LEADERSHIP ALIGNMENT: THE CHALLENGE OF DISTRIBUTED LEADERSHIP

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The bulk of research on educational leadership has focused on the school, and in particular on the role of the principal. However, the context to exercise leadership has changed in two ways. On the one hand, in the last 20 years, leadership functions have become more extensive (Moos, 2003). In the past, the main function was monitoring for regulatory compliances and basic management. Today, in a context of multiple accountabilities, leaders are asked to be responsible for instruction, school finance, staffing and teacher learning, to comply with federal, state and local regulation (Firestone & Shipps, 2003) and to be experts in different subject areas (Stein & Nelson, 2002). On the other hand, conditions for leadership have also been transformed as a result of changes in the government and business spheres characterized by decentralization of managerial structures to increase efficiency and efficacy (Moos, 2003).

Multiple leadership functions require leaders to have expertise in many different areas and the decentralization of managerial structures promotes the inclusion of multiple experts, such teacher leaders, or school management models. These changes in leadership functions and conditions require alternative analytic perspectives to make sense of the new leadership configurations. Moving away from heroic models that focus on the role of the principal the distributed leadership framework is useful to analyze leadership where the work is spread across a number of individuals (Spillane, Halvorson, & Diamond, 2001). In theory, distributing leadership should add to the labor available to provide leadership and the expertise to engage in the many tasks required of leaders. Moreover, this line of thinking is attractive to many because goes hand-in-glove with other efforts to empower teachers such as moves to create formal teacher leadership positions (York-Barr & Duke, 2004) and site-based management (Malen, 1994). In general, analysis from this perspective has focused on school practices (Pounder,

Ogawa, & Adams, 1995; Spillane et al., 2001) and on new emergent leadership roles (Burch & Spillane, 2003). In practice, however, leadership may be distributed rather differently from the way that advocates of this perspective assume. Schools are embedded in a larger district context, and relevant leadership also comes from district sources (CITE HIGHTOWER ET AL). In addition, teachers' opportunities to provide leadership may be constrained by both principals and their peers (Smylie, Conley, & Marks, 2002).

Drawing on case studies of schools participating in a school-university partnership to improve math and science teaching, this paper explores the configurations of distributed leadership in four schools in three districts. To examine how leadership is distributed, we examine how a set of change-related leadership tasks are accomplished, and in particular what contributions are made by district leaders, principals, formally identified teacher leaders and other teachers. This analysis suggested that principals and district office staff were more active in performing leadership tasks than teachers and teacher leaders. However, the vision or approach to improve mathematics was not always share among leaders. We describe patterns of leadership distribution looking into these two dimensions: visions and tasks. The configuration of leadership showed a typology of alignment.

Literature

Leadership has been notoriously difficult to define (Leithwood & Duke, 1999), but until recently, most analysts assumed it was a characteristic or behavior of an individual. By the 1990s, educational researchers were beginning to examine leadership as an organizational quality. Two main conceptualizations have been developed. One drawing on organizational psychology views leadership as the aggregate of influence exerted in an organization at any given time (Ogawa & Bossert, 1995). What has become the dominant perspective uses the

analogy of distributed cognition to suggest that leadership is a set of practices stretched over leaders, followers, and the situation in which leadership is exercised (Spillane et al., 2001). What underlies both of these traditions and the growing body of empirical work is the idea that leadership is seen as a kind of work and that it can be identified with a specific set of tasks that must be accomplished for the organization to be successful (Camburn, Rowan, & Taylor, 2003; Heller & Firestone, 1995).

This focus on work raises a set of questions that need to be addressed. These include: what are the leadership tasks?, who (or what) accomplishes these tasks?, what is the relationship among individuals carrying out the tasks?, and what are the consequences of such distribution of tasks? Because patterns of leadership distribution vary with content area (Burch & Spillane, 2003), we centered our analysis on leadership to improve mathematics.

Leadership Tasks

The focus on leadership as work comes from the observation that in different settings and under varying circumstances, leadership to accomplish the same end can come from a variety of sources (Firestone & Corbett, 1988). What has not been so clear is how to look at leadership work. Those grounded in the distributed cognition approach argue that a more fine grained analysis is required of the interaction and processes through which leadership is carried out (Spillane et al., 2001). Another approach has been to use some mix of observation and past research to identify a likely set of tasks and collect information on who accomplishes them with what effect (Camburn et al., 2003; Heller & Firestone, 1995). While these approaches are not mutually exclusive, it seems likely that the first one will yield more information about how the work is done while the second will offer more insight into what work is most critical.

When using the second approach, the tasks chosen become important because different tasks are associated with the successful accomplishment of different outcomes (Pounder et al., 1995). Since this is an analysis of an effort to improve math teaching, we focused on the following tasks: setting a vision, selecting a curriculum, providing materials, providing opportunities to learn, teaching teachers, monitoring and providing encouragement.

Setting a vision

The vision and mission are the perception of the way things and people are and the prescription of the way people should act and things should be (Rossman, Corbett, & Firestone, 1988). A district vision of mathematics instruction involves establishing directions of how mathematics should be taught and expectations of student achievement. In addition, the vision includes an approach to change (Bulkley, Fairman, & Martinez, 2004) and an assumption of how to implement the vision. Setting a vision involves providing a sense of purpose, structuring moments of collective development (such as retreats or meetings), allowing the expression of multiple visions, clarifying meanings of the vision in practices, and constantly communicating these visions (Leithwood, Jantzi, & Steinbach, 1999).

Selecting a Curriculum

The curriculum is the planned and guided learning experiences and intended learning outcomes (Tanner & Tanner, 1995). Because the curriculum is the product of reconstruction and selection of knowledge, in it, is embedded beliefs, social messages, and institutional values (Apple, 1990).

Thus, the curriculum selection is based on assumptions about how and what students learn (Delpit & White-Bradley, 2003; Martinez, 2005). Selecting a curriculum implies formalizing a plan, a vision, and setting the procedures to follow that plan (Kerr & Jermier,

1978). When the presence of formal procedures is so intensive that they can structure teaching practices, the actions of the leaders may become irrelevant to accomplish the tasks. In this case, the curriculum can be a substitute for leadership (Kerr & Jermier, 1978).

In mathematics, different curricula support different pedagogies without determining them. One way in which the curriculum plan is materialized is with the selection of teaching materials and textbooks. Some textbooks emphasize basic skills and test preparation; others offer inquiry-based learning opportunities, which include mathematical investigations and problem contexts for students to explore. Others books include a mix of both problem solving activities and practice drill exercises. Adopting a new curriculum restructures not only the material base and resources for the school but also encourages changes in teachers' knowledge about the subject area, teaching strategies, and teachers' beliefs about how students learn.

Providing materials

The availability of materials, such as manipulatives and extra worksheets for example, has a direct impact on instruction since they mediate teachers' and students' interactions (Cohen & Ball, 1999). Although important to promoting change, the success of the curriculum does not depend on the curriculum per se, but on the overall school capacity to relocate, appropriate, refocus, and relate the new materials to the students (Davies, 2003). School leaders help in implementing a curriculum by providing the necessary materials and overall support.

Providing opportunities to learn

The implementation of any change requires the understanding of foundations and ideas of the reform (Cohen & Hill, 2001). Providing opportunities to learn requires both organizational arrangements that can promote and facilitate these opportunities and activities that provide learning about specific knowledge needed to implement instructional changes (Firestone, 1996).

Multiple leaders provide formal opportunities to learn by organizing continuous professional development events that are focused in a few areas at a time and coherent with the schools' vision and mission (Firestone, Mangin, Martinez, & Polovsky, In press). The absence of time to learn is often a barrier to implementing professional development. Buying teachers' time to attend these events is part of providing opportunities to learn (Firestone, 1996).

"Teaching" teachers

While providing opportunities to learn implies creating a setting that allows learning, teaching teachers involves training, education, and coaching. Traditionally teaching has been an isolated profession; however, teachers learn from reflecting and discussing pedagogic practices. Thus, teachers' observations followed by constructive feedback and specific suggestions contribute to teacher learning (Louis & Kruse, 1995).

School leaders have an important role in teaching teachers. They contribute to bringing understanding of the reform by providing guidelines to align their practices with the new goals (Reyes, Scribner, & Scribner, 1999). Profound understanding of the reform includes deepening teachers' and leaders' knowledge of content areas, teaching strategies, pedagogical paradigms, the goals, and the need and relevance of the reform (Stein & Nelson, 2002).

Monitoring

Monitoring progress during change periods of reforms is important to institutionalize change (Heller & Firestone, 1995). It is also relevant to anticipate new opportunities and problems. Monitoring can include different sources of information or indicators such as formal data, test score, or data gathered walking around, observations, revisions of plan books, and informal interviews (Heller & Firestone, 1995). When monitoring focuses on the observation of teaching strategies and it is followed by specific and insightful feedback, it contributes to

develop teachers' expertise (Seifert & Vornberg, 2002). Making wise use of data so that evaluation can bring direct improvement into the classroom can change teachers' instructional strategies (Diamond & Spillane, 2001).

Providing Encouragement

Many leaders provide support by informally and formally recognizing teachers' work and by praising their successes. Recognition can be provided in the form of positive feedback or with formal incentives (Heller & Firestone, 1995). Respectful relationships with teachers in which expectations are communicated can modify micro-behaviors to promote motivation and commitment. Leaders can also promote commitment in more formal ways, such as developing career programs, placing incentives, and providing materials to implement the ideas learned in professional development (Firestone & Rosenblum, 1988).

Alignment

In sociology, alignment has been used to link individuals' actions and beliefs with macro structures, such as organizational goals or cultural mandates. The term "alignment" helps bringing together two antagonistic traditions in sociology: structuralism, which focuses on how the social is imposed onto the individual, and interactionism that emphasizes how the individual makes sense of the social. Social interactions are processes by which people orient their conduct to common objectives or goals. In this process, participants make an effort to align their conduct with the goals (Stockes & Hewitts, 1976). Stokes and Hewitt (1976) identified "aligning actions" such as offering apologies or giving explanations, as those activities that can restore a relationship or an alignment. Snow and his colleagues, use the term "frame alignment" to explain the linkage between an individuals' conduct and social movement orientations such as interest, value, and beliefs (Snow, Rochford, Worden, & Benford, 1986). They show different

ways in which alignment can be reached, including establishing general goals so that individual beliefs have room to find alignment; defining these goals clearly, incorporating new goals into existing frames, or transforming existing frames.

Misalignment occurs when individual conduct does not reflect the goals of the organization, culture, or society. Stokes and Hewitts expressed, “To speak of misalignment between culture and ongoing action is thus to say that people recognize that their own acts and those of others often do not accord with established “ways” of thinking, feeling and acting” (Stokes & Hewitts, 1976. p 843.) As a result, people can classify misaligned acts as wrong, strange, immoral, etcetera. Snow and his colleagues also mentioned that alignment cannot be taking for granted, is variable, and always subject to reassessment and renegotiation. As a result of misalignment, they point out, there can be a failure to mobilize a group of people to change (Snow et al., 1986).

In educational policy, alignment implies a set of organized effort conducive to a goal. Misalignment occurs for example, when policies provide different conflicting messages or when the programs that are in place hold different goals (Hatch, 2001; Smith & O'Day, 1990). Misalignment can occur in situations where leaders share agreement on the goals (Hatch, 2001). In these cases, misalignment results from lack of coordination in the job responsibilities or tasks. This is why Hatch argues that tasks must be crafted and relationships must be reconceptualize in cases where multiple leaders are implementing different programs. Following these conceptualizations, aligned leadership would be the articulation of leadership tasks or functions that can effectively promote change or guide the school towards a goal.

Micropolitics

Schools are sites or arenas of social conflict where issues are resolved through conflictive or collaborative processes (Ball, 1987). Conflict arises because school agents have different ideological perspectives, ambitions, expectations and goals. In order to accomplish their goals, teachers, principals and other school leaders make use of different strategies or adopt styles that influence other people to promote and protect them selves and their goals (Blase, 1991). Thus, micro-political analysis is about what people in schools feel, think, and do to promote themselves and their goals. In this paper, micropolitical analysis will be use to explore leaders strategies to carry on their vision. We are particularly interested in exploring how leadership style and tasks, relates to teacher commitment. Teacher commitment has been defined as a positive emotional or affective attachment to the work (Firestone & Pennell, 1993; Firestone & Rosenblum, 1988) Teachers may be committed to different causes including students, teaching and the school. While different types of commitment can enhance different aspects of school improvement, overall commitment is related to student achievement and quality of teachers' work (Firestone & Rosenblum, 1988).

Methods

This study draws on a larger study conducted at the Center for Educational Policy Analysis (CEPA) at Rutgers University. CEPA is currently doing case studies in schools that participate on the implementation of The New Jersey Math Science Partnership (NJ MSP) between two local universities and eleven urban school districts. The MSP provides the unique opportunity to explore how different schools and districts respond to external sources of leadership. A sample of four elementary schools (Frida Kahlo, Narciso Lopez, Raul Madera, and Cardenas) with different levels of student achievement was selected. Student achievement was determined relative to poverty levels. All schools are located in three low socioeconomic districts,

characterized by both poverty and educational inadequacy. The school population is ethnically segregated; most students at these schools are Latino or African American. The participants include an average of eight teachers per school, school principals, and teacher leaders. Teachers were selected to represent different levels of experience and grade levels.

Data Collection

Data collection began in the fall, 2003 and continued through spring, 2004. Data included, interviews, field notes, district plans to improve math and science, and documents from the publishers of the textbooks adopted at each school. Different sources of data allowed triangulation.

Each teacher was interviewed three times and principals and teacher leaders once. Interviews permitted the gathering of data on relationships and events that occurred outside as well as inside the school building. Questions were grouped in three different interview protocols. The themes of the first interview were: availability of materials, teachers' learning opportunities, and teachers' beliefs about teaching. The focus of the second interview was on networking opportunities and areas in which the teachers influence students. The third interview explored school culture and perceptions of leadership structures. The MSP team also developed one interview for teacher leaders and principals that covered the same themes as the teachers' interviews. This allowed further triangulation.

District documents showed the districts' formal plans for change and tools they would use to promote these changes. Documents developed by the publishers of the different textbooks adopted by the schools revealed the approach to teaching mathematics sponsored by the district.

Data Management

Documents were summarized, interviews were transcribed and filed notes and reflections were typed. Data were sorted into analytically meaningful and easily locatable segments or codes (Reid, 1992). This allowed for retrieval of specific parts of the data later in the analysis (Merriam, 1998).

The group developed the codes inductively. First, using sample interviews and guided by the data collection protocols, we explored ideas or categories that would emerge from each question. Then, we piloted the coding scheme with another sample of interviews. Each code was clearly defined to ensure that all members of the research team shared an understanding of its meaning to record data consistently. Also, a table that matched each question on the protocols with the codes was created to guide the coders.

Using the assistance of N6, software for qualitative research, each document was coded into two systems codes: demographic and content codes. Demographic codes were used to record general information about the documents including the teachers' district and school affiliation. We also coded each document into type of documents to be able to distinguish interviews from reflections and from district documents. Content codes were used to record passages according to their subject.

Data Analysis

District documents were summarized in a draft that showed patterns across districts. Codes were analyzed and summarized finding similarities and differences across schools. In this process, we identified the leaders at each school and the tasks they were doing. A table that compared tasks across leaders in each school was created. We developed one diagram per school, using boxes and arrows that showed the relationship between leaders, tasks, and people

being led. This allowed us to see clearly how leadership was configured at each of the schools, how accessible leaders were to teachers, and which tasks many leaders shared. Then, one table per school was created to clearly compare schools. The table showed leaders in the columns and tasks in the rows. Cells were colored when tasks and leadership roles intersected. Different colors were used to represent the visions that each task contributed to: when the task contributed to vision A, it was colored gray, when the task contributed to vision B, it was colored black, and etc. These tables allowed us to see if tasks were aligned among themselves and to which visions they were aligned. Finally, findings were written using rich and thick descriptions of the schools' leadership configurations.

Findings

Most principals and district leaders engaged in 6 out of the 7 leadership tasks, in most cases district leaders did not provide encouragement. Teachers' performed the tasks of providing encouragement in all schools, and in only one school, teachers also selected the curriculum, allocated resources and sustained learning opportunities among teachers. Teacher leaders showed the greatest variation engaging in 1 to 5 of the seven leadership tasks. While in some cases teacher leaders only facilitated materials, in others they also provided encouragement, monitored teaching and provided opportunities for teachers to learn (See Table 1). The task of teaching teachers stood out as poorly exercised by most leaders. In spite of the efforts of some of the districts and schools in our sample to establish the role of the teacher leader as coaches, little professional development came from this source.

The analysis of leadership tasks performed by different roles suggested that principals and district office staff were more active in performing leadership work than teachers and teacher leaders. With this higher level of activity in mind, we looked first at the alignment of

incumbencies in these two formal roles. Alignment involved articulation or coordination of tasks conducive to achieve goals. Thus, we analyzed the districts' and principals' visions and whether the tasks they performed contributed to achieve those visions.

The three districts had a vision of what math teaching should be and on how to implement changes that support this vision. The vision varied from district to district. All four principals in our sample wanted to improve test scores in math. In addition, in spite of the similar demographics across schools, principals had their own agenda. At Narciso Lopez School, (79% Latino, 46.2% English Language Learners, ELL), the principal emphasized multiculturalism and the implementation of a bilingual program. Two other schools in our sample also had a large ELL population: Cardenas (65% Latino, 40.8% ELL) and Frida Kahlo (71% Latino, 30% ELL), focused on providing professional development and implementing the math program respectively.

The only tasks that all three districts dominated and did not share with other leaders were the curriculum selection. Even at Raul Madera School, where teachers had input on the curriculum selection, it was the district that ultimately authorized the implementation of such curriculum (Bolman & Deal, 1991). Selecting the material base for teaching was one of the tasks that more closely represented the district vision of math teaching. Across schools, the curriculum selection seemed to be the most influential task that affected teaching. When asked what sources were used to prepare the lessons, most teachers in all four schools (29 out of 32) mentioned using the adopted curriculum materials. The curriculum, as the artifact that mediates leadership interaction, seemed to operate in two ways. First, it seemed to be an important constraint on teaching as many teachers reported that they were expected to use the materials.

Second, because the curriculum was the material base that structured teaching, and teachers did not need the actions of the leader, curriculum served as a substitute for leadership.

Across the schools we found that the principals and district leaders performed tasks consistent with their individual vision, thus, there seems to be alignment of tasks within a role. Such alignment did not occur across roles. In two cases only district and principals shared the same vision. In the other two cases principals and district leaders had different agendas that competed with each other.

Exploring how visions and tasks aligned across leadership roles, we found four different patterns of leadership alignment: fragmented, parallel play, complementary, and congruent. In this section we describe each case analyzing the tasks leaders performed. The next section analyzes, from a micropolitical perspective, the consequences of leadership alignment on teacher commitment.

Table 2: Patters of Leadership Alignment

		Vision	
		Different	Same
Tasks	Same	**Parallel Play** *Lopez*	**Congruent** *Kahlo*
	Different	**Fragmented** *Cardenas*	**Complementary** *Madera*

Fragmented Alignment: the Case of Cardenas School

The district leadership and the school principal from Cardenas School did not share the same vision. While the district had a test-driven approach the principal wanted to promote teacher learning. The tasks that principals and district leaders performed were opposed to each other; while the district cut the budget for professional development events, the principals was constantly promoting teachers participation in professional development. Because district and principal tasks and visions were in such opposition, leadership alignment was fragmented in this school.

District Vision

The district where Cardenas school is located, adopted a test-driven approach to change that identified the symptoms of the problem (test scores) and tried to eliminate the problem by doing more of the same, but did not address the problem itself. The district's documents did not show plans for revising the math curriculum or for providing professional development. All interviewed teachers from Cardenas School reported that the district strongly emphasized the need to pass the State test without providing support to teachers. It appeared that the district limited mathematics teaching to teaching to the test, and student achievement to passing the State test. When asked about school issues, teachers mentioned that the "only issue" in the school was the test scores and that it started with district pressure. When asked how district leaders let them know that this was an issue, teachers said that the district conveyed this message by showing teachers in district schools test score results on the first day of the academic calendar, generating competition among schools. One teacher said: *"Realistically, we have to continue to increase our test scores… it's a constant competition, which school is gonna [sic] be 1, 2, 3…you don't*

want to be toward the, be one of the failing schools. I mean that's a really big deal, especially in a district [with low socio-economics], so. It can be kind of stressful."

District Tasks

Consistent with the district approach to change, the district leaders where Cardenas School is located selected a textbook with a heavy emphasis on solving word problems, an area that the district had scored low on in the previous year. Upon an examination of the some sections of the textbook, we found activities that led to mathematical reasoning, practice drills, and test preparation sections in every unit. The teacher's manual included *"100 quick activities…to prepare [the] class for the big test"* and suggested that teachers focus on one activity every day "*to cover all the content on state or national tests"* (*Mathematics. You can count on us*, 2004). In addition to the textbook, this district required students to have eight math journal entries per marking period to ensure practice of word problems. The district also set the pace of the curriculum by establishing benchmarks of content knowledge that students needed to know at the end of the each marking period. In terms of providing materials, teachers reported that allocating resources was a task that district leaders shared with the principal and vice principal.

Teachers and the principal at Cardenas School, reported that the district limited professional development in several ways. First, they targeted their resources for professional development to failing schools as part of an intervention plan for these schools. Second, the district did not organize district-wide professional development. Their only role in regulating professional development was by approving the schools' budget at the beginning of the year. This budget included the allocation of money for professional development, which teachers took in institutions outside the school district. Third, the district was not consistent in allowing

teachers to attend professional development opportunities, even when the school budget had been approved. The principal commented: *"It is kind of a difficult situation, we are getting mixed messages. There were a lot of changes in central office, to give you an example, [I requested funding for a workshop in family math], it was approved, I found two teachers that were very interested in going…I [had gone] to training in family math and everything was in place. So, when I send the teachers, they don't approve…and everything is in [the budget...]".* Teachers at Cardenas School attended only a two-day training provided by the publisher of the math textbook they implemented. In addition, a group of teachers worked on setting the district benchmarks for the curriculum. While this could be seen as a professional development opportunity, it was limited to only a few teachers in the school.

District leaders analyzed test score data, which were then made available to the school. The principal said: *" the data that [the district] gives us is so much that you don't know where to begin… and it gets difficult to get into because instead of having…one set [we have] 20 books with 20 binders full of test scores and information."* A district supervisor analyzed data and took the results to the schools. There was no evidence to indicate that teachers had opportunities to reflect on the data to inform practice. This way of monitoring seemed consistent with the district test-driven approach to change that recognized the symptoms of the problem, but did not support school leaders in using the data in ways that could inform practice.

Principal Vision

At Cardenas School, the principal's approach to change was in conflict and was incompatible with the district's vision of change. While district adopted a test-driven approach, the principal who was also concerned about test scores, believed that teacher learning and parental involvement were two ways in which to accomplish this goal. He believed that teacher

learning and parental involvement promoted student achievement and he constantly tried to provide professional development for teachers and organized workshops for parents.

Principal Tasks

The principal constantly emphasized and demanded more professional development for teachers from the district. He personally checked all teachers' Professional Improvement Plans and suggested teachers' areas of improvement and professional development events. The principal was very aggressive in organizing and structuring parent meetings. While the district had long ago mandated regular meetings with parents, until this principal came on board, the meetings did not have a clear purpose and structure. This principal engaged the vice principal in the same philosophy and together they presented math activities and workshops on how to help children with homework among other topics. In addition to these initiatives, the principal, a former science teacher, provided support and materials to improve science. This subject area had been left out by the district, which only had focused their efforts on tested areas. He strongly believed in providing supplemental support to those students who showed strong achievement. Because of his beliefs, the principal implemented a gifted and talented program.

In terms of materials, the principal was instrumental in ensuring that teachers had the needed materials to implement the curriculum. A teacher from Cardenas said: *"…when we first got the new math program, we didn't have all the materials and they [the principal and vice principal] were getting our materials all together…"* In addition, the principal analyzed test score data and showed teachers areas that needed improvement.

Vice Principal Task

The vice principal at Cardenas school was in close contact with teachers, providing materials, opportunities to learn, or teaching teachers. At this school, the position of teacher

leader did not exist and the vice principal seemed to be teaching teachers about how to improve teaching through coordination across grade levels and leadership of grade level teacher's meetings.

The District at Narciso Lopez and Frida Kahlo School

Both Frida Kahlo and Narciso Lopez School were located in the same district, this section describe the district's role for both school. Leadership configuration was different in the two schools, thus a section will describe the process at the school level.

District vision

This district seemed clearly concerned about test scores. However, unlike the district where Cardenas is located, the scores were not an end in themselves. The approach to change included substantive and frequent opportunities for teachers to learn about a new curriculum. An analysis of the district plans to improve math revealed that the district made professional development and the coordination of math coaches who help implement the curriculum at each school a priority.

Teachers reported that district leaders believed in providing authentic opportunities for students to learn with an "inquiry-oriented" curriculum. Teachers mentioned that the district math supervisor pushed them to implement an inquiry-oriented math curriculum. When asked why they allowed students to explore, a teacher, reflecting about his own practice, said:

"At the district level… [The district math supervisor's] thing is she's into all of this discovery and the kids have to think. So, … that is her baby. She's always advocating that. So, ah, that is where [that teaching strategy] came from."

District Tasks

Consistent with the district vision, the materials the district selected emphasized students' hands-on investigations, using manipulatives to build strong conceptual understanding. The curriculum included problem-solving activities, investigations that varied in length (some of them taking weeks), and problem contexts. On almost every page of the teacher manuals was the word "exploration" (*Math trailblazers student guide*, 2003-2004, *Math trailblazers teacher implementation guides.*, 2003-2004) Teachers reported that the district provided materials needed for math and science instruction.

Teachers from this district received on-going professional development opportunities. In the area of mathematics, teachers received five-day training during the summer; in addition, some teachers were involved in lesson study groups, which were led by an external consultant from a local university. Lesson study groups consisted of a group of teachers, who prepared, observed, and discussed a lesson arranged by one of the group members.

In addition, the district set monthly math teacher meetings in which teachers across district schools talked about the implementation of the curriculum and their experiences. These meetings were organized and led by the district curriculum supervisor.

Math supervisors at this district conducted walkthroughs, going into the classrooms to monitor curriculum implementation. These visits did not produce any formal evaluations; rather they were used to provide feedback and materials to teachers to help them improve their teaching. Teachers also reported that the supervisors sometimes modeled lessons for them. Nevertheless, some teachers felt intimidated by the district visits. For example, one teacher who decided to supplement inquiry-oriented instruction with the teaching of basic facts during test preparation month reported that she "hid" worksheets when district supervisors came. The

district approach to monitoring seemed to be consistent with the approach to change that included developing teachers' knowledge of the curriculum.

Parallel Alignment: the Case of Narciso Lopez

The principal's main goals in Narciso Lopez were to increase test scores and to allow bilingual children to be taught in their native language until English was acquired. In terms of the bilingual program, the principal taught teachers about how to improve bilingual education and organized, monitored, and provided advice to teachers on how to carry out the bilingual program. Because the principal was performing the same tasks the district performed, but in the service of the bilingual program, principal and district leadership seem to follow parallel pathways where the same leadership tasks are being conducted in favor of different agendas that are not in conflict with each other. In this case, both the district and the principal were teaching teachers and were providing a vision, but the vision differed. While the district emphasized an inquiry-oriented approach to math and continuous professional development, the principal focused on bilingual education.

Principal Vision

At Narciso Lopez School, where 79% of the students are Latino and 46.2% are ELL, the principal emphasized multiculturalism and the implementation of a bilingual program that included students learning content in their native language until they acquired English. When asked about the changes in math or science he explained: *"…Our other changes are peripheral to math, but important to the entire school, 'cause the entire – the children benefit from the entire school not just from one subject area …a vast improvement in bilingual education through the hiring of more qualified bilingual teachers."* When asked what professional development events he attended, he mentioned only going to conferences in ELL.

Principal Tasks

The principal emphasized the addition of more security personnel in the building to ensure adequate discipline. He also strengthened the Parent's Association, hired a community liaison, and offered workshops for parents to increase parental involvement.

The principal allocated materials that could be use for bilingual instruction. One teacher from this school responding to how the principal impacted her teaching mentioned: *"He provides me with the resources that I need to be able to teach. Having textbooks in both languages all the time... it's really impacted me… I have found that it has given me a good background to be able to, to be effective as a bilingual teacher."* Moreover, the principal decided how to allocate resources for hiring personnel. He reported hiring additional aides, but lacking resources for the math supervisor. He said: *" …Our money went as far as getting um, an extra, an extra nurse, a family liaison, attendance officer, an extra security guard. But it didn't get to math specialist."*

The principal's hiring procedures also helped move his agenda on bilingual education. He mentioned: *"We also were able to get a science specialist that I brought in specifically, waited for her for six months since she is a bilingual science specialist."* A teacher mentioned that he did provide them with teachers' substitutes to allow them to attend the district professional development events.

The principal's approach to raise test scores was to pressure teachers. Many teachers reported that the principal would blame them for students' performance. This could indicate low encouragement coming from the principal.

Vice Principal and Teacher Leader Tasks

In Narciso Lopez School, the vice principal was in charge of discipline and school order. He also would order materials for teachers. The year we visited Narciso Lopez, the math teacher

leader was removed from his position and the school hired a new teacher leader. Thus, it is unclear in our data what his role was. Some teachers reported that he made sure that teachers had the resources to teach; thus the main role seemed to be providing materials. However, in the following year, the math teacher leader was re-positioned as a bilingual classroom teacher because of the high demand of Spanish speaking teachers in the building to sustained this bilingual program that requires students being taught in their native language until the acquire social English.

Congruent Alignment: the Case of Frida Kahlo School

Frida Kahlo School presented the case of a school where district and principal shared the vision and performed the same tasks to reach to that vision. Thus, there was redundancy on the tasks (Heller & Firestone, 1995). While the district selected a teacher leader who could carry on that vision, the principal reinforced this vision at the school building appointing a school facilitator and extra math teacher leaders who could share and implement the reforms in mathematics. Both, the district supervisor and the principal performed the tasks of teaching teachers. District leaders led monthly professional development events in math and science and provided in-class feedback and support. The principal also reported that she provided guidance to teachers on curriculum implementation. Moreover, she led weekly grade level meetings in which instruction was discussed.

Principal Vision

In Frida Kahlo School, the principal had general high expectations for students' achievement, a strong vision for excellence and; she strongly believed that the math program was responsible for the improvement of math test scores. This principal supported the inquiry-math curriculum and was also concern about test scores. Speaking about her support for the

curriculum adoption the principal stated: *"I would sit down in some of the classes to see what the kids were doing…And they really enjoyed it…they had activities, big activities out in the hallway, where they were building graph and doing all kinds of things so I felt very comfortable when the district decided to adopt this particular textbook."*

Principal tasks

Because of the principal support to the implementation of the math program, there were two math coaches at this school, one hired by the district supervisors and the other hired by the principal to work on the a tested grade. The principal also organized professional development events and most often lead these events to ensure that teachers talked about instruction. A teacher mentioned that the principal "*goes to my classroom and we have grade level meetings…and she all the time gives me good ideas every time that I see her…Um, how to develop more...the students, and that's very helpful."* Feedback seemed to be more intense at Frida Kahlo, where the principal talked to teachers more often.

However teachers reported receiving no encouragement from the principal. One teacher said: *"even a pat in the back would be nice."* Another teacher mentioned that the principal did not want to hear any complaints and that sometimes the principal would interpret these complaints as excuses for not providing learning opportunities.

Teacher Leader Tasks

The role of the teacher leader was very active at Frida Kahlo School. Teacher leaders not only ensured and facilitated materials, but also led teacher meetings and provided in-class support, in some cases modeling lessons for teachers. They also observed lessons, providing formative feedback. At Frida Kahlo, a teacher described her interaction with the math specialist saying, *"The math specialist [will] come in and teach a lesson [that students] were having a*

hard time understanding…It's really interesting to watch her teach a lesson because I learn as much as the kids do." Another teacher noted that she sought out the assistance of the math specialist about 10 times over the course of the year. One of the teacher leaders saw her role as monitoring curriculum implementation; thus she analyzed test data besides conducting classroom evaluations and discussing the results with teachers.

Teachers tasks

In this school, encouragement was a task performed exclusively by the teachers. Teachers reported that they felt overwhelmed by the aggressive style of the principal. For example, teachers expressed that they would have liked to have more input during teacher meetings and allowed these meetings to be driven by a teacher agenda, rather than by a principal agenda. Moreover, teachers complained that the principal always demanded more of them, even when they had the highest test scores in the district. While the presence of the teacher leaders and vice principal was strong, their activities were closely aligned with those of the principal; thus, they did not seem to provide any encouragement.

Complementary Alignment: The Case of Raul Madera School

Raul Madera School illustrated the case where principal and district tasks were complementary to each other in the sense that one task contributed to the effectiveness of other tasks. It seems that all leaders, district, principal and teachers who had active participation on leadership tasks, shared the vision of math teaching. But in addition, the principal's approach to change also included generating a strong professional community. While this approach may not be fully shared by the district, it was not in tension with the district's approach to change. Rather, it was a way to contribute to the district's efforts to promote teachers' learning of the curriculum. While the district had put forth efforts to implement the new math curriculum by hiring external

consultants, a district math coordinator and by offering district-wide (limited) professional development, the principal had focused on creating a professional community and was very aggressive in creating a positive climate.

District Vision

The district where Raul Madera School is located had an eclectic vision for teaching math. Teachers reported that test scores were very important in the school and a teacher added: *"…of course it is important to the district as a whole…statistics are out and you know, the facts are in the newspaper…so it is very important*". The district required teachers to analyze test score data *"line by line to see question by question"* the percentage of students that had the wrong answer. When asked how the district communicated that test scores were important, teachers reported that this was done by adopting and supporting a new curriculum. Thus, the district adopted an eclectic approach that combined pressure to improve test scores and support by providing the means to change.

District Tasks

The district adopted a math curriculum with a moderate approach to constructivism. The program, as reported by one reviewer was a "*blend of expositions and discussion"* that included a mix of exploration and problem solving activities with multiple methods for basic skills practice *("Every day mathematics center", 2005;* Slosky, 2005*).* In this district the initiative to adopt the new curriculum started with a group of teachers from the school who learned about a new program at a professional development event. A teacher reported: *"Well the adoption of our new math series this year came out of the desire for the district and everybody as well to want to do well."* Another teacher added *"it [was] mostly the teachers and then the office people [who] were involved in this decision."*

The district supervisor provided materials for the implementation of the curriculum; teachers seemed to have direct communication with the math supervisor. However resources for professional development seemed limited, the district provided professional development in math four to five times a year. In these events, district teachers met with an external consultant from the textbook company who worked permanently in that district.

External Consultant Task

The external consultant who worked for the district during the last two years fulfilled the role that teacher leaders performed in other schools. His main role was to contribute with the implementation of the math curriculum. Not only did he lead workshops but also he visited the schools regularly and provided teachers with feedback. This consultant was available to come to the school whenever teachers believed that they shared a common need that he could address and they expressed that need to the district's math supervisor.

Principal Vision

The principal wanted to develop a strong professional community, increase morale, and develop a shared understanding of urban education and poverty. He supported the math program, but he concentrated more on developing a professional community and high morale among teachers. Speaking about his expectations he mentioned: *"I like to give them credit for their accomplishments and tell them, both personally and also to follow-up with a written letter that goes in their files. I think it's a big part of it …it's a very strong team approach here. At each grade level …we also like to …. celebrate our successes…"*

Principal Tasks

In this school, the principal was the major figure of support. He cooked specials dinners for the teachers, and also recognized teachers' achievement by sending them "thank you notes"

and letters that were attached to the teacher's file. In order to promote professional communities, the principal scheduled weekly grade level meetings and common lunch and prep-times, which allowed teacher collaboration.

The principal also valued knowledge about education of children in poverty; he shared with teachers his expertise in this area or lent teachers books on educating the poor and urban education. Teachers reported that the principal ordered the materials they needed.

School Facilitator and consultant tasks

The vice-principal position did not exist in this school. Instead, they had a School Facilitator who, according to our data, did not play an important role in influencing math instruction. There were three designated teacher leaders, but none of them had released time; their role was limited to informing the district about the teachers' needs. The external consultant hired by the district and the district math supervisor carried on the tasks that involved facilitating the implementation of the curriculum.

Teachers Tasks

Only at Raul Madera School did teachers participate in the decision of selecting the new curriculum. However, teachers' participation was not structured; rather, teachers volunteered information about the curriculum to the district and the district was opened to it. A teacher explained: "*What happened is four of our teachers went to a workshop at [local] University I believe and they were so excited about it they came brought it back to our school…So, now that it is adopted in our entire school district. It is the first year for most of the teachers except for Raul Madera School teachers one in every grade did the pilot last year and than fourth grade did it two years ago."* This decision was shared with the district supervisor who ultimately approved the use of the program for the whole district.

Only at this school teachers appeared to have collaboration that influenced teaching. Teachers reported working well together within their grade level in daily interactions. Teachers discussed lessons, challenges, teaching strategies, pacing, how subject matter related across grade level, and applications of the district test. While among the factors that allowed this collaboration are trust and personalities, the culture of instructional collaboration was formalized with the creation of grade level meetings and instructional focused committees. Interestingly enough, at this school, the principal provided strong encouragement; thus Raul Madera is a school where it appeared that both high encouragement and high morale supported the highest levels of teacher collaboration.

Leadership Alignment and Micropolitics

Our data suggested that teacher commitment was different in each type leadership configuration. In both cases where principal and district leaders did not share the vision, commitment was poor. Where alignment was fragmented, the principal and teachers felt frustrated and pressured. Where alignment was parallel because the two main leaders had different visions, teachers were in conflicting groups within the school.

Interestingly enough, in both schools where principals and district shared the same vision, teacher's perceptions of their capacity to influence the school were at the two extremes. At Frida Kahlo, teachers felt alienated; at Raul Madera, teachers felt empowered. In both school, Frida Kahlo and Raul Madera, the principals were able to set their vision and move their agenda forward and they were both recognized as the formal authority. The difference however, depended on the kinds of tasks and power they were willing to share.

A close examination of teachers and principals' discourses showed that leadership style and the type of tasks that were shared influenced teacher commitment. This finding indicates the

need to integrate a micropolitical perspective (Ball, 1987) with the distributed leadership perspective that focus on the type of tasks and how it is shared to explain the relationship between leadership alignment and teacher commitment. This section analyzes teacher commitment in each of the cases trying to identify how leadership style and shared tasks were the most relevant to explain teacher commitment.

Fragmented

The Fragmented alignment at Cardenas school created both discomfort and frustration for the principal who saw himself in tension with the district. The principal felt he had little leeway in what he could do, and he expressed *"there are many things that we have to do and nobody can decide anything it is mandated we got to do that."* But above all, there was a feeling of frustration. During the interview, the principal used the verb "try" in about nine paragraphs. In most of these, he used it to explain situations in which he had been frustrated. Talking about his efforts to increase professional development, the principal said *"I tried, I tried what I had. Everything is in the budget, everything, you know it would be great if these teachers were able to do that."* Talking about how he managed to take advantage of the district agenda to move his own agenda, he said, "…*We try to look for the word [name of state tests] [in the title of the professional development]."* Explaining his efforts to analyze data he mentioned: *"And we try to [look at the areas that need more work]…it is sometimes difficult because we don't have enough teachers working after school our funds are not [available]… every time we try to get something else it is shot, it is cut."* Speaking proudly of his success with parental involvement, he said, "*Ah, very few parents wanted to leave even though they had a new school with a lot of facilities that we don't have. Cafeteria, a gym, the basics, we don't have the basics. And ah, many, many*

parents wanted to stay here. And they said I don't know if I could I'll try but I don't know if I can do that because of the way that the system implemented."

Teachers at this school felt extremely pressured to improve test scores. One teacher mentioned "*Unfortunately, we, as teachers, are encouraged to, we are very encouraged, extremely encouraged, I can't force it enough, we need to pass the test, we need to pass the test. We're told in the first day we come back in September, we need to pass the test. There's immense pressure for us to perform well…*" Another teacher commented that there was a lot of time allocated to test preparation and it was difficult for her to fulfill all the demands from the district. She expressed, *"It's hard because that's time out that I have to take from everything else that we're doing and it's like, there's not enough hours in the day to get it done."* This teacher also mentioned that the pressure came from everywhere. She said, *"[the pressure comes down from] the district, comes down from the board of ed, it comes from, the principal and vice principal, everybody wants to do well and it's like it's a message that comes loud and clear from every angle that it possibly could …, it's really, really, pushed."* In both principal and teachers, we saw a feeling of frustration.

Parallel Play

Narciso Lopez School presented another case where district and school leaders had different visions; implementing an inquiry oriented math program and implementing a bilingual program respectively. Unlike Cardenas, these visions were not opposed to each other; rather they can be viewed as parallel agendas. However, the different agendas created differences between the district and the principal.

The conflict on the vision between the principal and the district was materialized in incidents where the school had shown resistance to district policies. For example, the district

demanded that all test should be taken in English, even for bilingual students. The school sent a letter to the Superintendent asking for the test in Spanish and after several struggles, they finally where able to offer the tests in Spanish. A teacher told us that this only happened at Narciso Lopez School; other schools in the district passively implemented the district policies and gave the test in English. On another occasion, the district ordered the placement of trailers in the schoolyard to solve the problem of overcrowding. The school negotiated with the district and they were able to place half the number of trailers that were originally planned.

It was particularly interesting to compare Frida Kahlo and Narciso Lopez Schools because they belong to the same district. In both schools, the district had appointed teacher leaders in math. At Frida Kahlo, where the principal's vision aligned with the district, the principal had appointed two other teacher leaders in math. Moreover, in this school, teacher leaders seemed to be very aggressive in modeling lessons and providing coaching. At Narciso Lopez, where the principal's vision was about bilingual education, the teacher leader was hired late last year and he is currently teaching a bilingual class. In this case, we can see how the interest of the principal mediated the district policies.

At Narciso Lopez School, there were two coalitions of teachers formed. Teachers at this school either aligned with the principal's vision or were in disagreement with it. Thus, there seemed to be two coalitions of teachers at the school. These two groups might have limited the possibility of establishing professional communities. One teacher, who disagreed with the principal, expressed the big issue the school faced was "*Kids are in [the] bilingual [program] too long. That's a big issue.*" This teacher, who was a bilingual teacher, also mentioned that some children who are proficient in math are placed in the bilingual program with other children who are not proficient in math, limiting their math achievement. He mentioned "*I had a big push*

with the bilingual. Because well… I wanted [bilingual children] included….[Because] They should be [included], they have the [math] ability… Like this year I was pissed. Excuse my French." The teacher commented that a girl who was in advanced algebra was removed from that class because her English was not good. The teacher mentioned that *"most of the times"* children who had math proficiency were grouped in lower-level classes because of their language. The teacher who excluded that girl from the advanced algebra classroom has also expressed his disagreement for having a long-term bilingual program where teachers only spoke in Spanish. He told us that two of his students had been in the bilingual program for seven years, yet, he had been born in the U.S.A. Moreover, according to the teacher, this particular child scored low on standardized State tests because the test was in English and this child was never taught the academic language in English since most of his schooling was in Spanish.

A teacher, who seemed to support the principal's view of a long term bilingual program, mentioned that the big issue was that children needed to take the test in English and that "*our major problem is that our bilingual children are not doing well because it's a language barrier."* However, she thought that the school was on track with their bilingual program, but recognized the controversy. "*…in a bilingual program I think it is very effective to use the primary language when you are teaching primary subjects like reading, mathematics…We try to follow it really well in this school and I'm pleased that in this school our bilingual program is run the way it should be quote unquote [meaning that students are in Spanish classrooms for a long period of time]. There is a lot of controversy but I do I have found that they these children do acquire English eventually."*

The conflicts between the school and the district generated a certain level of marginalization of the school. During the second year of our fieldwork, a new principal was

assigned to the school. In an informal conversation, he expressed the view that this school was considered the rebellious school in the district because it was always resisting district policies. The new principal was determined to turn this image around.

Congruent Alignment

At Frida Kahlo School the principal and the district leaders shared the same vision and performed the same tasks to implement the math program. This strong leadership alignment however, was related to some kind of teacher alienation from their work because teachers felt pressured. Explaining how hard it was to get time for collaboration among teachers, one teacher mentioned: *"[it is] Not easy at all. Our principal set up a one time a week common prep amongst my grade level team. But we meet with her. So any concerns that we have always have to go through her. There's never really time for us to meet as a group unless we have a faculty meeting and she requires [extra time]*."

Teachers also reported discomfort for not having a voice in the management team: *"…we're really not allowed to make decisions at our school. We have a principal that will plain out tell you to your fact that she is the boss and you have to listen to her."* At Frida Kahlo School, the principal seemed to be authoritarian. She did not allow teachers or teacher leaders to have any input on the school organization. By not allowing any other leaders to influence the agenda setting, the principal did not seem to share her power and this might have contributed to create this sense of alienation.

In Frida Kahlo School, teachers complained about receiving no encouragement from the principal. Moreover, teachers sharing with one another were the only source of encouragement at this school. At this school, there was not a sense of professional community. To characterize the principal style, a teacher said: *"Her intentions are wonderful. Her approach needs some work.*

….Even, a pat on the back would be great. Any little, sometimes just a little cup of coffee or a donut or a, or a new a new marker or you know, a new pen. You know, just something. Just to say you know I appreciate you. Uh, you know. Something."

We suspect that part of the problem to explain teachers' discomfort is that power to establish a vision was concentrated in the principal and the district and that there are no sources of encouragement. Another factor that influenced teachers' commitment was the principal's style, characterized by teachers as very aggressive and coercive, it was interesting that it took place at the school where there was shared vision and tasks between district and principal.

Complementary

The complementary alignment at Raul Madera School where the principal focused on building a professional community that contributed to the implementation of the district tasks, and where teachers were part of developing a vision for math education, seemed to produce a sense of empowerment as reported by teachers and the principal. Talking about being part of the decision making process in the selection of the math curriculum, one teacher said: *"They [the teachers] had the option of two different math series. It was a unanimous decision system wide. He [the principal] never said yeah or nay. He left the decision up to us."* Another teacher mentioned that having a role in the decision-making "*makes you feel empowered as a teacher."*

The principal mentioned that the district did not make top down decisions and the curriculum supervisor tried to articulate decisions with input from schools. The principal mentioned that his initiative to build a professional community has been also embraced by the district. Talking about his efforts to develop a professional community the principal expressed *"We have shared conference several times a week. Teachers are located to work in proximity to their colleagues at the same grade level. And they all have a shared lunch period, shared prep*

period, shared conference time. I, we bend over backwards to send them and this is tough because the substitutes you know, I had one day when I had all my fourth and fifth grade teachers gone. It's not experience. So that they can go to professional development and you know together, as a team.

Interviewer: And who originates this kind of scheduling? Where does the idea come from?

Principal: That comes from, well I think that's consistent in the district now but it's something we've been doing here for well over a decade. Since I got here." Thus, the principal also felt empowered and able to influence not only teachers, but the district, as well.

In terms of encouragement, one extremely interesting observation was that at Raul Madera School, where there was strong encouragement and high levels of morale promoted by the principal, there was also a professional community where teachers collaborated with one another about instruction. This was the only school in our sample that showed both high levels of morale and authentic teacher collaboration.

At Raul Madera School, teachers not only shared the vision, but were part of developing this vision by being active in their search for a new math curriculum. Not only did this principal share the power he had, but also, encouraged teachers to participate in this power relation. This can explain one of the reasons why teachers felt empowered. We suspect this empowerment came from the fact that leadership was distributed in a way that all leaders had meaningful tasks and there was strong agreement on the agenda.

Final discussion and limitations

This paper showed how leadership tasks that influence the teaching of mathematics were distributed among different leaders in four schools. The distribution of tasks and the level of consensus on the vision gave place to different types of alignment. Teacher commitment was

different in each case. Theories on distributed leadership have focused on leadership tasks and on how these tasks are enacted without attending to goal and consensus. Our data showed that in some cases, there was no such consensus. On the contrary, there were multiple agendas and visions competing with each other. For schools this implies that distributing leadership tasks were influenced by the distribution of power and by allowing other leaders to be part of the vision setting, seemed relevant to influence teachers' commitment on their job and the development of professional communities.

The case of Raul Madera also suggests that a tasks distribution, in which each of the leaders has certain levels of autonomy and ownership of complementary tasks and the vision is shared, seems to positively influence teacher commitment. This type of leadership configuration could be seen as a cooperative work or teamwork where every participant is responsible for performing a task that complements with their peers tasks. The tasks of selecting the curriculum seemed to be particularly relevant to promote teacher commitment because it was part of materializing teachers' vision. The case of Raul Madera shows the kind of reconceptualization of relationships mentioned by Hatch (2001) needed to coordinate the implementation of programs.

Our attempt to explore patterns of leadership alignment did not fully explore how institutions and leaders develop each type of alignment. In other words, we did not analyze what leaders do to align their beliefs and actions with the vision of other leaders and how they negotiate the visions. Another area to explore is misalignment, what leaders do to resist other leaders' visions and what type of conflicts emerged. An approach that looks at the history of these institutions may help to trace how they develop each pattern of alignment. While that analysis is beyond this paper, longitudinal data on schools can help fulfill this purpose. This

study only analyzed leadership alignment around the teaching of mathematics, while this allowed in depth understanding of how visions and tasks were shared towards a goal, it is only one of the many goals of educational institutions.

Far from presenting definite findings, this paper suggests that alignment, leadership tasks, and micropolitics are dimensions that need to be explored when analyzing leadership from a distributed perspective. Incorporating these dimensions into the analysis can better help us understand leadership practices. This becomes particular relevant when we make implications for school leadership practices. The better we understand how leadership works, the more likely we will be able to develop a theory of action for leadership practices.

Table 1: Leadership tasks and roles

	Cardenas	Narciso Lopez	Raul Madera	Frida Kahlo
Setting a Vision	District: Test-driven, pressure Principal: Teacher learning, parental involvement	District: Inquiry oriented math, support Principal: bilingual ed.	District: Eclectic Principal: professional community	District: Inquiry oriented math, support Principal: inquiry-oriented math, excellence
Setting a curriculum	District: test preparation	District: constructivist	District and teachers: moderate approach	District: constructivist
Providing materials	Principal, vice principal: classroom materials	District: Math manipulatives. Principal: bilingual materials. Teacher leader: math manipulatives	District, principal: general math materials.	Principal, vice principal, teacher leaders: general math materials
Providing opportunities to learn	Principal, vice-principal: coverage for teachers, informing about events. (District takes away already assigned resources)	District: organize professional development. Principal: provides time to meet.	District: organizing professional development. Principal: providing time to attend and time to meet.	District; organize professional development. Principal: provides time.
Teaching teachers	Principal, vice principal: teaching strategies and lesson plans	District: about math , Principal: about bilingual programs.	District and teachers: about math. , Principal: about children in poverty.	District, principal, teacher leaders: provide formative feedback about the curriculum. There are coaching and modeling lessons.
Monitoring	District,: provides testing data. Principal: analyzes testing data	District: for curriculum implementation. Principal: formal to fulfill requirements. Teacher leader: informal for curriculum implementation.	District and external consultant: informal with feedback. Principal: formal, to fulfill requirements.	District, principal, teacher leader: monitoring curriculum implementation
Providing encouragement	Principal, vice principal: teachers share frustrations with them.	Principal, teachers: share frustrations.	Principal: major source of encouragement. Teachers: encouragement.	Teachers: support and encouragement. (principal discourages)

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