting is over?

### **Debrief**

- Before you went into the meeting, what was your sense of what you were going to talk about in that meeting? What was your intended outcome?
- To what extent did the conversation go as you planned?
  - If went as planned, why?
  - If varied from plan, why? What do you think made the conversation go a different direction?
- Was the outcome of the meeting what you anticipated?
  - If yes, what do you think facilitated that outcome?

- If not, why not?
- To what extent you were able to accomplish what you wanted in this meeting?
  - Why?
  - What happened in the meeting that you think helped you do that?
  - What happened in the meeting that you think hindered your ability to do that?
- How typical was that conversation to previous conversations?
  - What ways was it typical?
  - If, atypical, why do you think this was?
- Let's walk through the exchange for a few minutes. Was there anything in particular that the principal/teacher/ said or did that resonated with you?
  - Why or why not?
- What do you think was happening when [X]?
  - What were you thinking when [X] occurred?  
*Probe for more details of various aspects the interaction.*
- What purpose did the [articles, video, graphic or other documents) have in the meeting? Why did you use it?
  - What purpose did the it serve?
  - If you could re-do the meeting, what other documents or resources would you have liked to have had? Why? What purpose would those serve?
- To what extent will you be thinking about this interaction next week? Next month?
  - Why?

## **Semi-structured interview Round 2**

### ***Revisiting practice***

- What are the most important duties of your job?
  - How do you know those are the most important?
- What is one aspect of your practice that you would like to get better at?
  - Why?
  - What are you doing to get better at that?
  - What supports do you have to help you get better?
  - To what extent do you feel like your efforts to improve have seen results? Why or why not?
- What is one aspect of the job you like the most? Probe for examples.
- What do you like least? Probe for examples.
- What is one thing you are most proud of that you accomplished this year? Why did you choose that one?

### ***Professional development participation***

*Now I'm going to ask you about the different activities that I've observed over the course of the 6 months so I can understand what I've seen. These questions are general and not specific to any teacher.*

- How would you explain what the professional learning sessions were for and what role the principal played in that?
  - How do you know that's what role you should be in these meetings?
  - How close to what you described as the role is what you do in professional learning sessions?
    - What would you say are 1-2 things that you typically do during those times that characterize that?
  - So, take the last professional learning sessions that I was at. If I had a video camera observing you, what would I see you typically doing during that time?
    - Why those things?
    - How close is that to what you think you should be doing?
    - How did you figure out to do that?
- How would you characterize your participation or role in the school improvement team this year?
- What did you want to accomplish with the school improvement team this year?
  - Why that?
- To what extent do you think you accomplished that this year? How do you know?
- If you had to change something about the way that you participated in the team, this year, what would you change?
  - Why?

### ***Helps & hindrances***

- To what extent have there been challenges to your work as a [principal/teacher] this year?
  - What do you think are the sources of those challenges?
- To what extent have you been supported in your work as a [principal/teacher]?
  - What are the sources of those supports?
- To what extent have there been challenges as you work to meet your schools goals?
  - What do you think are the sources of those challenges?
- To what extent have you been supported to meet your school goals?
  - What are the sources of those supports?
- Is there something you wished you knew at the beginning of the year that you know now in terms of your work over the course of the school year?
- If you [or principal] won the lottery and were leaving the school to move to Hawaii, what would advice would you give incoming principal about how to succeed at this school?
  - Why that piece of advice?

## **CODING SCHEME FOR THE ANALYSIS OF CLASSROOM DISCOURSE**

Gordon Wells with DICEP

This document has been compiled over a considerable period of time as the DICEP group has moved towards a specific focus for the analysis of the videorecorded and transcribed observations that have been made in participating teachers' classrooms.

Part 1 contains a proposal for the general orientation to be adopted in investigating classroom discourse.

Part 2 outlines the basic structure of the proposed scheme of analysis.

Part 3 contains the specific coding framework developed for the investigation.

### **PART 1. NOTES ON THE RELATIONSHIP BETWEEN VISION, THEORY AND PRACTICE**

1. The stated goals of our project make it clear that our interest in classroom discourse is neither purely theoretical, nor an attempt to produce a descriptive survey of what happens in classrooms. As is implied by the term 'action research' to describe our collaborative activities, our goals are improvement in action and in understanding, achieved through a dialectic between them.

This means that our project is essentially about change: about reflecting on what is currently happening, imagining possibilities for improvement, acting to achieve them, evaluating the outcome, and increasing understanding by trying to make sense of the whole cycle in terms of some overarching theory(s). Then continuing with a further, related, cycle.

2. This involves us in working on a number of levels - or facets - simultaneously. We refer to these as: 'Vision', 'Practice', 'Theory', 'Data'. Each level illumines, and is illumined by the others; and, at each level, there is a continuing interaction between using the evidence we are collecting for knowledge building, and putting the understanding achieved in this process to good effect in guiding action.

3. Vision. This is what, for each of us, energizes and guides our practice. It can be thought of in terms of a number of goals, which include:

a) creating communities characterized by: inclusiveness, equity, caring, as well as by intellectual achievement;

b) giving a high priority to knowledge building and understanding through inquiry, while not neglecting the routine processes and skills needed to engage in them;

c) encouraging collaboration - between teacher and students, as well as among students; valuing and building, whenever possible, on students' contributions to the activity in progress, so that knowledge is coconstructed, rather than delivered;

d) broadening interests and recognizing and valuing the contributions of 'experts' beyond the classroom; bringing the classroom community into a two-way relationship with communities (local/world-wide, practical/intellectual) beyond the classroom by participating in their practices;

e) acknowledging and taking into account that, whatever the activity, the whole person is always involved (body/mind/feelings/dispositions);

f) providing for individual growth and self-determination as well as for the classroom community as a whole;

4. Practice. Although we can work towards agreement about the vision, we necessarily differ with respect to practice because of the unique combination of conditions and participants that we each work with. But there is another crucial difference between vision and practice. Vision is essentially abstract and 'synoptic'; practice is 'dynamic', realized in the successive actions and decisions of particular individuals and communities in relation to the possibilities and constraints of their material, social and intellectual environments. Although there is clearly a relationship between vision and practice, it is not a simple one, such as is suggested by the term 'implementation'. However, it is towards understanding this relationship, as well as towards optimizing practice, that our individual and collaborative inquiries are directed.

5. Theory. Theory has a dual function. On the one hand, it is what is produced in, and is the outcome of, attempting to make sense of one's own and other people's experience in a coherent and systematic manner. In this function, it is a distillation of the diversity of particular, dynamic experiences in a synoptic model that attempts to explain by reference to more general categories and relationships. A theory is an 'artifact' created in the process of knowledge building in collaboration with others. On the other hand, a theory is only valuable to the extent that it enables us to better understand the situations we find ourselves in so that we can act more effectively. In this sense, a theory is a tool for use in understanding and action.

6. Data are also artifacts; they are specific outcomes of particular activities that, deliberately collected, represent some aspect(s) of those activities. The important thing is that data continue to exist after the activity is over and can therefore be revisited and analysed. Our data consist of videorecordings of classroom activities, texts of various kinds, interviews, email discussions, and recordings of parts of our meetings.

7. Data stand to theory rather as practice stands to vision. Where vision and theory are abstract and synoptic, practice and data are specific and dynamic. However, there is another way of considering them: theory and data, considered as a functional system, can be thought of as a tool that mediates understanding of the relationship between vision and practice.

If this is correct, the theory we use should be compatible with our vision; the explanations it offers of particular instances of practice should be interpretable in terms of the vision. By the same token, the data we focus on should represent central aspects of practice and, when analyzed in terms of the theory, should allow us to judge how far practice is truly realizing the vision.

8. One of the strengths of our overall model is that it is not unidirectional. Investigations of practice can lead to clarifications and enrichments of vision, and analyses of data can lead to development and/or modifications of the theory, as well as vice versa. Equally, theory and vision influence each other, just as, on the one hand, analyses of data help us to see what is actually happening in practice, and on the other, focusing on particular aspects of practice calls for the development of new techniques of analysis derived from the theory.

### **Assumptions Underlying the Coding Scheme**

In devising a scheme for the systematic analysis of discourse, it is important to make explicit the assumptions on which it is based. The following are some issues for discussion.

#### 1. The scope of 'discourse'

The term 'discourse' is used in different ways by different people and on different occasions. In the present context, 'discourse' refers to communication that is both dialogic and linguistically based. It therefore includes written discourse as well as spoken, and inner as well as social discourse. However, in both phylogenetic and ontogenetic development, face-to-face interaction precedes discourse in other modes, and speech serves as the medium in which other modes of meaning-making are most frequently planned, interpreted and discussed. For this reason, the following assumptions are formulated with respect to spoken discourse. They will certainly need to be modified when considering other modes.

#### 2. Episodes of discourse occur as means to the achievement of activity goals

In general, discourse in the classroom, as in other settings, does not occur as an end in itself, but as a means of carrying out some activity(s) in which the participants are jointly involved. It is best understood, therefore, as functioning within a larger framework of mediated social activity (Wertsch, 1994). On this basis, it is proposed (Wells, 1993, 1996) that the scheme of analysis should be constructed on the basis of an articulation of activity theory (Leont'ev, 1981; Engestrom, 1991) and systemic linguistics (Halliday, 1978, 1993).

Furthermore, spoken discourse is only one of several mediational means, including action with material objects, drawing, reading, writing, etc., that are employed to achieve the goals of classroom activities. Episodes of spoken discourse can therefore be thought of as co-occurring or alternating with, and thereby complementing, other forms of semiotic behaviour in operationalizing the tasks that make up those activities.

The relationship between discourse and the goal of activity varies. In some cases, the activity

goal is constituted and achieved solely through the discourse (e.g. constructing a theoretical explanation of something); in other cases, a proposed, ongoing, or past activity forms the topic of the discourse; in yet others, the discourse takes place in parallel with a non-verbal activity, which is the primary focus of attention. In all cases, however, discourse may also play a 'meta' role in (re)negotiating the goal of the activity or task, and in monitoring and evaluating progress toward it.

### 3. Discourse is necessarily collaborative; but this does not imply agreement

Discourse is necessarily collaborative - at least to some degree. Individual contributions are only effective if they mesh with co-participants' interpretations of the situation, including the activity in which they are jointly engaged and the preceding discourse contributions. However, this does not mean that there is uniformity of purpose or of interpretation. In other words, while intersubjective agreement is normally the aim of interaction, it is not a prerequisite condition for collaboration. Indeed, without some divergence or disagreement, there would be no increase in individual or shared understanding (Matusov, 1996).

In multi-party talk, particularly where there are inequalities of status or power, there may be multiple purposes, some of which may be in conflict. Furthermore, as would be expected from a constructivist perspective, participants' interpretations of others' meanings are always coloured by their own current preoccupations as well as by their personal construal and knowledge of the topic, and of what is said and done, based on their past experience.

Even discourse with self is collaborative, when the larger context of activity to which it relates is taken into account. This is true not only for the means used - the social language from which the medium of inner speech is derived. It also holds for the functions of inner discourse, which are often both dialogic in nature and oriented towards previous or subsequent direct participation in social activity.

### 4. Discourse is both emergent and generically structured

Because discourse is progressively constructed by multiple participants, move by move, its meaning and structure are constantly emerging. Each move takes account of what preceded and, in turn, sets up affordances and constraints for what will follow. At the same time, no move can fully control what follows; its import for the discourse is only seen in the way in which it is taken up in subsequent moves. However, this does not mean that there is no larger organizational structure. Drawing on Bakhtin's (1986) work and on current genre theory (Kamberelis, 1995), discourse can be thought of as being made up of segments on different scales, from minimal exchanges to lengthy episodes, each based on a generic organizational pattern of constituent parts that is the culturally accepted way of carrying out the task or activity which it serves to operationalize. To a considerable extent, making an effective move is dependent on recognizing which genre or micro-genre is currently being co-constructed and making a contribution which is interpreted as being appropriate in this context.

The degree of constraint on what move can be made at successive points, and hence the extent to which the larger structure is predictable, depends on the nature of the activity, the extent to

which there is a specific genre associated with it, and the degree to which one participant exercises control over the way in which the discourse unfolds. Teacher-directed, whole-class 'recitation' discourse, for example, tends to be organized in a hierarchical-sequential manner according to the principle that one unit is completed before the next one starts, with the teacher both initiating and completing each unit and determining who may participate and the nature of the contributions that will be accepted. However, in less controlled situations, and where there is greater equality among participants, the sequential organization is constantly under negotiation and is sometimes contested. Furthermore, more than one person may speak at the same time and there may be more than one conversation going on simultaneously within the same group. There are also occasions when one unit may be embedded within another (e.g. to negotiate problems in the interaction).

#### 4. Meaning is situated in the ongoing activity, which is linked to other related activities within the culture and within the experience of each of the participants

The meanings made in discourse are always situated with respect to the particular activity in which they occur and to the point reached in that activity. Discourse moves thus cannot be taken as context-free expressions of the speaker's 'true' beliefs and attitudes, but must be understood as strategic contributions, designed to advance the current discourse towards the goal envisaged by the speaker (which may not be the same as that envisaged by other participants).

Meanings are also strongly influenced by the connections made by participants to related experiences, both personal and collective. These exist on several time-scales: within the current activity/discourse; within the participants' individual and collective experience of similar or related activities in their community; within the history of the activity in the culture more generally. Some of these connections concern the 'content' of the activity; others relate to the 'ground-rules' for participation (Edwards and Mercer, 1987). Connections are also made to other texts, both spoken and written - to the information they contain, and to the responses they evoke. These various types of connection and the constitutive role they play in the ongoing process of collaborative meaning making are referred to in terms of 'intertextual relations' (Lemke, 1994).

#### 5. Discourse proceeds simultaneously on multiple dimensions of meaning

Participation in discourse involves the whole person, body and heart as well as mind. Moves not only refer to aspects of the world and theories about the world, they also express the speaker's involvement in and attitude to this 'content', as well as adopting an orientation to the other participants with respect to both content and involvement. (To complicate matters, the same move may be intended to be taken up differentially by different co-participants.) Moves are also strategically shaped to fit the generically defined slot in which they are placed in the unfolding discourse (i.e. as answer to a question, or as 'another anecdote of the same kind').

Only some of this complex web of meaning is realized lexico-grammatically (although this tends to be the only semiotic modality that is adequately captured in a written transcription). Other significant modalities include various parameters of intonation, pacing and pausing, gaze, gesture and spatial orientation to the people and objects involved in the activity.

When considering the functions of moves, therefore, it is not adequate to describe only the function encoded in the lexico-grammar, and still less to focus only on the 'ideational' function.

### **Implications**

The implications of basing analysis on these assumptions seem to include the following:

1. We should try to ensure that written representations of actual discourse data are as 'thick' as we can make them by: a) providing as much detail as possible about the participants, the activity and the historical, social and intellectual context; b) including information about the modalities of meaning-making that are not represented lexico-grammatically.
2. While recognizing and attempting to convey the uniqueness of each event, we should also attempt to describe events in terms of a common framework and make use of a common set of analytic categories.
3. We should accept that there is no single, correct, analysis of any event. Like moves in discourse, analytic codings or descriptions are always situated and depend on the analyst's purpose and perspective. In addition, multi-party events can be viewed from the perspective of more than one of the participants and thus give rise to alternative, but complementary analyses. Since it is impossible to do justice to all perspectives, it is important to make clear what perspective is adopted and to recognize the limitations and/or bias that this entails.

## PART 2. UNITS OF ANALYSIS AND THE RELATIONSHIP BETWEEN THEM

Table 1 shows the relationship of discourse to activity. In educational settings, it is convenient to use the more familiar terms of ‘Curricular Unit’, ‘Activity’, and ‘Task’ to label the units of activity in the classroom. These correspond to the level of ‘action’ in activity theory. Again to avoid confusion, we use the term ‘Practice of Education’ to refer to the highest level of activity theory. Each teacher has her/his own vision of what the practice of education should be chiefly concerned with and it is to realize this vision that s/he selects the topics and approaches used at the level of curricular unit, activity and task. But it is ultimately through the ‘operations’ of meaning making in which the community and its individual members engage that the vision is put into practice.

It goes without saying that this section presents a highly synoptic representation. In reality, the relationship is as much bottom-up as top-down, and it is always to a considerable degree emergent.

Table 1. The Enactment of the Practice of Education

<u>‘ACTIVITY’</u>	(Motive)	<u>‘ACTION’</u>	(Goal)	<u>‘OPERATION’</u>	(Means)
Practice of Education	(a) cultural reproduction	Curricular Unit	Increasing mastery of: (a) content knowledge (b) discipline-based practices (c) tools & artifacts (d) metacognition (e) collaboration etc.	Curricular Activity	Use of semiotic tools, including spoken discourse , e.g. Curriculum genres (cf. Christie, 1993)
	(b) development of individual potential				
	(c) fostering of communities of inquiry				
		Task	Completion of a component of an activity outcome		e.g. Co-construction of episode of discourse
		Step	Contribution to outcome of task		E.g. Co-construction of sequence of discourse, using a microgenre, e.g. triadic dialogue

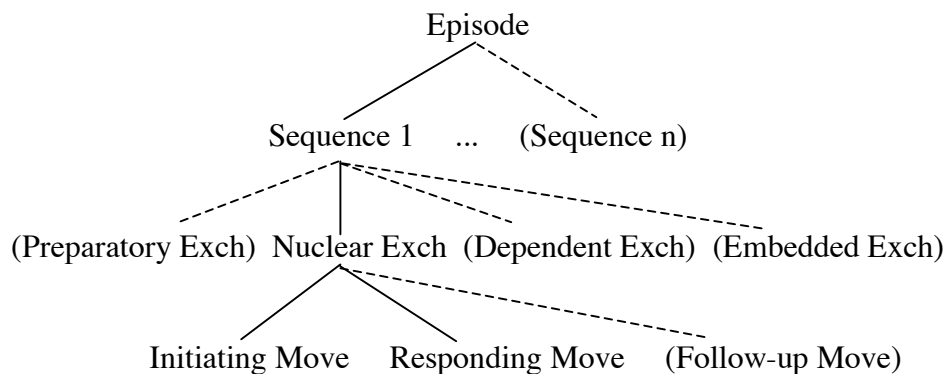
## The Constituency Relationship Between Units of Spoken Discourse

Table 2, and the accompanying figure 1, show the hierarchical relationship between units of discourse. Each unit consists of at least one unit of the level below. In practice, however, higher level units are always built up over real time from units at levels below.

Table 2. The Constituency Relationship Between Units of Spoken Discourse

<u>Episode:</u>	Typically corresponds in scope to a recognizable task within a curricular activity.
<u>Sequence:</u> the	All the moves required to fulfill the expectations set up by the initiating move in the nuclear exchange around which it is organized.
<u>Exchange:</u>	The minimal unit of interaction, it consists of an initiating move and a responding move; in certain types of discourse, there may also be a follow-up move.
<u>Move:</u> a	A contribution to an exchange made by a participant in a single speaking turn. (Note: A turn may involve moves that contribute to more than one exchange, and a move may also function as an (implicit) response in one exchange and as the initiation of the following exchange.)
<u>Act:</u>	A move, or one of its constituents, viewed from the perspective of the speech function it realizes.

Figure 1. The Hierarchical Relationship Between Units of Discourse



## Segmentation into Units

In order to carry out systematic analysis, even of a simple kind, it is necessary to segment the stream of speech (or its transcribed representation) into functional units - at least roughly. Participants must do this (in an informal and barely conscious manner) in order to know where they have got to in the conversation. But they do it in the moment, with only their own interpretation of what has already been said to base their judgments on. The analyst is in the privileged position of being able to view the whole conversation, as it were synoptically from above, and to see how particular moves were subsequently taken up (or not) in subsequent moves.

While for some purposes it is not necessary to code every episode in detail, it is probably useful to mark boundaries between sequences and clusters of related sequences in order to get a general idea about how the episode developed. However, when coding in detail it is a good idea to adopt the participants' perspective as the primary one when deciding where a unit ends and a new one begins; of course the analyst also has the ability to look ahead to see whether what was expected actually transpired. Nevertheless, in practice - despite the categorical nature of the descriptions below - boundaries between units are not always clear-cut. Nor is it always easy to decide whether a particular move is part of an exchange/sequence already in progress or the beginning of a new one. A good test is to ask how the participants treated the decision.

In the following notes, units are arranged in descending order of size and scope. In conversation, participants construct one move at a time on the basis of what has gone before. In certain respects, coding works from the larger units down. However, it is important to remember that coding is an attempt to represent what the participants were understanding and doing.

An episode consists of the interaction that takes place in carrying out some recognizable task or sub-task. In general, episode boundaries are signalled by a change of task (often announced, in whole class activities) or by a change of participant structure. For this reason, episodes often begin and end with boundary exchanges (which may, of course, consist of a single initiating move, to which no-one bothers to respond, or at least not verbally). Episodes consist of an indefinite number of sequences which are linked either by continuity of topic or of the action to which they refer. In some cases, the episode may consist of a number of clusters of sequences, each of which has internal coherence, and is related to other clusters, either by the sequential organization of the practical task or the larger discourse task in which the participants are engaged. This is where the concept of 'action type' or 'curriculum genre' can be helpful.

A sequence is organized around its nuclear exchange. In the initiating move of an exchange, a speaker proposes an interactional purpose with respect to some form of information or goods or service. In the simplest case, this purpose is completed in the responding move, or in the follow-up move when one occurs. However, there may be additional exchanges that facilitate or contribute to the achievement of this purpose: either by preparing for it; elaborating or qualifying it; or by dealing with various types of difficulty - of hearing, reference, identification, etc.

A sequence may thus be defined as a nuclear exchange and all exchanges that are bound to it (i.e. exchanges that cannot stand on their own but take on their meaning and function in relation to the

nuclear exchange). Sequence boundaries also tend to be marked by the fact that, typically, a sequence starts with a move uttered with intonation relatively high in the speaker's pitch range; then, over the sequence as a whole, subsequent moves will tend to be lower in pitch, with the final move lower in pitch than those that have preceded.

An exchange consists minimally of an initiation move and a response move and, in certain types of exchange, of a follow-up move; these moves are organized in terms of 'commodity' and 'prospectiveness'. The commodity is what is 'exchanged', either 'information' or 'goods and services'; and prospectiveness concerns the extent to which the current move sets up expectations for what follows or meets expectations already set up (Halliday, 1984). There are three basic levels of prospectiveness - high, mid, low - corresponding, respectively, to the speech roles of demanding, giving and acknowledging. These generalized roles map on to the three move types of Initiate, Respond and Follow-up. Where the initiating move makes a demand, a give is expected as a response and this, in turn, is usually followed by a follow-up move that, minimally, acknowledges what has been given. Where the initiating move takes the form of a give, the response move expected is an acknowledge and there is unlikely to be a follow-up move.

Exchanges can be of four types. Every sequence contains a nuclear exchange. Sometimes, as when children bid and/or the teacher nominates, the nuclear exchange is preceded by a preparatory exchange. Dependent exchanges may extend or modify some part of the nuclear exchange, by giving details of when, where or why; they may also be used to request a justification or clarification of the response move. Embedded exchanges interrupt an ongoing exchange, usually to deal with problems of communication.

Moves consist of one or more acts. Typically, one of these acts will realize a combination of the generalized commodity and speech roles referred to above in a way that is appropriate to the sequential position of the move in the exchange, e.g. 'question' (demand-information) and 'answer' (give-information-on-demand), 'statement' (give-information-without-demand), 'request' (demand-goods/services), 'offer' (give-goods/ services-without-demand), etc. Additional acts may amplify, qualify or justify the 'head' act in some way.

Within a move, acts may be realized either consecutively or simultaneously. Acts concerning the commodities of information or goods/services are typically realized consecutively, e.g. a request followed by a justification. Acts involving attitude, affect, etc. are typically realized simultaneously with the former.

N.B.: This is an oversimple account of acts, moves and exchanges, as it focuses almost exclusively on the organization of the 'ideational' function of interaction, i.e. what the talk is ostensibly about. However, other 'commodities' such as status, power, attitude, affect and so on, are also at issue. How these map on to the sequential organization is still very much in need of systematic investigation.

### Subcategorization

At each level, categories are more delicately subcategorized according to the specific purpose of the proposed analysis.

### **PART 3. CODING FRAMEWORK FOR THE ANALYSIS OF THE USE OF FOLLOW-UP MOVES**

The following framework has been developed to permit investigation of the contexts in which different options are selected to realise the Follow-Up move in triadic dialogue and of the consequences of these selections for the subsequent discourse. A deliberate aim of several of the contributing teachers has been to promote a more collaborative form of knowledge building in the classroom through the co-construction of "progressive discourse", in which all participants build on each other's contributions towards a common understanding of the topic under consideration. One of the principal questions to be investigated is how the selection of different follow-up options may contribute to the achievement of this aim. The revised version (2001) incorporates categories from Nystrand et al. (2000) that address the cognitive demand of questions and the extent of uptake in the Follow-up move.

The coding framework is designed to permit selected episodes of videorecorded and transcribed observations to be coded as a succession of "records", where each record corresponds to an exchange. All exchanges are coded, whether or not they contain a follow-up move; however, where a follow-up move occurs, it is coded in some detail, with provision for up to three different acts. In order to allow occurrences of follow-up moves to be related to what precedes and what follows, each record contains information about the episode and sequence in which the exchange occurs; where a follow-up move occurs, the exchange is also coded for its sequel in the immediately following discourse.

The remainder of this section consists of two parts: the coding instrument that is used by the coders, and a more detailed definition of the subcategories, where this is considered necessary.

#### **The Coding Instrument**

The instrument assumes that coding will be carried out by (a) segmenting the transcript into its successive constituent exchanges, and then (b) for each exchange, entering the appropriate code in each of the numbered columns in the coding protocol corresponding to the categories in the coding instrument.

<u>Column</u>	<u>Field</u>	<u>Categories</u>
1	Episode #	1 - n
2	Episode Task	M Math Discussion P Science Practical S Science Discussion D Science Presentation O History Practical H History Discussion R History Role-Play L Literature Discussion B Reading Discussion W Writing Discussion T Show and Tell
3	Participant Structure	C Whole Class G Group D Dyad
4	Episode Activity Orientation	C Commenting O Organizing P Planning T Reporting S Problem-Solving G Generating L Launching B Constructing F Formulating M Monitoring R Reviewing
5	Sequence #	1 - n
6	Sequence Start	# Line number of Sequence start
7	Episode Development	N New Topic F Further A Adds E Extends S Consolidates C Challenges R Shifts to related. O Relationship opaque

8	Student Link	A C E O	Adding Challenging Extending Reference opaque
9	Exchange Type	N D M P &N	Nuclear Dependent Embedded Preparatory Additional Nuclear
10	Cognitive Demand	R P M G A S	Rote recall Previous Conversation Memory/Prior Knowledge Generalization Analysis/Explanation Speculation
11	Exchange Initiator	T S N	Teacher Same student as involved in previous exchange/sequence New student
12	Initiation Prospectiveness	D G G+	Demand Give Give Plus
13	Demand Subcategories	D F FI C CI A AI P PI	Action Full Clause (or more) Full (Implicit) Single Constituent Single Constituent (Implicit) Choice of Alternatives Choice of Alternatives (Implicit) Polar (Yes/No) Polar (Implicit)
14	Give Subcategories	E C A P	Extended Response Single Constituent Alternative Polar (Yes/No)

15	Initiation Function	<p>Information: Assumed Known</p> <p>F Fact  A Rule-governed answer  J Conventional explanation  R Report of public event  L Connection</p> <p>Information: Personal</p> <p>E Experience  I Imagination  N Personal Opinion  K Exclamation</p> <p>Information: For Negotiation</p> <p>O Opinion  P Prediction  X Explanation  C Conjecture  B Connection</p> <p>Goods &amp; Services: Assumed Known</p> <p>D Act</p> <p>Goods &amp; Services: Personal</p> <p>G Intention</p> <p>Goods &amp; Services: For Negotiation</p> <p>S Suggestion</p> <p>Q Clarification Request</p>
16	Responder	<p>T Teacher  S Same student as in previous exchange  N New Student  P Pivot (Responds by Initiating)  F Feedback (Responds with Follow-up)  Q Clarification Request  Z Clar.-&gt; Return to Nuclear Exchange</p>
17	Response Function	<p>K Acknowledge  Y Confirm/Disconfirm  U Stall  W Exclamation</p>

Information: Assumed Known

- F Fact
- A Rule-governed answer
- R Report of public event
- J Conventional explanation
- L Connection

Information: Personal

- E Experience
- I Imagination
- N Personal Opinion

Information: For Negotiation

- O Opinion
- P Prediction
- X Explanation
- C Conjecture
- B Connection

Goods & Services: Assumed Known

- D Act

Goods & Services: Personal

- G Intention

Goods & Services: For Negotiation

- S Suggestion

- Q Clarification Request

- Z Give Clarification

- M Cite text (e.g. cite a question)

18 Response Length

- 1 Minimal (less than 1 clause)
- 2 Main clause (+ dept. clause)
- 3 Three or more clauses

19 Follow-up

- T Teacher
- S Same student as in previous exchange
- N New Student
- A Other Adult

20	Follow-up Prospectiveness	A Y R G D G+	Acknowledge Accept Reject Give Demand Give+
21	Evaluation Level	H P Q J L N	Accept + Uptake Accept + Praise Follow-up Question Reject + Justification Accept/Reject Null Evaluation
22	F1 Prosp.	A G D	Acknowledge Give Demand
23	F1 Commodity	V J C U A M	Evaluation Justification/Explanation Comment Clarification Action Metatalk
24	F1 Subcat. (Contingent on choice of Commodity)		

Evaluation

A	Accept
R	Reject
C	Correct
F	Reformulate
D	Counter
Y	Repeat (accept)
N	Repeat (reject)
P	Praise

Comment

E	Exemplification
A	Amplification
C	Connection
S	Summarise
O	(Demand) Opinion
D	(Demand) Description
L	(Demand) Observation

Action

- N Now
- F Future
- S Suggestion

Clarification

- R Repetition
- I Identification
- C Confirm

Metatalk

- C Metacognitive
- O Metaorganizational

- 25 F1 Length 1 Minimal
- 2 Main Clause (+ dept. clause)
- 3 Three clauses or more

26-28 F2 (as for F1)

29-32 F3 (as for F1)

- 33 Sequel Type
- M Embedded Exchange contin.
- D Dependent Exchange contin.
- F Sequence: Further
- A Sequence: Adds
- E Sequence: Extends
- S Sequence: Consolidates
- C Sequence: Challenges
- R Sequence: Shifts to related
- O Sequence: Relationship opaque
- N New Topic
- Z End of Episode

## Definitions of Selected Categories and Sub-Categories

Only those categories judged to need further explanation are included below. The number at the beginning of each sub-section corresponds to the relevant column in the instrument above.

The coding framework assumes the theoretical perspective outlined in section 2 above, in which the majority of events that make up life in classrooms are seen as the goal-directed activities through which the Practice of Education is realized. Many of these activities, in turn, are made up of constituent tasks, that, together and in sequence, work towards the achievement of the goal(s) of the activity. Within this activity structure, discourse functions as one of the means by which the goals of activities and tasks are operationalized.

Since an episode is defined as the discourse that mediates the achievement of an activity or of one of its constituent tasks, it is important to provide a characterization of the activity/task from the perspective of the setting it provides for the discourse that occurs. Here, the approach adopted draws on register theory, as developed by Halliday (1978; Halliday and Hasan, 1989) and Martin (1992). Halliday proposes that settings, or situation types, can be described on three dimensions: field, tenor and mode. In the present scheme, field is coded in terms of "episode task", tenor in terms of "participant structure" (3), and mode in terms of "activity orientation".

### 2. Episode Task

Classroom activities and tasks are thought of as falling into the cells of a two-dimensional matrix, where the "subjects" that make up the school timetable form one dimension, and the nature of the students' involvement the other. This latter dimension has four alternatives:

Practical	This form of involvement is often described as "hands-on"; it involves physical action, often on material objects. The prototypical examples would be science experiments, model making, gym activities, etc. By extension, it is taken to include the activities of writing, drawing and reading, where these are the focus of attention.
Discussion	This form of involvement occurs when the focus of attention is talk in which there is alternation of speakers.
Presentation	This form of involvement is more monologic. As well as teacher exposition, it includes activities where one or several students present their work to the rest of the class.
Role-Play	In this form of involvement, students take on roles appropriate to the topic and adopt the perspective of the role adopted.

In principle, activities corresponding to all the cells in this matrix could occur. However, in this instrument, only those cells that are relevant for our database have been included.

### 3. Participant Structure

In this investigation, only those activities that involve the teacher as one of the participants are being coded. These fall into three subcategories: teacher with whole class, group and dyad.

### 4. Activity Orientation of Discourse

Here, the activity/task is categorized in terms of mode: what role does the talk play in mediating the goals of the activity/task?

- C Commenting Talk, descriptive or evaluative, about an ongoing activity.
- O Organizing Talk that organizes, directs or monitors an ongoing or about-to-occur activity.
- P Planning Talk that considers and plans a forthcoming course of action, event or unit of work.
- T Reporting Talk that narrates or describes a past event (e.g.what we did). Can include report of text read or written.
- S Problem-Solving Seeking, constructing, testing and evaluating a solution to a problem of a practical, social, symbolic or imaginative kind.
- G Generating Talk to brainstorm, generate and gather ideas.
- L Launching Talk to arouse interest and relevant information for a new topic.
- B Constructing Developing an account, argument or explanation orally.
- F Formulating Talk to develop an account, argument or explanation in the form of a written, visual or other permanent representation.
- M Monitoring Talk concerned with checking work completed, the processes used or the skills, information or understanding retained.
- R Reviewing Talk that retrospectively reviews an activity or unit completed to discover What has or has not been achieved, what issues remain, and/or what processes proved successful or problematic. This is likely to involve adopting a 'meta' stance at least part of the time.

### 7. Episode Development

The purpose of this category is to describe the relationship between successive sequences in the development of an episode. The code describes the way in which the current sequence is related to previous sequence(s).

- N New Topic (typically at the beginning of an episode).
- F Further (parallel) contribution on same topic.
- A Adds to previous sequence through example, anecdote, etc.
- E Extends previous sequence by developing, justifying or generalizing it.
- S Consolidates previous sequence(s) in summary, conclusion, etc.
- C Challenges or counters previous sequence ("yes, but..")
- R Shifts to related topic, making connection explicit.
- O Relationship to previous sequence vague and inexplicit.

#### 8. Student Link

The purpose of this category is to identify occasions on which a student explicitly makes reference to a previous contribution and to describe the nature of the connection.

- A Adds to a previous contribution with an example, anecdote, etc.
- C Challenges or counters it with an objection or alternative.
- E Extends it by developing, justifying or generalizing it.
- O Makes reference but does not make connection explicit.

#### 10. Cognitive Demand

Nystrand et al. essentially distinguish between ‘high’ and ‘low’ level demand, with further subcategories of each. The demand level is judged according to the form and the basis of the answer that is intended or expected.

Thus, the cognitive level of questions cannot be judged altogether from words alone. For example, if the teacher expected students to answer questions by reciting information found in textbooks, we coded questions as reports regardless of their linguistic structure. Hence, though a why-question will normally elicit an analysis, it will elicit a report (= “rote recall” or “Memory/Prior Knowledge” or based on “Previous Conversation”) if the teacher’s focus is the recitation of a textbook’s analysis rather than the class’s reflection or a student’s understanding; then “Why?” really means, “According to your text, why did it happen this way? Do you remember?” In this instance the teacher is seeking only recitation. These are all low level demands.

High level demands call for:

Generalizations display inductive reasoning, building up ideas rather than breaking them down. They address questions such as: What happens? What do I make of what happens? They tie things together, and they are not restatements of information.

Analyses display deductive reasoning, breaking concepts, ideas, and arguments down rather than building up ideas. To be scored as analyses, questions had to require more than restatements of known information.

Speculation considers possibilities, going beyond the information given.

Information about personal experience seems to fall outside this scheme. It should be coded simply as Information.

## 12. Function of Initiating Move

The opening move in triadic dialogue makes a Demand, the response to which can be followed up in various ways. Demands for both Information and Goods/Services seem likely to elicit different types of response depending on whether what is demanded is:

Assumed Known, i.e. the response can be evaluated in terms of criteria of conventional correctness, which the student is held responsible for knowing.

Personal, i.e. the student is invited to respond from his/her own personal perspective, which is treated as sui generis.

Exploratory, i.e. the response is interpreted in terms of its contribution to the ongoing joint activity; while there are no criteria of 'correctness' against which it may be evaluated, the responder may be held accountable for justifying its relevance or appropriateness. The purpose is to negotiate towards consensus.

The same distinctions can be applied to initiating moves that are Give in prospectiveness. The following are the subcategories recognized:

Information:	Assumed Known
F	Fact: Information of a public kind which the student(s) are expected to know and be able to remember.

- A Rule-governed answer: Solution to a problem of an algorithmic kind, as in arithmetic, which the student(s) are expected to know or be able to compute.
- J Conventional explanation: Culturally recognized explanations in terms of cause, reason, etc., which the student(s) are expected to see as being appropriate.
- R Report of public event: An account of an event which the student(s) are expected to be familiar with.
- L Connection: Connections, other than of an explanatory kind, that the student(s) are expected to be able to make.

Information: Personal

- E Experience: Events in the speaker's life that are not assumed to be known to other participants.
- I Imagination: A personal response of an imaginative kind to a situation or work of art, etc.
- N Opinion: What the speaker personally believes about a topic or situation of personal concern.

Information: For Negotiation

Individual contribution to a group attempt to find a solution or reach a conclusion not known in advance.

- O Opinion: What the speaker personally believes about a topic or situation.
- P Prediction: What the speaker personally believes or conjectures will happen in an experiment or narrative.
- X Explanation: Speaker's personal explanation (as opposed to an attempt to repeat the conventional explanation) for an event or state of affairs.
- C Conjecture: Information that the speaker judges to be relevant to the topic under discussion.
- L Connection: A link to another topic that is thought to be relevant for the discussion in progress.

Goods and Services: Assumed Known

- D Act: Perform an action of a conventional kind, which the student(s) can be expected to manage.

Goods and Services: Personal

- G Intention: An action that the student intends or wishes to perform.

Goods and Services: For Negotiation

- S Suggestion: A proposal concerning an action to be performed.

Clarification

- Q Clarification request.

At any point in a sequence after the initiating move, a next speaker may make a request for clarification with respect to the preceding move. This has the effect of initiating an embedded exchange which, when the problem is resolved, may be followed by a return to the point in the sequence that had been reached before the clarification request was made.(See also columns 17 &18)

## 16. Responder

In addition to identifying the role of the person providing the response in the exchange, this column is used to note non-canonical ways in which the response slot may be filled.

- P Pivot: In a nuclear exchange initiated by a Give, instead of explicitly providing the anticipated acknowledge, the next speaker may implicitly acknowledge the previous give by making an initiating move in a new and (usually) related sequence.
- F Feedback: In the same situation, the next speaker may make a contribution that functions more like one of the subcategories of Follow-up. In this case, an F is entered under responder, and the move described in the columns for follow-up.
- Q Instead of providing a response, the responder requests clarification.
- Z In responding to a request for clarification, the responder effectively returns the conversation to the point reached before the clarification request was made.

## 17. Response

- A Acknowledge: the typical, minimum, response to an initiating move that Gives Information.
- Y Confirm/Disconfirm: A polar (yes/no) response, or any synonym of such, that either confirms/disconfirms or agrees/disagrees with the proposition in the preceding move.
- U Stall: The responder avoids answering the question, typically by “Well..”

### Information: Assumed Known

- F Fact: Information of a public kind which the student(s) are expected to know and be able to remember.
- A Rule-governed answer: Solution to a problem of an algorithmic kind, as in arithmetic, which the student(s) are expected to know or be able to compute.
- J Conventional explanation: Culturally recognized explanations in terms of cause, reason, etc., which the student(s) are expected to see as being appropriate.
- R Report of public event: An account of an event with which the student(s) are expected to be familiar.
- L Connection: Connections, other than of an explanatory kind, that the student(s) are expected to be able to make.

### Information: Personal

- E Experience: Events in the speaker's life that are not assumed to be known to other participants.
- I Imagination: A personal response of an imaginative kind to a situation or work of art, etc.

### Information: For Negotiation

Individual contribution to a group attempt to find a solution or reach a conclusion not known in advance.

- O Opinion: What the speaker personally believes about a topic or situation.
- P Prediction: What the speaker personally believes or conjectures will happen in an experiment or narrative.

- X Explanation: Speaker's personal explanation (as opposed to an attempt to repeat the conventional explanation) for an event or state of affairs.
- C Conjecture: Information that the speaker judges to be relevant to the topic under discussion.
- L Connection: A link to another topic that is thought to be relevant for the discussion in progress.

Goods and Services: Assumed Known

- D Act: Perform an action of a conventional kind, which the student(s) can be expected to manage.

Goods and Services: Personal

- G Intention: An action that the student intends or wishes to perform.

Goods and Services: For Negotiation

- S Suggestion: A proposal concerning an action to be performed.

Clarification

- Q Clarification : Instead of providing a response, the responder makes a request for clarification.  
At any point in a sequence after the initiating move, a next speaker may make a request for clarification with respect to the preceding move. This has the effect of initiating an embedded exchange which, when the problem is resolved, may be followed by a return to the point in the sequence that had been reached before the clarification request was made. Clarification may be requested as:  
  
  - Repetition: Requests the previous speaker to repeat what s/he has just said, either in the same or similar words.
  - Identification Requests the previous speaker to identify unambiguously what s/he intended to refer to.
  - Confirm: Requests a confirmation/denial of the truth or validity of something that was previously said (often realised as a tag or rising intonation on the current speaker's utterance).
- Z In responding to a request for clarification, the responder effectively returns the conversation to the point reached before the clarification request was made.

## 19. Prospectiveness of Follow-up Moves

As with other moves, Follow-up moves can be described by a combination of Prospectiveness and Commodity, with further subcategorization of Commodity. In this column, only the effective prospectiveness of the Follow-up is coded, i.e. that of the segment that selects the next move in the sequence (if any) or that closes the sequence.

Prospectiveness:

- A            Acknowledge: Indicates that the previous utterance has been taken into account by the speaker. This is a minimal F move and is quite rare. It might be realized by "OK" or "Yes" said without evaluative overtones.
  
- G            Give: The F move provides a response to the previous responding move. It is thus, technically, the Initiation of a Dependent Exchange. However, it rarely expects or receives a responding Acknowledge.
  
- D            The F move, in responding to the previous response, calls for a further response from the same or a different speaker. Depending on the Commodity requested - either a repetition or clarification of the previous response, or some further contribution, the Demand initiates either an Embedded or a Dependent Exchange.
  
- G+          A Follow-up move that starts like a comment may have a tag appended or be given final rising tone, which effectively makes the move a Demand. Like a Demand, a Give Plus expects a response.

## 20. Evaluation Level

Nystrand et al. distinguished 'high' and 'low' level evaluation, with 'high' involving some form of 'uptake.'

Uptake. The issue here concerns the way in which the previous response is taken up. Is the response given recognition in its own right by being included in some way in the follow up move? Uptake can be realized in a comment that explicitly recognizes the previous response and builds on it in some way; or it can be realized in a question that asks the previous responder to extend what s/he said.

[We defined uptake as occurring when one conversant, e.g., a teacher, asks someone else, e.g., a student, about something the other person said previously (Collins, 1982).

Uptake is often marked by the use of pronouns, e.g., "How did it work?", "What caused it?", "What city grew out of this?" In each of these questions, the italicized pronoun refers to a previous answer.

To qualify as uptake, a question must incorporate a previous answer, not a previous question; hence,

we did not code as uptake teachers making reference to questions or remarks they had previously made.

Do not consider as high-level a teacher's introduction of new information in response to a student answer unless the teacher incorporates a previous student answer; the criterion is the importance of the student as a source of new information.

We coded teachers' evaluation of student responses as high when the student contributed something new (i.e., new information) that changed or modified the topic of discourse in some way, and was acknowledged as such by the teacher. In other words, when a teacher's evaluation is high-level, the student really "gets the floor." Specifically, we operationalized high-level evaluation using two criteria: (a) the teacher's certification of the response ("Good," "Interesting," etc.) and (b) the teacher's incorporation of the response usually in the form of either an elaboration (or commentary, e.g., "That's important because . . .") or a followup question (e.g., "Can you say more about that?" or "Why do you say that?"). That is, for level of evaluation to be coded as high, the evaluation had to be more than "Good," "Good idea," or a mere repeat of a student's answer. In all instances of high-level evaluation, the teacher validated the student's answer so that it affected the subsequent course of the discussion. ]

Accept + Uptake: as described above

Accept + Praise: More than mere acceptance; the praise is explicit.

Reject + Justification: As well as rejecting the preceding response, the speaker gives a reason.

Accept/Reject: Indicates that that the information provided or action performed is thought to be appropriate or inappropriate by the speaker.

#### 21. Function of Follow-Up: Commodity:

F moves that are G or D in prospectiveness introduce new material into the exchange in which they occur. The possibilities recognized are:

- |   |   |
|---|---|
| V | Evaluation: Expresses or calls for an opinion about how useful or appropriate another person's contribution (in words or action) has been.        |
| J | Justification/Explanation: Provides or requests an argument to support a preceding contribution or to show that it was reasonable or appropriate. |
| C | Comment: Makes or requests a comment that extends or modifies a preceding contribution.   |
| U | Clarification: Requests a repair with respect to the previous contribution.   |
| A | Action: Makes a request referring to action.  |

M Metatalk: Treats the discourse as the topic for discussion.

### Evaluation:

The subcategories of Evaluation are:

- A Accept: Indicates that the information provided or action performed is thought to be appropriate by the speaker.
- R Reject: Indicates that the information/action is thought to be inappropriate by the speaker.
- C Correction: Indicates that something previously said or done is considered to be wrong, and expresses the speaker's view of how the error should be rectified.
- F Reformulate: Expresses in different words (often more concisely or completely) something that was said by a previous speaker.
- D Counter: Expresses disagreement by offering another argument or an alternative interpretation of a point made by a previous speaker.
- Y/N Repeat: The speaker reiterates what someone has previously said, either in the same or very similar words in order either to accept or reject the move in question, with the evaluation signalled by intonation and by what is done in the following move. Code Y for Accept or N for Reject.

### Comment:

The subcategories of comment that may be given or requested are:

- E Exemplification: Provides or requests an example to illustrate a point that has just been made.
- A Amplification: Provides or requests a filling out or qualification or modification of something previously said in terms of temporal, spatial, causal, or conditional detail (Egins and Slade, 1997, p. 198).
- C Connection: Provides or requests additional information to supplement what has just been said, or to connect it to some other domain, with the effect of developing the topic of the current sequence.
- S Summarize: Provides or requests a condensed statement of what has been said by one or more participants. This is often done in such a way that the

other participants understand that closure has been provided and the topic should not be further pursued.

The following only occur in the Demand mode:

- O       Opinion: Requests another participant(s) to express his/her personal views or conjectures on the topic under discussion.
- D       Description: Requests another participant(s) to tell or write about a physical object or abstract idea.
- L       Observation: Requests another participant(s) to describe something that s/he is looking at or has recently seen.

Action:

The subcategories of Action are:

- N       Requests action immediately.
- F       Requests action in the reasonably near future.
- S       Suggests action in the future.

Clarification:

The subcategories of Clarification that may be requested are:

- R       Repetition: Requests the previous speaker to repeat what s/he has just said, either in the same or similar words.
- I       Identification Requests the previous speaker to identify unambiguously what s/he intended to refer to.
- C       Confirm: Requests a confirmation/denial of the truth or validity of something that was previously said (often realised as a tag or rising intonation on the current speaker's utterance).

Metatalk:

- C       Metacognitive: Refers to the procedures and strategies used in the discourse.
- O       Metaorganizational: Refers to the organization of the activity.

T                    Metatopic: Refers to characteristics of the under discussion as a whole.

28. Sequel

This column is used to describe the type of exchange that immediately follows the follow-up. Apart from continuations of the exchange initiated by a follow-up with Demand prospectiveness, the categories here are the same as in column 7.

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Gordon Wells

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