External mandates and instructional leadership: school leaders as mediating agents

Karen Seashore Louis
University of Minnesota, Minneapolis, Minnesota, USA, and
Viviane M. Robinson
University of Auckland, Auckland, New Zealand

Abstract

Purpose – The purpose of this paper is to examine how US school leaders make sense of external mandates, and the way in which their understanding of state and district accountability policies affects their work. It is posited that school leaders' responses to external accountability are likely to reflect a complex interaction between their perception of the accountability policies, the state and district contexts in which those policies are situated and their own leadership beliefs and practices.

Design/methodology/approach – The authors use both principal and teacher survey data to explore the question of how perceptions of external policy are associated with instructional leadership behaviors. Cases of seven principals are employed to flesh out the findings from the survey analysis.

Findings – It is concluded that external accountability policy may have a positive impact on instructional leadership – where they see those policies as aligned with their own values and preferences, and where they see their district leaders as supportive of school-driven accountability initiatives. In these cases, school leaders internalize the external accountability policies and shape them to the particular needs that they see as priorities in their own school. Where one or the other of these factors is weak or missing, on the other hand, leaders demonstrate more negative attitudes to external accountability and weaker instructional leadership.

Originality/value – This analysis draws on a unique, large-scale data base and uses a mixed methods approach to answer the question.

Keywords United States of America, Schools, Leaders, Leadership, Educational policy, Implementation, Improvement, Legislation, Organizational behaviour, Principals

Paper type Research paper

Introduction

Educators around the world are living in a period of almost unprecedented policy activism. State pressures for schools to be more publicly accountable for their results were observed in the USA by the end of the 1980s (Wills and Peterson, 1992; Wohlstetter, 1991), and similar initiatives were felt in other countries (Gordon, 1995; Louis and van Velzen, in press). Whether the pressures for improvement generated by elected officials are due to the increased availability of comparative data (such as PISA or TIMSS internationally, and NAEP within the USA) or the more general circulation of theories about how to improve the management of public services (new public management), one of the consequences has been a steady stream of research on the nature and impact of accountability policies.

Through the mid-1990s, policy analysts began to examine the logic underlying state accountability and testing systems, most of which operated under the assumption that public test results would motivate school-based educators to work harder (because their performance would be made public) and smarter (because they would have clear

objectives for improving student learning, McDonnell, 1994; O'Day, 2002). Initially, the responsibility for creating accountability systems rested with the states, and most responded to the expectation, albeit in different ways (Louis *et al.*, 2005, 2010b).

In the USA, the passage of the federal No Child Left Behind (NCLB) Act, which took effect in 2003, added another layer to the school accountability hierarchy. This legislation tied federal funding to state testing, public reporting and a set of increasingly harsh consequences for schools that failed to improve. Like most federal education mandates, NCLB provided an umbrella framework which states adapt to suit their existing political, and accountability contexts (Louis *et al.*, 2010b). It also provided additional guidance and support, and, in particular, created the expectation that states would assist their districts in becoming better at supporting schools. The additional expectations for states that were embedded in NCLB have garnered less research attention than the law's effects on schools. This is, perhaps, surprising because the law was clear in its expectations that districts were seen as key institutional actors in creating results (Rorrer *et al.*, 2008). Over the last decade, increasing research attention to districts suggests that, while some may be up to the task of setting strong improvement agendas and providing support for schools (Honig, 2006; Kerr *et al.*, 2006; Togneri and Anderson, 2003), others are not (Coburn *et al.*, 2009; Spillane, 1998). The NCLB requirements are, thus, contextualized within state and school district policies related not only to accountability but to any related reform initiatives.

Given this layered accountability context, school leaders responses to federal accountability mandates are likely to reflect a complex interaction between their perception of state policies and support, the specific district contexts in which those policies are situated, including ongoing district reform initiatives and their own leadership beliefs and practices. In this paper, we investigate the relationship between these three forces, as we address a number of questions:

- Do school leaders' perceptions of state or district school improvement policies and procedures influence how they lead their schools?

- Are those school leaders who perceive their accountability context (state or district), as supportive more likely to behave as instructional leaders?

- How do school leaders integrate their own leadership beliefs and agendas with the external mandates to which they are subject? To what extent do they perceive conflict between the two?

- To what extent do school leaders' relationships with the district office enable them to craft coherence between the external accountability policies and their own agendas?

The focus of NCLB policy is on student outcomes, not on leadership. Although in most states, NCLB has led to specification of the achievement targets to be met by each school, the federal legislation is silent about the role of leadership in achieving them. Yet the implications of NCLB for school leaders are profound. If targets are to be achieved, at least in the population of schools relevant to this paper, then instructional leadership that is skilled in monitoring student achievement data, in using that data to identify student needs and in building collective teacher capability to address those needs, are just a few of the leadership skills and responsibilities that are required. In schools without high levels of capability in these areas, skilled leadership of

teacher change will also be required. NCLB not only sets highly ambitious student achievement targets, but by implication, also sets a very particular leadership agenda. The reaction of leaders to this agenda is, we predict, partly determined by the extent to which it is consistent with their current leadership beliefs and practice, and partly determined by their perception of district capacity to support them in achieving it.

Related literature

While our research questions belong within a long tradition of research on educational policy implementation, we draw, in particular, on two more recent theoretical trends within this literature. The first is that of sensemaking – the central insight of which is that implementing agents interpret policies through relevant prior beliefs and understandings (Spillane *et al.*, 2002b). It is their interpretations of policy, rather than an invariant and objective policy idea, that is implemented. The explanation of policy implementation, therefore, requires investigation of the nature and determinants of actors' policy interpretations.

The second theoretical idea is that of crafting coherence (Honig and Hatch, 2004). How NCLB policies are enacted by leaders is not just a function of their independent sensemaking processes. The quality of their instructional leadership is also likely to be influenced by the degree of coherence achieved between their own leadership agendas and the policy agenda set by the district office (Youngs *et al.*, 2011). We use the term "coherence achieved" deliberately, because we see coherence as the result of sustained interactions between policy makers and implementing agents – one in which there is mutual influence and adjustment so that there is a principled integration of internal and external policy agendas.

The third conceptual resource we draw on is that of instructional leadership. We explain the particular aspect of this concept that informed the items we included in our principal and teacher surveys.

Sensemaking and policy implementation

How people and organizations act is determined, in part, by the way in which they interpret and make sense of ambiguous event and environments (Gioia *et al.*, 1994; Thomas *et al.*, 2001; Walsh, 1995). A sensemaking framework is, thus, particularly important for understanding how ambitious and comprehensive external policies, like NCLB, may affect leaders within organizations. As Weick *et al.* (2005) point out, "sensemaking involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action" (p. 526). A sensemaking perspective thus allows us to investigate why accountability policies have engendered such disparate responses among implementing agents (Coburn, 2006; Mintrop and Sunderman, 2009; Spillane *et al.*, 2002a; Louis *et al.*, 2005). Drawing on research on situated cognition, researchers have shown that how reform policies are understood and implemented is "a function of the interaction of (a) the policy signal; (b) the implementing agents' knowledge, beliefs, and experience; and (c) the circumstances in which the local actor attempts to make sense of policy" (Spillane *et al.*, 2002b, p. 420).

Policies themselves comprise complex ideas that are often ambiguous and open to multiple interpretations. How educators understand a given policy will depend on the constructs, schema, values and emotional reactions they bring to the policy content (O'Day, 2002). These prior understandings act as lenses or filters through which the policy is understood, and those understandings, in turn, shape decisions about the

changes that the policy requires (Spillane *et al.*, 2002b). One key determinant of the response of implementing agents to accountability policies is the degree of consistency they perceive between the policy content and their own values, goals and strategies for achieving them. For example, school leaders who believe that fair treatment of special needs students is incompatible with assessing them against age-related benchmarks will have a different response to AYP targets for this categorical group than school leaders who do not share this belief.

When information, such as that communicated through accountability policies, is judged to be consistent with prior understandings, it is less likely to generate defensive reactions than if it is seen as challenging those understandings (Hart *et al.*, 2009). On the other hand, perceived consistency may lead to over-assimilation – that is to the mistaken interpretation that the policy requires no change in the school or its leadership (Spillane *et al.*, 2002 b). Given the prevalence of defensive motivation – that is the propensity to select and interpret information in ways that confirm rather than challenge prior beliefs (Hart *et al.*, 2009), unmediated policy interventions will have less chance of motivating change than those that are mediated in skillful interactions designed to engage the views of implementing agents.

When a large gap is perceived between the policy content and their current understandings, considerable cognitive effort may be required to interpret the policy accurately, let alone change practice accordingly. How a leader understands a policy, in other words, is partly a function of what they already understand and value. That is why we report in some detail about how our sample of principals and assistant principals understood their leadership at the level of both values and practices. These descriptions provide the backdrop against which we can better understand their responses to the external accountability policies.

The interaction of policy content and prior beliefs and experience is evident in a study of how three Chicago elementary schools responded to accountability policies (Spillane *et al.*, 2002b). Consistent with the policy intent, all three responded to the policy by focussing on test results, increasing their instructional leadership and concentrating on math and literacy. Despite these commonalities, there were important differences in their sensemaking. The principal with a deep commitment to school and teacher autonomy and high-level skill in data analysis, used external data to mobilize staff to understand and resolve uneven math results. A principal newly appointed to a school in probation mediated the policy as an opportunity to "get off probation" and focussed teachers on the test content and test taking skills to achieve that goal. In the third school, where student performance was high, the principal struggled to convince her teachers that the policy had relevance to their context. This study points to the importance of the principal's ability to help teachers "make sense" of accountability by connecting policy to goals and values that are already important to their staff.

Features of the situation in which sensemaking occurs also shape leaders' cognitive and behavioral responses to accountability policy. A critical part of the situation is the district office and we know there is wide variation in how districts support schools in their pursuit of improvement. Some school-district relationships reflect a more bureaucratic and others a more professional type of accountability (O'Day, 2002). In bureaucratic accountability the district's role is largely confined to monitoring school's performance to ensure that personnel are focussed on externally set targets and on employing resources and tools for achieving them (Daly and Finnigan, 2011; O'Day, 2002). In professional accountability relationships, the district role goes beyond monitoring, to the development of common frameworks for instruction and the

provision of support focussed on the improvement of teaching and learning (Youngs *et al.*, 2011). Such districts share the challenge with school leaders of raising the capability of teachers to improve performance.

Crafting coherence between external and internal improvement agendas
Researchers have repeatedly pointed out the negative consequences of policy incoherence on school improvement (Hess, 1999; Newmann *et al.*, 2002). Multiple simultaneous school reform initiatives, each with their own accountabilities, can fragment the efforts of leaders and teachers, create stress, and increase cynicism without achieving the intended improvement (Hess, 1999). While there have been multiple calls for increased policy coherence, neither of the two dominant strategies have proved effective.

The first, an "outside-in" strategy, treats incoherence as a problem of policy design (Honig and Hatch, 2004). Increased coherence is sought by "creating conglomerate policies that subsume the different strands of reform activity into one carefully orchestrated whole" (Knapp *et al.*, 1998). Increased policy coherence, in other words, will increase coordination and unity of teacher practice at the school level by making fewer and better aligned reform demands on schools (Coburn, 2003). There are a number of reasons why reliance on outside-in approaches has not proved sufficiently effective. First, national and global political forces that are likely to produce multiple, discrete and short-lived reform responses in many countries (Louis and van Velzen, in press). Second, our previous discussion of sensemaking showed that even when a policy is technically coherent it may not be experienced as such by implementing agents. "Coherence depends on how implementers make sense of policy demands and on the extent to which external demands fit a particular school's culture, political interests, aspirations, conceptions of professionalism and on-going operations" (Honig and Hatch, 2004, p. 18). The inevitable variety of context and cognition means that the coherence of a given policy will vary across implementing agents.

A common alternative, an inside-out approach to creating coherence, sees schools as the source of the solution. Rather than mandate a specific policy, a policy framework or menu is promulgated that provides leaders with considerable discretion about how they will meet broad policy goals (Youngs *et al.*, 2011). For example, rather than requiring implementation of a specific reform approach, the US comprehensive school reform initiative provided criteria against which schools' own reform proposals would be evaluated and funded (Borman *et al.*, 2003). It was up to school leaders to shape their proposals in ways that integrated what they saw as school priorities with federal requirements. In practice, these inside-out, or bottom up approaches to coherence may generate local ownership, but they may also fail to create reasonable fidelity to the intent of reform policies (Coburn, 2003). When leaders cannot establish a clear internal agenda, a discretionary external policy will not, in itself, help them find a more coherent focus. In addition, even those leaders who have a clear reform focus do not necessarily have the strategic skills required to integrate it with the external policy framework. For example, leaders may choose school reform initiatives for reasons that have little to do with their alignment to existing school reform purpose and strategies (Datnow, 2000; Datnow, 2002). Inside-out strategies may also fail when district leaders do not make the shift from a top down authority relationship to a more collegial one in which school leaders and policy-makers work together to integrate their internal and external agendas (Datnow and Stringfield, 2000; Coburn, 2003).

Both the outside-in and inside-out approaches treat coherence as an objective condition that is predominantly the responsibility of either the policy-maker or school-based educators. Instead, Honig and Hatch (2004) argue that a third approach is needed – one that treats coherence as a process that "requires school and school district central office leaders to work in partnership to continually 'craft' or 'negotiate' the fit between external demands and schools' own goals and strategies" (p. 17).

Honig and Hatch (2004) have proposed three broad conditions as conducive to this on-going interaction. First leaders need to establish improvement goals that are flexible enough to be integrated with external agendas but specific enough to enable monitoring of goal progress. Second, they need to use these goals to make decisions about how to respond to demands by either "bridging" and increasing interaction with external actors or "buffering" teachers from outside influences that they see as distractions from school priorities. Third, if coherence is crafted through on-going interaction between policy makers and implementing agents, district officials need to define their interactions with schools as a partnership rather than an authority relationship. Reducing leader regulatory roles also limits the degrees of freedom that are needed to bring differing internal and external agendas into alignment, and may result in re-introducing a more authoritative approach (Honig, 2006). If district officials see their job as monitoring results, administering sanctions and providing centrally determined resources, then the system is unlikely to engage with schools about the support they require from the district to achieve improvement goals. Building leaders may be left on the periphery, without the networks and access to the expertise they need to meet accountability goals (Daly and Finnigan, 2011).

Under a professional accountability relationship, the school-district relationship is one of reciprocal rather than top down influence – external policies are adjusted or interpreted in ways that serve local goals and local efforts are shaped by overall policy purposes (Coburn, 2003; Louis *et al.*, 2005). It is the on-going interaction around the pursuit of particular school goals that produces a coherent approach to school improvement. This interactive conception of coherence suggests that neither district officials nor school leaders acting alone will be able to craft coherence in school improvement efforts – it requires both to be working in partnership to learn about, refine and support the school's own improvement goals.

In the context of our study, the interacting agents are principals and district leaders. In our qualitative cases we investigate the extent to which these two parties were able to craft coherence between school goals and strategies and those of the district office – within the larger context of state accountability policies.

Instructional leadership

External accountability policies treat the school as the unit of analysis and intervention and yet it is the practice of teachers within those schools that determines improved performance (O'Day, 2002). The causal logic of accountability driven improvement requires school leaders to intervene to improve teacher practice so that student performance comes closer to accountability targets. Leadership work that is focussed on the improvement of teaching and learning is generally known as instructional leadership (Hallinger, 2005). A distinction is sometimes made between those leader behaviors that involve direct involvement with teachers, as in observation of classrooms, feedback to teachers, discussion of results and leadership of teacher learning, and more indirect instructional leadership practices involving the organization of curriculum and instruction and the creation of classroom and school

routines which protect time for student and teacher learning (Robinson *et al.*, 2011). What makes all these diverse behaviors illustrative of instructional leadership is that they are deliberately directed by leadership to the improvement of teaching and learning.

While evidence about the impact of instructional leadership shows that, all else being equal, students achieve more in schools with strong instructional leadership (Marzano *et al.*, 2005; Robinson *et al.*, 2008), our particular concern here is its role in contexts of district-driven accountability. Formal leaders must motivate teacher change by setting goals and expectations, resourcing those goals and providing high-quality opportunities to learn the knowledge and skills to achieve the goals (Finnigan, 2010; Leithwood *et al.*, 2002). Teacher commitment to the pursuit of ambitious goals requires teachers to believe that the goals are important and that they have the capacity to achieve them (Latham and Locke, 2006; Locke and Latham, 1990). Building that capacity is a key responsibility of school and district leaders.

The relationship between leadership and teachers' sense of efficacy was tested in a recent study of Chicago schools under accountability sanctions (Finnigan, 2010). Teacher efficacy was assessed as the strength of their belief that they could make a significant difference to their students' achievement, including that of their most difficult students. Of four leadership constructs, two (instructional leadership and support for change) were significantly related to teachers' sense of efficacy. The instructional leadership measure included items assessing leaders' goal setting (vision, setting high standards for both staff and students), the application of professional learning in classrooms and leaders' understanding and monitoring of student learning. These findings support the conclusion of an earlier study which also showed the substantial impact on school performance of the combination of instructional and change oriented leadership (Marks and Printy, 2003).

There is ample evidence that the desire of policy makers for strong instructional leadership falls short of the reality (Cooley and Shen, 2003; Horng *et al.*, 2009). Part of the difficulty is that increased instructional leadership requires leaders to spend relatively more time on the educational and less on the management aspects of their role, or at least to integrate instructional concerns into all aspects of their managerial decision making. Making this shift poses considerable professional and organizational challenges. The professional challenges include developing the capabilities required to engage in the practices described as instructional leadership (Nelson and Sassi, 2005; Robinson, 2011; Stein and Nelson, 2003). Broadly specified, those capabilities involve deep knowledge of teaching and learning, the ability to bring that knowledge to bear in context-specific management and instructional decision making and to build relational trust in the process. It is the integration of the knowledge, context-specific problem solving and trust building that characterizes the work of instructional leadership (Robinson, 2011). The organizational challenges include aligning the organizational and systemic conditions that shape school leaders' work to the goal of stronger instructional leadership.

Since states provide the regulatory framework within which school leaders' work, we have assessed school leaders' perceptions of the degree to which they see state policies as broadly supportive of their instructional leadership. We also assessed leaders "perceptions of the capacity of their district office to support their school's improvement by providing reliable information on school and student performance and using it to offer teacher learning opportunities that are aligned to student learning needs. We predict a relationship between school leaders" perceptions

of district capacity and their teachers' reports of the strength of their instructional leadership.

Data collection methods
This paper is based on a secondary analysis of an existing data base. The data sources for this paper are drawn from a larger multi-method study that included nine randomly sampled states[1], 45 districts and approximately 175 randomly sampled schools within these states[2].

Sampling
The random sample of districts was stratified to ensure that schools from larger and smaller districts would be selected, as well as district with higher and lower poverty and racial/ethnic minority enrollments. Size definitions followed the categories established by the National Center for Educational Statistics. As our measure of poverty, we used the percentage of students in the district who were eligible for free or reduced price lunch. Ethnic/minority enrollment was measured by the percentage of non-white students in the district. Schools were selected within each district to include one high school, one middle school and two elementary schools. Two districts per state (one larger, one smaller) were selected for site visits, and within these we conducted site visits in one secondary and one elementary school. When districts declined to participate, we replaced them with another district or school that had similar characteristics. The larger project and the complex sampling strategy for schools, and teachers are described in detail elsewhere (Louis *et al.*, 2010a). Teachers and principals filled out surveys that tapped assessments of building, district and state leadership, as well as school culture, in 2005 and 2008 (the second and fourth year of the five-year study).

Data collection
The teacher and principal surveys were mailed to individual schools and were typically completed by all teachers during a school staff meeting. Each survey form was accompanied by a blank envelope that could be sealed to ensure confidentiality so that none of the principals had access to their teachers' responses. The teacher response rate was slightly over 65 percent in 2005, and 55 percent in 2008[3]. Principals filled out their surveys at the same time, with at least one principal or assistant principal responding from most of the sampled schools in 2008, with responses received from 138 principals and 119 assistant principals, representing 37 districts and 146 schools. The principal response rate was 78 percent in 2005 and slightly over 60 percent in 2008. Data on school background characteristics (student socio-economic status, urbanicity, school enrollment, etc.) and student achievement were gathered from publicly available information. This paper draws from the 2008 teacher and principal surveys.

We collected three rounds of site-visit data from the 36 schools and 18 districts. These occurred in years 2, 3 and 5 of the study. As noted above, two districts in each of the nine states, one larger and one smaller, had agreed to be site visit districts. Typically we visited the two sampled buildings, but in two of the small districts we visited three buildings each, which were all the regular buildings in those two districts. Interviews were held with the principal (and assistant where they were present) during all three site visits, as were interviews with district leaders[4]. Interview protocols for varied between site visits, but focussed on their leadership values, actual leadership

practices, improvement strategies, responses to state accountability mandates and relationships with the district, community and state.

Limitations

Overall, our analysis and questions were motivated by some of the survey findings that we will present below. However, the paper's main value, we believe, lies in the more in-depth examination of the principal interviews. This paper, like most secondary analyses, has both strengths and limitations. Because the study from which these data were drawn was large in scale, we have access to a data base and a far more diverse population of schools, districts and states than one typically finds in qualitative investigations of how leaders adapt to the new pressures of accountability. On the other hand, because the study was not designed with our questions in mind, we are forced to rely on the survey and interview data that exists. To give just one example, superintendents and other district office staff were not asked specific questions about the principals included in this analysis, so we are only able to use their interviews as a generic "validity check" for consistency with the principal's responses. Some survey data that would have been useful, such as the Annual Yearly Progress status for the survey schools, is not available.

Finally, although the study is relatively comprehensive in its coverage of the USA, the findings are clearly embedded in a specific national context. However, because many countries are experiencing similar accountability policies, we believe that there may be some value in the results for non-US readers.

Data analysis: survey data

We first developed a merged data base that allowed us to match principal and teacher survey responses in 2008[5]. Due to non-response, either from teachers or any principal/assistant principal, on key items, our useable school sample size was reduced from 157 to 147, which includes 201 principal and assistant principal respondents[6]. We used the 2008 principal survey to develop measures of our two key predictor variables. A positive state policy index was measured by principal's degree of agreement with four positively worded items about state policy. Principals' perceptions of district accountability policies were assessed by their degree of agreement that the district was focussed on and could support the school's improvement efforts, which we called the positive district accountability index.

An index of instructional leadership was developed from the 2008 teacher survey. It comprised seven items about school leader involvement in such things as setting standards and providing instructional advice (Louis *et al.*, 2010a). Since the design of the wider study involved analyses of the relationships between selected school variables and student achievement, the instructional leadership measure was based on published evidence about the relative impact of various types of practice on student outcomes (Robinson *et al.*, 2008; Marzano *et al.*, 2005). Most of the items included in the survey were about direct instructional leadership, including frequency of classroom visits; provision of teaching advice and involvement in teacher planning. We judged that while it might be difficult for high school leaders to engage in these more direct forms of instructional leadership, they provided a realistic assessment of the focus of our elementary and middle school leaders.

The description of each of these variables, along with associated survey items and scale reliability is reported in Appendix.

In addition, we assumed that a number of measures of school characteristics might mediate the effects of accountability policies on principal behavior. In particular, secondary schools are typically under considerably more pressure on accountability measure, since they must not only perform on state tests, but also on graduation rates and increasing expectations about students being "college ready." We therefore included school level (elementary/secondary) in our analysis. Student poverty levels (percent eligible for free or reduced price meals) are known to be associated with lower student test scores, which may put schools in jeopardy of not passing muster on state indicators.

For this paper we examined the distribution of leaders' responses on key variables. Multiple regression analysis was used to examine predictors of administrative instructional leadership. The useable sample size for this analysis includes all respondents who identified themselves as an individual with the title of principal. This decision was based on the assumption that both principals and assistant were in a position to make assessments of state and district policies, that including both increased the sample size, and that teachers were asked to include all leaders in their rating of instructional leadership (see Appendix)[7].

Case study sampling and data analysis

As already indicated, site visits were conducted in 18 districts and 36 schools in nine states. For this paper, an outlier sampling strategy was used to further reduce the number of case study schools. All site visit schools were ranked by the instructional leadership score described above. While the relationship between this score and school type (elementary or high school) was 0.33 in the survey sample, the relationship was considerably stronger in this sub-group, with none of the high schools ranked above the median. As a consequence, we decided to eliminate high schools from the case analysis and focus on elementary and middle schools serving students in grades eight or lower. We sampled the four top and four lowest scoring schools for analysis. As we proceeded, we discovered that one of the lowest scoring sites had incomplete data so we limited our analysis to the four highest and three lowest instructional leadership schools.

The purpose of the qualitative analyses is to deepen our understanding of the inter- relationships between principals' attitudes to state and district policies and teachers' ratings of their leadership practices. We begin with a brief description of the context of each the seven cases and then provide a thematic analysis organized as a comparison between three principals categorized as low instructional leaders (LIL) and four categorized as high instructional leaders (HIL). This comparison is organized by four themes: principals' espoused leadership theory, instructional leadership emphasis and practices; response to state and district accountability policies, and their relationship with district office. Under each heading, we note the contrasts between the two principal groups while also being careful to note the variation within each group and the overlaps between them.

The seven schools, which were located in six different states, varied widely in size, demographic characteristics of the student body and the administrative experience of their principal (Table I). Both LIL and HIL schools came from larger and smaller districts; both groups had relatively new and relatively experienced principals; both included schools with students from varying backgrounds (although the LIL schools had somewhat fewer minority students). The only obvious imbalance across the two groups is that all of the LIL principals were male, while all of the HIL principals were

School	School location	Approximate enrollment	Student SES background	% minority	AYP sanction	Principal sex	Principal years as administrator in the school	Principal total years in administration
							Principal characteristics	
			School characteristics					
Low-instructional leadership schools								
Pinewood Elementary	Medium-sized town (NJ)	850	Higher	Low	No (2005, 2008)	M	9	9
Chillwater Elementary	Medium-sized city (NM)	500	Mid-level	Mid-level	No, 2005; Yes, 2008	M	6	30
East Starr Middle School	Small town (NY)	500	Higher	Low	No (2005, 2008)	M	2	7
High-instructional leadership schools								
Antica Elementary	Medium-sized town (NM)	420	Low	High	Yes, 2005; No, 2008	F	4	17
"Maple Island Elementary"	Medium-sized town (NC)	500	Low	Mid-level	No (2005, 2008)	F	7	14
Walker Elementary[b]	Large suburb (OR)	450	Mid-level	Mid-level	No (2005, 2008)	F	2	2
Overton Elementary	Small suburb (MS)	250	Mid-level	Mid-level	No (2005, 2008)	F	4	8

Notes: [a]We do not include specific demographic data in order to protect site and individual anonymity. For both poverty and percent minority, low signifies o20%, while higher more than 60%. [b]There was principal turnover in this school during the study. Principal characteristics refer to the principal in place when the 2008 survey was carried out

Table I.
Characteristics of case study schools and their principals[a]

female. However, Walker Elementary, an HIL school, was led by a male principal during the first two and a half years of data collection. Only Maple Island had an assistant principal, and it was therefore decided to confine our analysis to the seven who served in similar positions.

Given our focus on sensemaking and coherence we chose a largely inductive approach to interview analysis. Each author independently read interviews from both higher and lower instructional leadership and proposed themes that might be relevant to the research questions. After discussion we settled on seven coding categories that were discussed by all principals and that were relevant to the focus of our inquiry:

(1) features of school and community context that they believed shaped their leadership;

(2) descriptions of their personal leadership theories, including leadership vision and values;

(3) descriptions of their leadership priorities, particularly with respect to instructional leadership;

(4) connections between federal and state policies and their own leadership priorities and actions;

(5) connections between district policies and their own leadership priorities and actions;

(6) discussion of resources and their effects on their leadership; and

(7) principals' sense of "ownership" of external policies from federal, state or district sources and their integration of external and internal initiatives.

Responsibility for the initial analysis of each principal's interviews was divided equally between the two authors. Quotes and summaries of interview data were entered in an excel spreadsheet under each of the seven headings and then a draft case was written for each school. Before the cross-case analysis was completed the seven themes were reduced to the four which connected most closely to our research questions and captured the contrasts between HIL and LIL: leadership vision; reported instructional leadership practices; response to external accountability policies and relationship with district office. Once each case was written, a cross-case analysis was conducted in which the leadership of higher and lower scoring schools was systematically compared on each of the four themes. Claims made in the final cross- case analysis were checked against the entries in the excel spreadsheet and, in some cases, against the original interview transcripts. Finally, the first author read the district interviews with superintendents and other key leaders to cross-check principals' claims about both the district and the district's response to state and federal policies.

Survey results: instructional leadership and responses to accountability policies

Our analysis of the survey data was focussed on two questions: first, how did the principals describe the policy context? Second, did their views of their policy context help to explain their instructional leadership behaviors? Both of these questions address, albeit indirectly, the context in which they "make sense" of the policy

environment in which they are located, and whether they view them as coherent and incoherent.

School leader ratings of their policy context
In general, school leaders had a relatively positive view of their district's policies supporting accountability for student learning. On a six point scale, 40 percent of the leaders marked "strongly agree" with the statement that "Our district has the capacity for reliable student performance" while almost as many agreed that "Our district incorporates student performance data in district level decisions" and "Our district assists schools in the use of school/student performance data." The only area where districts were viewed somewhat less positively was on the item "The district uses student achievement data to determine teacher professional development needs and resources," where o30 percent indicated that they strongly agreed.

The principal survey also reveals a positive assessment of the effects of state policy. For example, the mean for ratings on the item "State standards stimulate additional professional learning in our school" was 4.39 on a six-point scale, with more than 60 percent of the respondents giving the item a rating between somewhat agree and strongly agree. Although fewer gave the items "State policies help us to accomplish our school's learning objectives" and "The state communicates clearly with our district about educational priorities" the highest rating of "strongly agree," both items suggest that most have positive views of the state's role in these areas. Only one of the items, "The state gives schools the flexibility and freedom to do their work," garnered a response suggesting that most respondents disagree[8].

An additional question is whether perceptions of state policy vary by the state in which they are located. While it is beyond the scope of this paper to analyze the different policy environments in which the schools were located, we know from a variety of media sources and other analyses that, for example, North Carolina and Texas were early adopters of state-wide tests and accountability, while Oregon and Missouri made limited use of tests for accountability until NCLB, and Nebraska did not institute state-wide tests until four years after NCLB had passed[9]. We might reasonably expect this history to make a difference, since research on teachers' perceptions of accountability policy suggests that familiarity breeds acceptance (Ingram *et al.*, 2004). We therefore conducted an ANOVA and also examined boxplots to look for patterns. The ANOVA was significant, but as both the *post hoc* Schefes test (not tabled) and the boxplots (Figure 1) indicate, this is largely due to a difference between Texas (which was highly rated, although it places high accountability demands on) and Oregon (which was rated lower, although it has a tradition of giving more leeway to local districts). Furthermore, Texas and North Carolina, with the longest consistent history of using tests for accountability, are perceived more positively than those that are later into the testing game. No other paired comparison is significant.

This finding hints that, as we might expect, school leaders' world views are not conditioned by deep knowledge of the larger national policy context in which they find themselves. Rather, they arrive at assessments of their state's policies by comparing today with what they may have experienced a few years ago or on the basis of what local conversations suggest they should expect. As one pre-NCLB study noted, leader's views of state accountability policies tend to be deeply affected by the amount of time they have had to adjust to them: new policies are regarded as onerous; time allows
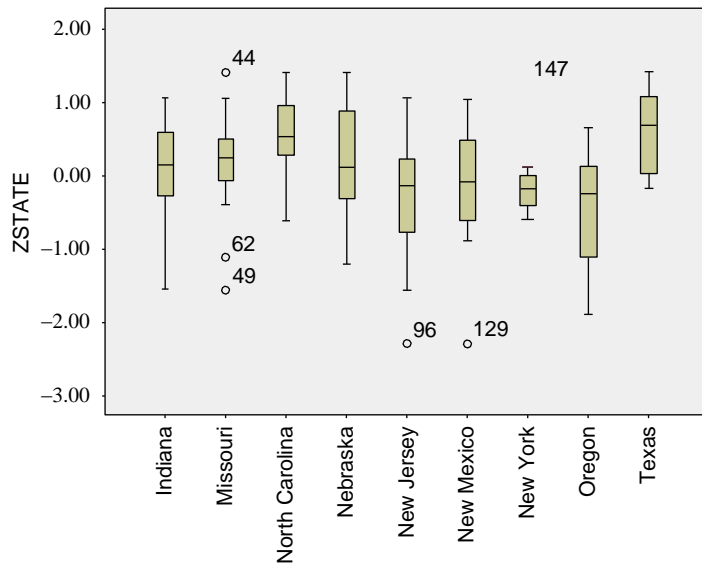
Figure 1.
Positive perceptions of
state policy (ZSTATE)
by state

people to "make sense" of the requirements so that older policies are accepted as a reasonable status quo (Louis *et al.*, 2005).

The relationship between school leader ratings of policy context and instructional leadership
Two regression analyses were carried out to examine the relationship between school leaders' assessments of district and state policy and their leadership behavior. In the first we looked only at the association of the positive state policy index and teachers' ratings of their leader(s) instructional leadership, controlling for two key school characteristics (building level, coded as elementary or secondary; and the percentage of students in poverty, or eligible for free and reduced-price lunch), as well as the respondent's position as a principal or assistant principal. We then examined the positive district accountability index in an alternative model in order to determine whether district policy and accountability priorities were associated with school leader instructional leadership behaviors. The results of these parallel regressions, presented in Table II, reveal three key findings:

(1) The first regression shows that school leaders' positive perceptions of state policy are significantly associated with teachers' ratings of their school leaders' instructional leadership behavior. The relationship could signal either that state policy shapes school level leadership, or that school leaders' current level of instructional leadership shapes their attitudes to an instructionally focussed policy or that there is a reciprocal relationship been the two.

(2) The second regression suggests that district policies are equally important.

(3) In both cases, school level and the demographic composition of the school are stronger predictors than the associations with policy.

|	Predictors[a]	b coefficients	t	Significance	R^2	Adjusted R^2
1	(Constant)	29.43				
	State policy index	0.125	2.099	0.037		
	Building level	-0.326	-5.36	0.000		
	Poverty	0.326	5.24	0.000		
	Principal/AP (dummy)	-0.007	-0.113	0.91		
	$F \frac{1}{4} 21.714$			o0.001	0.30	0.29
2	(Constant)	29.143				
	District accountability index	0.135	2.26	0.025		
	Building level	-0.309	-4.94	0.000		
	Poverty	0.347	5.54	0.000		
	Principal/AP (dummy)	-0.008	-0.12	0.899		
	$F \frac{1}{4} 21.208$			o0.001	0.30	0.29

Table II. Positive state policy index, district accountability index and the leaders as instructional leaders ($N \frac{1}{4} 201$)

Notes: [a]Building level, elementary or secondary dummy coded; poverty, percent free and/or reduced-price lunch; your title, principal (0) and assistant principal (1). See Appendix for items in state policy index and district accountability index

Overall, these findings suggest that that the school leaders' perceptions of both the district and the state's role are associated with their instructional leadership behaviors. They do not, however, answer the question of how these two policy levels may augment or interact with each other. We therefore decided to examine both variables simultaneously using structural equation modeling. The initial model made the following assumptions: first, school level and student characteristics may have a direct effect on the school leaders' perception of district and state accountability policies as well as on the leader(s) instructional leadership; second, leader perceptions of state policy are not independent of district policy. Rather, they are likely to see state policies through the accountability lens that is articulated to them by district personnel and through district policies.

An initial analysis suggested that the school's level was a weak predictor of the leaders' attitudes toward both state and district policy, and that student poverty was a weak predictor of leader attitudes toward district policy. When these insignificant paths were eliminated, the model was robust (see Figure 2). The results suggest that:

- leader's perceptions of a positive district accountability policy environment are a significant predictor of their instructional behaviors (as perceived by their teachers);
- leader's perceptions of a positive district accountability policy environment are a significant predictor of their positive attitudes toward state policies;
- secondary schools have significantly less instructional leadership, but school level is not a significant predictor of attitudes toward either district or state policy;
- schools with higher poverty levels are significantly more likely to have positive attitudes toward state policy. Although they also have more positive attitudes toward district policy, the path is not significant; and
- schools with higher levels of poverty are more likely to have teachers who experience strong instructional leadership.
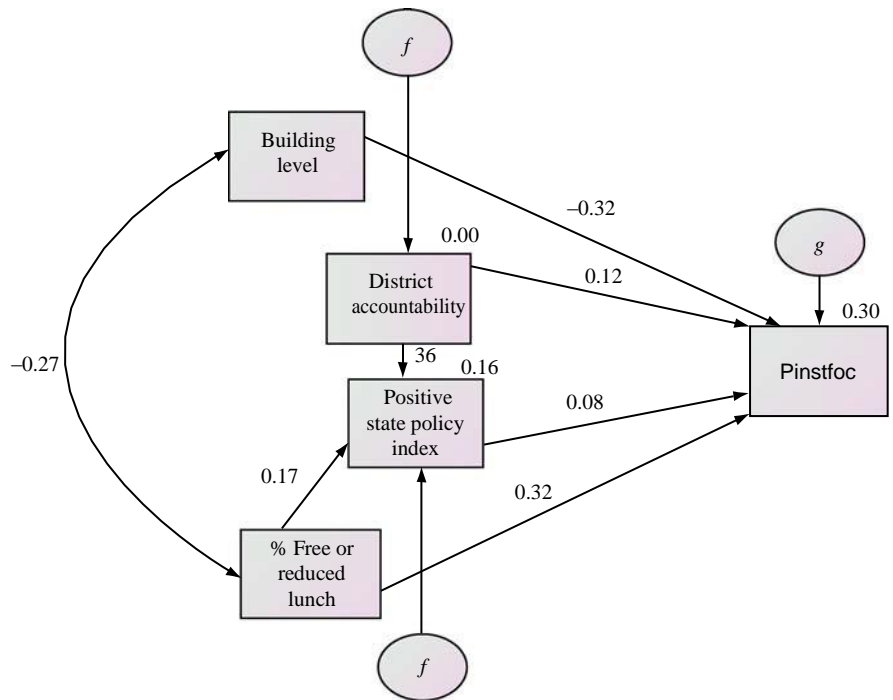
Notes: RMSEA = 0.00; F_{min} = 0.06; C_{min} = 0.00

Figure 2.
Predicting instructional leadership with state and district policy and accountability (SEM)
(N¼211)

Overall, these findings suggest that that the districts may play a moderating role with respect to attitudes to state policy. They also raise a tentative proposition that will be explored in more detail as we examine our case data – namely, that unless the district is able to build on state policy to augment the local agenda, the effects of state policies at the school level will be minimal. The finding that leaders in higher poverty buildings are more likely to have positive attitudes toward state policy and are also more likely to be viewed as instructional leaders by their teachers addresses a "holistic fallacy" that is often portrayed in the media, which assumes that high poverty schools are also "stuck schools" (Rosenholtz, 1991) with lackluster staff.

Responses to accountability policies: a comparison of low and high instructional leadership

In the remainder of our paper, we deepen our understanding of the impact of external accountability policies by looking at the relationships between school leaders' attitudes to and experience of state and district policies and their instructional leadership practices. Our findings are organized as a comparison between three school leaders who teachers rated as among the lowest on instructional leadership (LIL) and four who were assessed as among the highest (HIL). Table III presents an overview of this comparison organized under four themes relevant to our research questions.

	Low-instructional leaders	High-instructional leaders
Leadership vision	Describe their leadership as involving implementation of state and district policies create a positive family atmosphere prior to tackling big educational issues provide support so teachers can do their job	Describe an ambitious inclusive vision based on social justice or high-performance values Develop trusting respectful relationships which serve these ambitious purposes are clear about the need for teacher change

Reported instructional leadership practices
  Instructional management
	Manage the instructional program by:
	    organizing student placements
	    monitoring test results
	    ensuring teacher familiarity with state standards
		Manage the instructional program by:
		    monitoring test results
		    allocating resources to support educational goals

Teacher professional learning	Organize the teacher learning by:
	    communicating the expectation that teachers learn
	    providing access to a rich repertoire of teacher learning opportunities
	    providing considerable teacher discretion over the focus of teacher learning
		Lead or participate in the teacher learning by:
		    developing school-based teacher learning communities
		    using student learning needs to determine the focus of teacher learning
		    observing teaching and giving feedback based on common instructional framework

Response to external accountability policies	Are positive about the principle of increased accountability but are critical of aspects of implementation, e.g. misalignment of state and district standards are negative towards the impact on subgroups e.g., high poverty and special education students largely focussed on compliance with state and district requirements	Are positive about the principle of increased accountability and discuss how state and district policies provide leverage for pursuit of their educational vision and instructional leadership see district policies as aligned with school needs view themselves as active agents in shaping policy

Relationship with district office	Hold mostly positive attitudes to districts which are reported to exercise benevolent control through:
	    personal support and mentoring of
	    generous resourcing of principal development
	    increased control of instructional decisions which relieves the principal of some instructional leadership responsibility
		Hold mostly positive attitudes to districts which are seen as a partner in the pursuit of educational goals through:
		    a team approach
		    collaborative capacity building
		    responsive school – specific assistance
		    freedom to pursue own vision while strongly accountable for results

In discussing these findings, we will attend to both similarities and differences between the two groups of cases and to the differences within each group.

Thematic analysis: espoused leadership theories[10]

There were important differences between the stories HIL and LIL told about their leadership vision and their instructional leadership practices.

LIL. LIL spoke predominantly about their relationships with staff and students. For the principal of Chillwater Elementary, creating a school which was warm and friendly was a priority. He believed he could get things done by explaining the direction he wanted to go and working with those staff who wanted to go with him rather than assigning or directing staff accordingly. For example, he explained to his staff how he agreed with the district goal for greater inclusion of special education students and told them:

> I am not going to assign people to do that. You need to come to me and tell me if you're interested [y] they all came in and volunteered, we gave them some in-service and we've been doing it, this is our second year and it's great. But again, it was not, to me, if I require
> and I mandate and I say "you must", it's not there [y]. they have to want to do it, they have to [y] understand what it's about and be ready to go forward. That's how I operate.

Maintaining a positive school climate was also stressed by the principal of Cedar Grove Elementary who described himself as a "laid back leader" who strives to maintain a family atmosphere by focussing on the positive despite the challenge of some negative teachers and difficult parents and students.

The principal of East Starr Middle School articulated very deliberate strategies for building staff trust and mutual respect. He believed that trust developed over time as conflicts were resolved and teachers learned that their principal did not make decisions to appease particular groups. He also believed that trust was a pre-requisite to tackling the bigger educational issues and defended the delay this created in making important changes by arguing that the end result was likely to be a more sustainable change. While still focussed on relationships, the East Starr principal articulated a more assertive and, at times, directive leadership style than the other three LIL principals. His goal was less ensuring a family atmosphere than providing his teachers with an environment where they could be productive. His job was not to "make them happy," but to give them direction, provide them with support and protection from criticism.

Beyond relationships, the only other theme that emerged from the LIL principals' description of their leadership vision was the implementation of state and district policies. The Pinewood principal, for example, described his leadership vision as "to bring state policies back to the school."

HIL. While relationships were also important to HIL principals, their accounts of their leadership transcended the personal and interpersonal because relationships were embedded in a wider vision of what they wanted to achieve in their schools. For two of the four HIL principals, that wider purpose was informed by a deep commitment to social justice. The principal of Maple Island emphasized that creativity in addressing the needs of their very low-income pupils had to come first in all decisions. Similarly, the principal of Antica Elementary school brought her respect for and experience with Native American communities to her leadership of a school that had a reputation as the worst in the district. She saw her role as demonstrating that her pupils would succeed:

> The role of my school in this community, my own vision of it, would be that my school is the only school that is predominantly Native American. I think the role of Antica is to show

the community that Native American kids can and will be successful. I carry that vision because of my previous life [living on an Indian reservation] of knowing that. I think that's my mission in life, to show that to this community.

Although the leadership vision pursued by the remaining two HIL principals was less clearly based on a personal vision for social justice, they placed student achievement and well-being at the center. At Overton Elementary, the principal saw her leadership role as growing teacher leaders and supporting teacher teams that were focussed on instructional issues; at Walker, relationships of trust between parents and teachers were essential to building a more inclusive school in which parents and teachers could work together to help students break out of the cycle of poverty that many families experienced.

In short, the vision articulated by HIL principals was educationally richer and more ambitious than that of their LIL counterparts. They articulated educational purposes that were broader than relationships, broader than accountability imperatives and yet inclusive of both. While relationships were critical to achieving these broader educational and social justice purposes, they were not treated as ends in themselves. Respectful relationships with teachers were pursued through the work of developing strong teacher leadership and professional learning communities. Trust was a social resource for achieving shared educational and community vision (Bryk and Schneider, 2002). In the next section, we see how these differences in leadership vision translate into reported instructional leadership practice.

Thematic analysis: reported instructional leadership
Leaders descriptions of their instructional leadership exemplified the wide range of practices that are embraced by this concept (Hallinger, 2005). We have made a distinction in Table III between instructional leadership that involves instructional management and that which involves leadership of, or participation in, teacher learning. While both principal groups reported very similar engagement in the former, the HIL principals were far more closely involved in their teachers' professional learning. This is a particularly interesting difference given the research showing that the effects of this type of leadership on student outcomes are, on average, stronger than the effects of other types of leadership practice (Robinson *et al.*, 2008).

LIL principals. The three LIL leaders managed instruction by organizing student placements, monitoring test results and ensuring teacher familiarity with, and adherence to, state standards. The Chillwater principal, for example, gave a detailed account of how he made student placement decisions after seeking parental opinion and using test results to determine the best match between teacher, student and grade level.

Like his counterpart at Chillwater, the Pinewood Elementary principal acted as instructional leader through his organization of the instructional program and focus on student placements. He believed the job of teachers was to "deliver the curriculum," which he monitored by classroom observations and close review of test results. He ensured that there was both vertical and horizontal alignment of the curriculum to state standards and that teachers at any given grade level understood what students who were entering and leaving their grade should have achieved. Official test results were used for placement purposes by identifying students at the boundaries of achievement standards and ensuring they were placed with teachers who could provide the required assistance.

When it came to their leadership of teacher professional learning, the LIL principals relied heavily on communicating their expectations that all teachers should learn. The Chillwater principal described it this way:

> My attitude toward the staff is that I expect everybody to grow every year, including myself. I said, "I want to see, I want you to identify what areas you want to grow in and what things you're interested in. I want to see that growth every year. So keep moving forward." Some grow a little bit, some grow immense amounts. But again, it's, that's a challenge to them all the time to see where we're growing.

The principal did not, however, set a common direction for teacher "growth." Teachers exercised considerable discretion over how they set their own learning agenda. There was no explicit connection made by the principal between student and teacher learning needs. Topic selection and teacher choice seemed to be the paramount considerations. The same was true at Pinewood. The teachers' professional learning agenda was mainly set by the teachers themselves, because the district required grade level teams to do so. When asked how he would know if teachers' professional learning had influenced their classroom practice, the Pinewood principal replied that he would only really know if they told him.

The East Starr principal also described how he communicated his expectations for teacher change. He saw his main challenge as ensuring teacher familiarity with and responsibility for achieving the state standards. As he saw it, this change required convincing teachers that it was their responsibility not just to teach the material but to ensure that it was learned. His strategies included talking to teachers about their test results and expecting them to produce ideas for improvement:

> A bunch of [kids] didn't do well on the social studies assessments so the social studies teacher and I had a little conversation. "These are the results. What does this mean to you?" The poor lady doesn't know, she is like in tears. "I'm not going to fire you, but we need to look at this. We need to take a serious look and say Okay, our reading kids didn't do well [y] This social studies is a reading test. How do we bridge the gap?" [y] I said "Don't even start with 'I taught the material. Tell me what we are going to do differently.'" Solve the problem. It's not
> a personal attack.

In addition to communicating their expectation of change, the LIL principals supported teacher change by monitoring what was happening in classrooms through brief visits and informal feedback, reviewing plan books and resourcing a range of teacher professional learning opportunities, including bringing in expert speakers. None of the LIL principals made explicit the links between the topics chosen and the learning needs of particular groups of students and their teachers.

HIL. Like the LIL principals, the HIL principals played an active role in the management of the instructional program, and stated that they spent a lot of time on it. HIL principals, however, combined detailed knowledge of student learning needs and a vision of how to meet them. As a consequence, they played a stronger role in steering and coordinating improvement activities and teacher choice played a far less important role in determining the professional development agenda.

The extensive classroom teaching and literacy coaching experience of the Antica and Walker elementary provided the platform from which they evaluated teachers, engaged in data discussions and led professional learning. We will highlight Walker, because there was principal turnover during the study, but no gap in the emphasis on instructional leadership because of the sustained focus on the role of principal as coordinating teachers' instructional learning.

The first principal, interviewed in 2006, described how district-wide consultation had led to a common literacy curriculum supported by literacy coaches. He pointed out that this research-based, consensus-driven process allowed him to provide direction to the teachers in his school as they worked through their own plans. One of the strategies that he pointed to was filming in a teacher's class and then giving the film to the teacher to review in private before discussing it together. While this process made teaching visible to the two persons involved in the review, the principal was now searching for ways to have more teachers involved in peer observation and coaching. The new principal, whose background was in literacy, continued the momentum by focussing on developing common instructional practice. She described precisely what she was looking for when she visited classrooms:

> I'm looking for some commonality in the way we practice here [y] Are they giving kids time for guided practice before they ask them to do independent work and that kind of thing? I'm looking for differentiation all the time. I'm also looking for classroom management. I don't think learning happens if there is not good classroom management. So those are some of the things that I look for. Then what happens is I get to know the kids because I am in the classrooms all the time. The teachers aren't so uncomfortable with somebody coming in for more formal evaluation because I have been in on a daily basis.

Bi-weekly staff meetings were reconfigured as professional learning opportunities, internal expertise was identified and data teams met regularly to identify and support students with particular learning needs. The close involvement of this principal in the data teams meant she had a detailed knowledge of what teachers were up against and how she could best support them in achieving change:

> Data teams [y]. I sit in on them and I think it's really important that I'm there because then I hear what the concerns are and I can help address them [y] Our literature coach is the facilitator. What happens as teachers look at the data base, is they say "There is a group of kids really struggling with this. What should we do next?" So there is our literacy coach who has ideas and resources and I actually sometimes chime in. They have said they want me to [y] because that was my role in my previous life.

In contrast to Walker and Antica, the instructional leadership of the remaining two HIL principals was somewhat more indirect, involving careful organization and allocation of resources to support the achievement of school-wide educational objectives. In the case of Maple Island, the whole school was involved in the development of an International Baccalaureate curriculum that would prepare students of poverty for a globalized, high-technology world (and that requires external certification). The principal emphasized that it was important that any of her teachers be as capable as she was of explaining the way in which the curriculum would operate. In Overton, the principal also focussed on the creation of a vibrant, inclusive learning community, and noted that it was important to keep the vision very simple, and to allow many people to be teachers-of-teachers:

> Our vision is to be an excellent learning community, period [y]. I think that's important [for me to be up on the research] and I think I need to give those strategies and things to teachers, but who do you learn best from? Your colleagues. So my role in instructional leadership is
> providing time and providing opportunities for teachers to [y] learn from each other. Job
> embed it within the regular day, providing them professional development and then under that umbrella meaning providing time for them to study groups. Providing opportunities for them to collaborate. Bringing in a consultant, that is not me, that is an unbiased person that can sit down in a neutral setting and walk them through what good writing looks like

and anchor papers and assessments. Have them start learning to coach each other. That's my role.

In both cases the work was intimately connected to student learning needs and the principals positioned themselves as people who learned from their students and with their teachers about how to bring the vision to a reality.

In summary, both LIL and HIL principals saw themselves as instructional leaders, but they articulated different theories of change. The LIL group acted as if they believed they could improve teaching and learning by laying a foundation of positive or trusting relationships, communicating high expectations for improved teaching and teacher learning and giving teachers access to a rich repertoire of professional learning opportunities. Teachers were then given discretion over which opportunities they engaged in – a leadership strategy that precluded a closely coordinated collective improvement effort directed to specific student learning needs. This strategic orientation was largely disconnected from state and district policies and frameworks for school accountability, and few connections were drawn between what they could do to make their school a better place and external expectations. In contrast, the HIL principals were closer to the action – "hip deep in curriculum and instruction" (Hallinger, 2007). They either led the teacher learning themselves or accessed experts who could support a school-wide, tightly coordinated approach to instructional improvement that was guided by their vision, which was informed by the expectations of the district and state. If they themselves lacked the requisite knowledge of how to achieve their vision, they led as lead learners, researching good practice and joining with their staff in the sustained learning needed to achieve it. They brought about improvement by participating in the learning with their teachers rather than by telling teachers to learn or solve problems. It is this stance that best distinguishes the instructional leadership of the LIL and HIL principals.

Thematic analysis: leaders responses to external accountability policies
LIL. It would be wrong to characterize the three LIL attitudes to external accountability policies as wholly positive or negative, for their attitudes varied depending on whether they were describing their attitudes to the principle of increased external accountability (about which they were positive), their views about how the policies had been implemented (about which they were much more critical), or their attitudes to particular targets for their schools (about which they were mostly negative).

The Chillwater principal saw the increased accountability as mostly having a positive impact because it gave direction. He explained, "I have always felt, 'just give
me the plan'. Give me the parameters and let's get on with it and we'll do the best job we can [y]." He was, however, scathing in his criticism of the (state-determined) targets that had led his Title 1 building to fail AYP in the third year of our study – a result
which the principal attributed to the inclusion of free lunch students as a categorical group and unrealistic targets for the special educational students in his school.

> We were one of the few Title 1 schools in the state that are still meeting AYP. When [the state] changed [the comparison groups], we won't meet it again. Okay? They changed it last year to include all kids that were on free lunch. Well, that was 70% of the school. Okay? So, all of a sudden you had all these kids lumped as one big lump. And we have increased our special
> ed. numbers. [y] The parents want their kids here, so the numbers increase. But those kids aren't going to be on level so we're not going to make it. We know it [y] Parents accept it [y]

> What idiot created that plan? [y] I tell parents in that manner. I say, "You know, realistically [y] Every school is going to be in need of improvement by 2014 if nothing changes".

While implementation problems also contributed to this principal's critical attitudes, the most important source of his negativity was the fundamental incompatibility he perceived between his own and the state's approach to assessing student progress. For this principal, success is judged by demonstrating that students are making progress, not by reaching proficiency targets. His response to the AYP challenge was to change the assessment schedule and the tests used, so that teachers could provide more concrete and more regular representations of student "growth," but he was unwilling to accept predetermined benchmarks of adequate progress. While the external policy had pushed the principal to be more specific and transparent about the "growth" in his students' learning, his demonizing of the target setting aspects of the policy, made it difficult for him to see how the pursuit of "growth" could be integrated with those external policy requirements. In addition, reconciliation of the two agendas was inhibited by high turnover at the district office, which disrupted relationships and led to inconsistent district reactions to state policies.

When asked how external policies affected his leadership, the principal of Pinewood Elementary replied that "It's probably close to a hundred percent of every decision or every program that's brought into the school." State standards, tests and programs shape practically everything the school does, and there is little evidence of an independent instructional or educational agenda through which those requirements are mediated. The transmission of the state agenda does not imply complete agreement with it. The principal believes both the state standards and the targets for special education students are unrealistic, and this self-described "laid back" principal fears the consequences of NCLB for both his school and his own career:

> My biggest fear would be when you really look at the sanctions-punishments-consequences, whatever you want to call them, [that] you are never going to get to the point where 100% of your kids are proficient [y] When you take a look at your special ed. population, there is a reason they are in there. They have a learning disability [y] My philosophy has always been "Let's hold on as long as we can." You don't want to be the first who ends up in school choice or any other type of sanction. We've done very well and it's great being on the top, but [y] But in the back of my mind, I'm very concerned, because obviously I have a lot of years to go.

In short the response of the Pinewood principal to external accountability requirements is wholesale adoption. While he fears that the challenge is too tough and somewhat unfair, he brings no alternative to the table.

The principal of East Starr Middle School gave a considerably more positive account of state policies than the other two LIL leaders. At the time of the interviews, he was not experiencing AYP pressure and believed his school would exceed the state targets. He saw his job as ensuring that his teachers teach to the standards:

> [Our] professional responsibility is to make sure those lessons are aligned to the standards. So teaching to the test here is not a bad concept because it is standards-based. Years ago, if you said "teaching to the test", it was taboo [y] But in this case, you should be teaching to the test
> because those tests are a reflection of the standards that you should be teaching all year long [y] They take the guesswork out [y] It's very clear. We have access to the web site. We have
> resources now with canned lessons in how to teach to the standard. So in essence, we've made it very easy for teachers [y].

This principal shares the theory of improvement that is at the heart of NCLB itself. His theory of change is that the combination of clear expectations, aligned resources and accountability is sufficient. His role is to implement what the state wants and ensure his teachers do the same. It would be a mistake to judge this as an unprincipled stance, for he genuinely believes in what his district and state are doing.

HIL principals. The HIL had largely positive views about state policies. They were, in particular, positive about their increased accountability for the learning of poor and minority students even when they had reservations about some aspects of the implementation. The first Walker Elementary principal strongly approved of state standards and the "transformative" focus on high need student groups. Unlike the LIL principals, the generally positive attitudes of the HIL principals were not explained by the achievement levels of their students. The Antica principal (located in the same state as the Chillwater principal) had taken over a school which had been in restructuring "since the dinosaurs," and for which meeting AYP targets was a considerable challenge. She mediated external accountability requirements, not through communicating her personal views, nor by requiring and expecting change, but by focussing on developing supportive and capacity building internal accountability processes (Elmore, 2004). This is how she described her own leadership response to the external accountabilities:

> I have concentrated my efforts on data, on having realistic, real time data to give back to the staff to influence how they're doing their instruction [y] We do the MAP testing four times a year, so we have updated data all the time [y] [teachers] have access to that [information] anytime they want it. And that way we can see each individual student, whether they're progressing or not. And then we can get the help for those who are not [y] And for the accountability part of it, I think one of the things I've learned is that you have to look at student data in groups first, you've got to look at groups. So having the tiers made a good group to have. And I know how many Tier 2 readers there are, and how many Tier 3 readers there are, and how many Tier 1. And that can show us our progress.

The principal reported proudly that her emphasis on the two mantras of data and student success allowed her to out-perform schools on state tests that were assumed to be better than her own. She understood the external requirements as supportive of her own vision of demonstrating that Native American students could be as, or more successful, than other students in the district.

In sum, the voices of these seven enrich the survey finding that principal attitudes toward state policy were associated with their teachers' assessments of their instructional leadership behaviors. Overall, it is reasonable to say that the HIL principals had a "story" of external accountability as allowing them to be internally coherent, while the LIL understood external demands, but had not incorporated them in a coherent way into their own agenda. The HIL principals were remarkably similar in the degree to which they interpreted both state and federal external accountability as a lever for gaining an increased focus – on the part of the public and their teachers – on improving the performance of students in their schools. They viewed it as a tool to create a "no excuses" culture that focussed on learning and did not blame external accountability for the increasing likelihood that their schools would face some consequences.

Two of the LIL principals had incorporated state standards as the focus of their job, but neither of them connected state standards with their own role as instructional

leaders, presenting a classic case of limited efforts at active sensemaking may lead to incoherence. The third LIL principal had the most ambivalent perspective on state and federal requirements, focussing mainly on how targets would cast his school in a negative light. This principal's impassioned defense of "growth" as a measure of success, combined with his personal criticism of policy makers, meant he was very unlikely to find a principled way through the impasse. He had made sense of external demands, and had rejected them.

Thematic analysis: leaders relationships with their districts
According to Honig and Hatch (2004) the quality of relationships between policy makers and implementing agents affects the extent to which coherence is achieved between the goals and agendas of each group. Relationships that are stable and involve rich opportunities for interaction are more likely to foster the understanding and mutual adjustment required to craft coherence, than those which are less so. In this fourth theme, we compare the relationships LIL and HIL principals report having with the district offices, as a way of explaining their enactment of accountability policies through their instructional leadership.

LIL. Among the LIL principals, the Chillwater Elementary principal was the only one who expressed a predominantly negative attitude about the district's role. While most of his concerns were directed at the state, he was also critical of district leadership, which, he believed, had let the teacher unions get too strong, provided weak coordination for some improvement efforts, introduced initiatives that were not well linked to student learning (a "wellness" initiative) and placed increasing restrictions on school-centered development. In other words, he saw the district as an actor that made state policies (with which he disagreed) worse, largely because they responded to the state's agenda by trying to standardize education in a very diverse district. By the third interview, he was concerned about increasing constraints on schools' choice of curriculum materials and about how union restrictions and a shortage of substitute teachers restricted his teachers' access to the district's professional development opportunities. Despite these criticisms, he was grateful for the district's provision of an instructional coach whom he described as both supporting teachers and as relieving him of some of his responsibilities as an instructional leader.

At Pinewood Elementary, the district took a strong central role in determining curriculum and instruction. It set standards for classroom observation of teachers, and requirements for principal professional development that were higher than those of the state. In general, the principal felt supported by the district's central control. He was pleased about a district-wide math program which had raised test scores considerably, and wanted teachers to keep teaching to the tests (as recommended by the district) even though they reported that students were tired of them. In this regard, he saw the district's steady policies as buffering his school from state policies that he perceived as often incomprehensible. Even onerous district requirements were interpreted as protecting the principals. For example, district revisions to a form for reporting on required classroom observations were sufficiently consultative to please him:

> So again the superintendent's office, the curriculum department really was working with a group of teachers and leaders to come up with a new form that would make it easier for you to observe forty teachers but really pinpoint some areas that we wanted to work on. And it even gave you a spot where you could write comments.

He reserved his greatest enthusiasm for the support that he received from his district supervisor, who appeared to be highly available for mentoring and consultation. However, the support that he received, while valued, rarely focussed on instructional leadership or meeting district or state standards.

In East Starr, the third LIL school, the principal was constantly in the district office, which was located in his building. He spoke of the district in largely positive terms, citing generous conference provision and access to resources.

> This district is great and the resources are great. If I say I want to go to a conference, obviously I don't have carte blanch to everything but if it's within reason they will send me to any reasonable conference. I'm assigned a mentor [y] The superintendent pretty much has an open door policy.

However, despite the proximity, the district staff seldom visited the school and its classrooms, although the principal noted that he would have welcomed it if they had taken responsibility for communicating accountability messages to his teachers. The few leadership development opportunities the district had organized, such as a seminar on "Good to Great" did not appear to be closely aligned to teacher and student learning needs, and he did not see any connection to the state's accountability focus. The principal explained that he and the district staff did not get together to talk about leadership, but rather the "minutiae of the job." He saw the district as risk averse, and failing to provide the support of principal initiative and risk taking that was needed to counter the cautiousness engendered by a high stakes accountability environment. As he saw it, "Because the accountability has gone up, we've all retracted into our little safe zones. Everybody wants that safe harbor. We are never going to go anywhere. You can't steal second base without taking your foot off of first."

For the three LIL principals, relationships with the district office are best characterized as that of benevolent control, with districts providing personal support while at the same time directing curriculum and instructional choices. There was surprisingly little negative reaction to this control, possibly because these LIL did not bring a strong personal educational agenda, to the table. After all, wholesale adoption of state and district policies was the leadership vision articulated by two of these four principals.

HIL principals. The HIL viewed their districts as partners rather than supervisors in the process of school improvement. The partnership was evident in the formulation of district policies and initiatives, and in district support for school-initiated strategies for achieving broad district goals for improved achievement. When district policies and programs are formulated in consultation with building leaders, the boundary between internal and external agendas blurs as leaders and district staff learn together about how to address context-specific needs and priorities while still satisfying policy constraints. The first Walker principal described such a partnership in which 30 elementary school principals collaborated with district staff to hash out a framework for literacy instruction and assessment, while the second indicated that most of the school's reform work was focussed around district priorities that were collaboratively set. Forging a district-wide collaborative approach was also fostered by a staffing policy which enabled building leaders to move in and out of central office positions. At Walker, the first principal left the school to go to a district-level coordinating job; his replacement came to the school from a district level coordinator's position. The movement back and forth solidified personal and professional

relationships in ways that translated into a sense of being part of a collaborative district-wide improvement effort.

The development of principals' instructional leadership was supported by regular meetings to discuss professional readings and district polices as well as by more personal mentoring. The district also organized school clusters which engaged in structured and facilitated learning walks at each member's school.

While the Walker example illustrated partnership through the co-construction of district policies, a partnership rather than supervisory approach was also evident in district support for school-based initiatives that while aligned with broad district imperatives had their origins in the educational vision and passions of building leaders. The Maple Island principal was explicit about how her district had supported her efforts to develop an International Baccalaureate curriculum:

> What is so wonderful is I empower my teachers and at the district level, they empower me. They valued not only just my opinion but the amount of research and work we had done as a school. It wasn't just that I showed up and said "How about this magnet school thing? Why don't we do it?" They respected that this is an initiative that I've worked on for almost
> five years [y]. They have supported my vision all along, whether it was [the former Superintendent] and now [the current superintendent] [y]. Our [district] is so forward
> thinking.

What she emphasized on a number of occasions was the degree to which the district office staff, from superintendent on down, understood her school and its needs. They did so because they were available and spent time in the school: "You call them and they are the most accessible people. Seeing them walk in nobody (gasps) the district office is here. No one does that. It's just a natural thing to see them visit your school." Rather than being a source of standardized assistance and prescriptive interpretations of state policy, district staff provided assistance that was specific to the school.

The principals at Overton and Antica voiced similar perspectives on the role that their district's played in developing policies and programs that would support improvement in their schools. In Overton, where there were only six elementary schools, the principal emphasized the team work involved in a district-wide approach to improvement. She would not take a job closer to her home because of the value that she placed on her own learning within the team, and the commitment she felt to their collective decisions:

> [y] there are not many principals that can say that, at least once or twice a month, they sit down with their superintendent and make decisions for the district. For the most part, those of us that are elementary are usually low man on the totem pole and we usually have to get our information from the superintendent rather than make the decisions with him and that's
> what I love about him [y] Some of it is what I call administrivia [y] Other times, if
> questions are brought up we say, "OK, we've got this facing us. How do we want to go about it? Let's brainstorm it."

The Antica principal, from a slightly larger district, did not have the same intense collaborative experience with the district, but emphasized that they worked as a team. She, like the other HIL principals, described herself as accountable for results rather than for the means for achieving them. This results focus gave her a sense of

autonomy within a tight yet supportive external accountability environment. As she explained:

> I hate to say that they've given me carte blanche, but I feel a great deal of support from my bosses. And if I can justify whatever it is that we're doing, I have been allowed to do that. So I don't feel a lot of constraints [y]. But they are interested in Antica getting some academic results and have pretty much given me free reign to get those results in a way that I think we need to.

In summary, one of the conditions for crafting coherence between external and internal improvement and accountability agendas is opportunities for regular and respectful interaction between those responsible for each agenda (Honig and Hatch, 2004). This implies a relationship between and district officials where the latter are responsive and consultative rather than hierarchical and authoritative. Both LIL and HIL principals, with the exception of Chillwater, had forged what they considered to be "good" relationships with those in district office, which they saw as providing support and resources which would help them to meet external policy imperatives. The nature of the relationship was, however, distinctly different.

The relationship described by HIL principals was largely responsive and consultative. In three of the four HIL settings, the district was seen as a strong partner who gave them the opportunity to pursue educational agendas about which they were passionate. In other words, the HIL principals tended to see district policy as a work-in-progress, to which they could make contributions.

Although the relationships described by the LIL principal group were more authoritative, they did not necessarily engender a negative reaction. In the three LIL schools, responses to questions about the district's role suggested a sense of subservience, even when the relationship was deemed positive. The mental image of the principals was that the districts were in charge – for better or worse – and that the schools were obliged to implement policy choices on which they had limited input. Given that two of the schools were in small- or medium-sized districts, it is notable that their sense of being relatively powerless stands in contrast to the explicit stories of the HIL principals, which emphasized that they were at the table when decisions were made and were part of a network of peers and district staff whose job was to make sense of how state and district priorities could serve and be served by the needs and agendas of building leaders.

Summary and discussion

The evidence from our analysis of the survey data suggests that most principals in this study had positive perceptions of state policies, a finding that is corroborated from our qualitative data, where five of the seven had largely positive comments, while a sixth had mixed perceptions that included both positive and some negative comments. Given the public controversies about NCLB, school leaders' predominantly positive perceptions of state policy were something of a surprise. Overall, many journalistic reports about NCLB's effects on schools have tended to emphasize the problems that have been caused by particular stipulations of the law, such as tutoring requirements, or inflexibilities related to testing. At least one characterizes NCLB as heading toward "predictable failure" (Mintrop and Sunderman, 2009). This study suggests a need to reframe the discussion of accountability, at least in the context of the HIL.

Accountability and instructional leadership

The first two questions that we posed for our analysis were: Do school leaders' perceptions of state or district school improvement policies and procedures influence

how they lead their schools? Are those who perceive their accountability context (state or district), as supportive more likely to behave as instructional leaders? Our survey data suggest that the attitudes held by school leaders toward accountability policies may be particularly important as a predictor of their behaviors. In particular, principals and assistant principals who have positive attitudes about state and district policies are more likely to be judged as stronger instructional leaders by their teachers. Our findings suggest, furthermore, that positive perceptions of state policy are important, but that perceptions of support from the district moderate this positive relationship. These findings are important because they come from nine randomly sampled states operating different accountability policies under the broad NCLB federal legislation. The analysis of interviews with principals in seven schools confirmed these overall positive attitudes and also shed light on the underlying issues for those who were less positive. The interviews suggest that more negative views about accountability policies may have resulted from more ambitious categorical targets, especially those set for special education students.

The cases revealed subtleties in leaders' attitudes to policy that are easily overlooked, but that affect the degree to which they engage in active efforts to direct improvement in classrooms. It is important to note that there was no overall relationship between the attitudes expressed by leaders and the level of sanctions, if any, being applied to the school. The principal of Antica Elementary (HIL), which had been in corrective action "since the dinosaurs walked," was positive because it helped her pursue her strong equity agenda. The principal of Pinewood Elementary (LIL), which had never failed to achieve its testing targets, was, on the other hand, upset about the use of targets. The cases tell us more about how principal sensemaking and crafting coherence – the frameworks that were set out at the beginning of the paper – help to explain the quantitative findings. They also parallel an earlier examination of how superintendents' interpreted accountability requirements, which also ranged from a focus on implementing state expectations to one of exceeding and re-defining accountability goals (Louis *et al.*, 2010b).

Principal's sensemaking
The third question that we posed was: How do leaders integrate their own leadership beliefs and agendas with the external mandates to which they are subject? To what extent do they perceive conflict between the two? In our framework and analysis, we drew on a sensemaking perspective to address this topic. Sensemaking is the result of an interaction between policy content, the relevant prior understanding and experience of implementing agents and the context in which they are working (Spillane *et al.*, 2002b). Our seven cases have focussed on both the state and the district as relevant policy contexts and have shown the importance of taking each of these into account. With one exception, principals reported supportive relationships with their district offices and these relationships enabled them to either adopt the state's external improvement agenda or to integrate it with their pre-existing educational vision. The principals, again with one exception, viewed their relevant policy context as the state and the district, and made only limited references to NCLB.

School leaders differed considerably, however, in the educational and instructional knowledge that they brought to the enactment of the external agenda. The HIL principals brought more such knowledge to this task than did their LIL counterparts, and this difference substantially shaped how they led the work. The LIL principals led by building inclusive relationships, managing placements, monitoring data,

making quick visits to classrooms and urging their teaches to "grow," "show progress" and "solve" their teaching problems. In addition to the above relational and indirect instructional leadership roles, the HIL principal led the improvement of instruction by participating as either leader of or learner in teacher professional development that was aligned to student learning needs. While the LIL principals managed the structures and processes around instruction, such as placement, reporting and record keeping, the HIL principals were more directly involved, in addition, with the core business of teaching and teacher learning (Elmore, 2004).

In only two cases were these differences mitigated by district offices because of professional development experiences sponsored by the district. In these cases (Walker and Overton, both HIL), learning related to instructional leadership was an informal byproduct of collaborative administrative work that allowed school leaders to participate in developing instructional policies. For the remaining four HIL and LIL principals who had a positive view of the district, their appreciation was framed in terms of the district's providing of a supportive and consultative environment, which included the exchange of expertise, rather than because of a specific focus on the instructional learning needs of their principals.

Crafting coherence
Our final question was: To what extent do leaders' relationships with the district office enable them to craft coherence between the external accountability policies and their own agendas? In our introductory discussion, we described three conditions that are required for crafting coherence between the school improvement agendas of school leaders and policy makers (leader; Honig and Hatch, 2004): Specific yet flexible improvement goals, appropriate "bridging" and "buffering" to link schools to external actors, and a partnership orientation. These three conditions were very apparent in our HIL cases. All four principals saw district policies as enabling the achievement of educational goals to which they were already strongly committed. While there were occasional tensions around timing or implementation, the policies provided an enabling structure that sharpened goal focus and brought additional resources and expertise. The personal relationships they developed with the district officials made the power they wielded less threatening, and provided expertise and feedback. Sustained interaction about how district mandates could serve school needs and their educational vision built up a level of trust between them and district officials – a basis of trust from which together, they could figure out how to make the policy work for their school.

The evidence from two of our three LIL principals (East Starr and Pinewood) provides a more complex story. These two described a leadership vision that was predominantly about relationships between staff, students and community. Instructional and educational goals were given far less emphasis, and, in one case (Pinewood), were not articulated. Coherence was achieved, not by integrating two agendas, but simply by adopting that of the state and district office. The vision of the Pinewood principal was "to bring state policies back to the school." The East Starr principal described his role as ensuring his teachers taught to the standards, which in conjunction with the "canned lessons" would make it "very easy for teachers." For these two, coherence was achieved by policy adoption rather than integration. They were grateful for the greater clarity the policy and associated standards provided and their positive relationships with the district office meant they were happy to be directed.

One could argue that this wholesale policy adoption was desirable because it strengthened principals' instructional focus within these two schools. Close

examination of these two cases, however, suggests that this new focus is unlikely to deliver improved teaching and learning because the district offices are not developing the instructional leadership capability of these two. In East Starr there is little focus on leadership development and what there is, is not instructionally focussed. At Pinewood, the principal was appreciative of district professional development opportunities, but once again they were not tailored to his instructional leadership needs. The coherence that has been achieved may be at the level of words rather than actions, because, despite their genuine support of the policies, these two may lack the instructional knowledge they need to make the envisaged educational changes in their schools. Coherence in the end, lies not in the integration of words but in the integration of policy intent and school practice (Honig and Hatch, 2004). An obvious limitation of this study is that we do not have data on these practices.

Implications for policy and practice
These findings have important implications for principal preparation and support. They have confirmed the importance of developing school leaders with a clear educational vision that is grounded in understanding of their teachers and families, and the knowledge and skills to partner with their own teachers and their district office in its pursuit. They develop the capacity to bridge the external accountability demands and specific localized needs. Principals who lack a rich educational vision are overly reliant on relationships and externally oriented compliance to motivate teacher change. Principals' ability to think strategically about how external accountabilities provide important opportunities to advance their educational agendas is also critical to their ability to craft coherence between increasingly tight accountability requirements and their own agendas. Oppositional thinking, that sees the conflict rather than the common ground between school-based improvement strategies and those of the state and district, will inhibit formulating a goal that is inclusive of both.

    While we lacked systematic data on the background training and experience of the seven cases, there was some evidence that their curriculum and pedagogical knowledge was different. HIL principals were confident providers of advice, leaders of data teams, and partners in professional learning. Unlike the LIL principals, they went beyond the monitoring of results and appeals for improvement, to collaborative planning and implementation of reform strategies. To put it in its simplest terms, they seemed to know more about teaching their students. While these findings are suggestive of the importance of deep knowledge of teaching and learning for instructional leadership, it should be remembered that the instructional leadership of HIL principals also included a considerable emphasis on instructional organization. It was their leadership of teacher professional learning, however, which distinguished the instructional leadership of the HIL group.

    There are obvious implications of this study for district offices. While all but one principal described supportive and cordial relationships with their district office, the focus of those relationships was very different. Strong instructional leadership from principals seems to be related to a strong and collaborative instructional focus from district offices. Collaboration is important because it seems to ensure that experience support as appropriate to their school. Focus, rather than a menu of opportunities is important, so sufficient expertise can be developed within the district to achieve improvement goals. Of the four HIL principals, only two had participated in formal professional development opportunities provided through their districts. None of the LIL principals reported district-sponsored professional development. This suggests

that, while the emphasis on instructional leadership was already prominent at the time when this study was conducted, there is likely to be considerable room for districts to develop more collaborative opportunities for principals to learn to link educational visions to practical behaviors that might help them to enact them within their schools. Other survey analyses from the survey data base used here suggest that district-wide principal networks, such as those reported by the Walker and Overton are particularly critical to developing stronger school leadership (Lee *et al.*, 2012).

Concluding remarks

At the beginning of this paper we posited that "school leaders' responses to NCLB are likely to reflect a complex interaction between their perception of the accountability policies, the state and district contexts in which those policies are situated and their own leadership beliefs and practices." Other analyses, from the larger study that provided the data for this paper, also established the empirical connections, demonstrating that district practices are important in determining school leaders' sense of efficacy and their behavior (Leithwood and Louis, 2011) and that the way in which superintendents interpret state policy affects the way in which they design responses and interpret it to the schools (Louis *et al.*, 2010b). This in-depth analysis adds to the previous work in several ways.

First, it suggests that external accountability policy can have a positive impact on the behaviors of school leaders where principals see those policies as aligned with their own values and preferences, and where they see their district leaders as supportive of school-driven accountability initiatives. In these cases, principals internalize the external accountability policies and shape them to the particular needs that they see in their staff and among their students. Where one or the other of these factors is weak or missing, external accountability policies will not develop the instructional leadership that is needed to bridge state and district policy intentions with improved school performance.

Second, while the survey data suggest that both state and district policies are positively associated with instructional leadership, the case study analysis indicates that the principals who are assessed as effective instructional leaders by their teachers have a nuanced and well-articulated perspective about their district's policies, but see the state largely through the lens provided by the district. Their relationship with their districts suggests that they value the district's bridging role because district policies and practices support the alignment of accountability demands and the individual school's student development aspirations. They also value the buffering role and trust that the district will support their efforts to provide the right kind of educational experiences for their students, even when they may be a little risky.

Third, our analysis shows that effective instructional leaders internalize the external accountability policies articulated by both their state and district, and shape them to the particular priorities in their own school. Where cannot create a personal story about how external accountability demands support their aspirations for their school or where they see their districts as unsupportive, on the other hand, demonstrate more negative attitudes to external accountability and are assessed by their teachers as having weaker instructional leadership.

We cannot, of course, make causal attributions based on this research, which covers only a few years in any of the participating school leaders' careers. However, the use of in-depth interview data, collected over time, enriches our understanding of how they

use their larger narrative of the purposes of state and district accountability initiatives to reinforce the leadership strategies and values that they have developed. School leaders who appear to have subscribed to a "big narrative" of state and district accountability – that the purpose of leadership in schools is to create settings in which students from diverse backgrounds can succeed – work diligently to shape the environments in which this will be achieved, even when the "small narrative" of test scores suggest, in the short run, that the school is still imperfect.

Notes

1. The nine states were: New York, New Jersey, North Carolina, Texas, Missouri, Indiana, Nebraska, New Mexico and Oregon.

2. The term approximate is used because, over the course of a five-year study some schools dropped out entirely, some had only partial data, and some were added. In a few small districts, middle and secondary schools were combined, while others used a K-8 configuration, with no middle school. The actual *N* of schools varies across components of the very large data base.

3. In both administrations, a few schools failed to return surveys; whole school non-response was greater in 2008. Other response rates were limited because teachers were absent or (infrequently) chose to turn in unusable questionnaires. In 2008, we mailed the surveys to 177 schools with a total teacher population of 7,075. Teachers returned 3,900 surveys from 134 schools. A total of 211 principals responded, including 116 principals and 90 assistant principals. When teacher and principal responses were merged, the total number of schools in the 2008 sample was 146. We cannot calculate within-school non-response, but in general it is clear that the lower response rate was due to the absence of entire schools rather than spotty response within schools.

4. Interviews and observations with teachers, and interviews with other members of the school community, also occurred but are not part of this analysis because they were not asked about the questions addressed in this study. In this paper we draw primarily on 20 principal interviews (one principal was only interviewed twice), with validity check from 15 superintendent interviews.

5. The 2005 and 2008 surveys had some overlapping items for both principals and teachers, but were different. In addition, the same questions were not asked of principals or district leaders during the three site visits.

6. The minimum number of teachers responding in any school was seven. One school was eliminated due to low teacher response. Another factors leading to a reduction in the *N* of schools was due to the fact that a number of schools "dropped out" of the 2008 survey administration and that there were no principal or assistant principal respondents in a few schools.

7. To ensure that this decision did not have a significant effect on the results, we conducted ANOVAs to determine whether there were any significant differences between principals and assistant principals on any of the key variables used in our analysis. The *F*-statistics for the ANOVAs have significance levels of between 0.22 and 0.88. We also included principal/ AP status in some analyses.

8. Are these assessments of state policy, obtained in 2008, different from those collected at the beginning of the project, when leaders had less experience with the effects of state responses to NCLB? The answer is, not surprisingly, that they are. While there are some differences between states, respondents in all states rated state policies less positively in 2008 than in 2005. Note that the respondents in 2005 and 2008 were not matched due to principal turnover and non-response in some schools.

9. Although we turn to the interview data in detail later in this paper, the principals in our case studies tended to view the state as the primary source for their public accountability and rarely mentioned the federal role.

10. Argyris and Schön (1974) distinguish between espoused theories of action and theories-in-use. Espoused theories are derived from reports of actions or intended actions and theories-in-use from behavioral evidence (observations or incident reports). Since the following accounts of principals' leadership are derived from interview data, they are, by definition, espoused theory.

References

Argyris, C. and Schön, D. (1974), *Theory in Practice: Increasing Professional Effectiveness*, Jossey-Bass, San Francisco, CA.

Borman, G.D., Hewes, G.M., Overman, L.T. and Brown, S. (2003), "Comprehensive school reform and achievement: a meta-analysis", *Review of Educational Research*, Vol. 73 No. 2, pp. 125-230.

Bryk, A.S. and Schneider, B. (2002), *Trust in Schools: A Core Resource for Improvement*, Russell Sage Foundation, New York, NY.

Coburn, C.E. (2003), "Rethinking scale: moving beyond numbers to deep and lasting change", *Educational Researcher*, Vol. 32 No. 5, pp. 3-12.

Coburn, C.E. (2006), "Framing the problem of reading instruction: using frame analysis to uncover the microprocesses of policy implementation", *American Educational Research Journal*, Vol. 43 No. 3, pp. 343-79.

Coburn, C.E., Honig, M.I. and Stein, M.K. (2009), "What's the evidence on districts' use of evidence?", in Bransford, J., Gomez, L., Lam, D. and Vye, N. (Eds), *Research and Practice: Towards a Reconciliation*, Harvard Education Press, Cambridge, MA, pp. 67-87.

Cooley, V. and Shen, J. (2003), "School accountability and professional job responsibilities: a perspective from secondary principals", *NASSP Bulletin*, Vol. 87 No. 634, pp. 10-25.

Daly, A.J. and Finnigan, K.S. (2011), "The ebb and flow of social network ties between district leaders under high-stakes accountability", *American Educational Research Journal*, Vol. 48 No. 1, pp. 39-79.

Datnow, A. (2000), "Power and politics in the adoption of school reform models", *Educational Evaluation and Policy Analysis*, Vol. 22 No. 4, pp. 357-74.

Datnow, A. (2002), "Can we transplant educational reform and does it last?", *Journal of School Change*, Vol. 3 Nos. 3-4, pp. 215-39.

Datnow, A. and Stringfield, S. (2000), "Working together for reliable school reform", *Journal of Education for Students Placed at Risk*, Vol. 5 Nos 1-2, pp. 183-204.

Elmore, R.F. (2004), *School Reform from the Inside Out: Policy, Practice, and Performance*, Harvard Education Press, Cambridge, MA.

Finnigan, K.S. (2010), "Principal leadership and teacher motivation under high-stakes accountability policies", *Leadership & Policy in Schools*, Vol. 9 No. 2, pp. 161-89.

Gioia, D.A., Thomas, J.B., Clark, S.M. and Chittipeddi, K. (1994), "Symbolism and strategic change in academia: the dynamics of sensemaking and influence", *Organization Science*, Vol. 5 No. 3, pp. 363-83.

Gordon, L. (1995), "Controlling education: agency theory and the reformation of New Zealand schools", *Educational Policy*, Vol. 9 No. 1, pp. 54-74.

Hallinger, P. (2005), "Instructional leadership and the school principal: a passing fancy that refuses to fade away", *Leadership and Policy in Schools*, Vol. 4 No. 3, pp. 221-39.

Hallinger, P. (2007), "Leadership for learning: reflections on the practice of transformational and instructional leadership [Online]", Australian Council for Educational Research, Melbourne, available at: www.acer.edu.au/documents/RC2007_Hallinger-Presentation.pdf (accessed July 10, 2011).

Hart, W., Albarracin, D., Eagly, A., Brechan, I., Lindberg, M.J. and Merrill, L. (2009), "Feeling validated versus being correct: a meta-analysis of selective exposure of information", *Psychological Bulletin*, Vol. 135 No. 4, pp. 555-88.

Hess, F. (1999), *Spinning Wheels: The Politics of Urban School Reform*, The Brookings Institution, Washington, DC.

Honig, M. and Hatch, T. (2004), "Crafting coherence: how schools strategically manage multiple, conflicting demands", *Educational Researcher*, Vol. 33 No. 8, pp. 16-30.

Honig, M.I. (2006), "Street-level bureaucracy revisited: frontline district central-office administrators as boundary spanners in education policy implementation", *Educational Evaluation and Policy Analysis*, Vol. 28 No. 4, pp. 357-83.

Horng, E., Klasik, D. and Loeb, S. (2009), *Principal Time-Use and School Effectiveness: School Leadership Research Report 9-03*, Stanford University, Palo Alto, CA.

Ingram, D., Louis, K.S. and Schroeder, R. (2004), "Accountability policies and teacher decision making: barriers to the use of data to improve practice", *Teachers College Record*, Vol. 106 No. 6, pp. 1258-87.

Kerr, K.A., Marsh, J., Ikemoto, G., Darilek, H. and Barney, H. (2006), "Strategies to promote data use for instructional improvement: actions, outcomes, and lessons from three urban districts", *American Journal of Education*, Vol. 112 No. 4, pp. 496-520.

Knapp, M.S., Bamburg, J.D., Ferguson, M.C. and Hil, P.T. (1998), "Converging reforms and the working lives of frontline professionals in schools", *Educational Policy*, Vol. 12 No. 4, pp. 397-418.

Latham, G.P. and Locke, E.A. (2006), "Enhancing the benefits and overcoming the pitfalls of goal setting", *Organizational Dynamics*, Vol. 35 No. 4, pp. 332-40.

Lee, M., Louis, K.S. and Anderson, S. (2012), "Local education authorities and student learning: the effects of policies and practices", *School Effectiveness and School Improvement*, Vol. 23 No. 2, pp. 133-59.

Leithwood, K. and Louis, K.S. (2011), *Linking Leadership to Student Learning*, Jossey-Bass, San Francisco, CA.

Leithwood, K., Steinbach, R. and Jantzi, D. (2002), "School leadership and teachers' motivation to implement accountability policies", *Educational Administration Quarterly*, Vol. 38 No. 1, pp. 94-119.

Locke, E.A. and Latham, G.P. (1990), *A Theory of Goal Setting and Task Performance*, Prentice Hall, Englewood Cliffs, NJ.

Louis, K.S. and Van Velzen, B. (Eds) (in press), *Educational Policy in an International Context: Political Culture and its Effects*, Palgrave/Macmillan, New York, NY.

Louis, K.S., Dretzke, B. and Wahlstrom, K. (2010a), "How does leadership affect student achievement? Results from a national US survey", *School Effectiveness and School Improvement*, Vol. 21 No. 3, pp. 315-36.

Louis, K.S., Febey, K. and Schroeder, R. (2005), "State-mandated accountability in high schools: teachers' interpretations of a new era", *Educational Evaluation and Policy Analysis*, Vol. 27 No. 2, pp. 177-204.

Louis, K.S., Thomas, E. and Anderson, S.E. (2010b), "How do states influence district leadership", *Educational Leadership and Policy*, Vol. 9 No. 3, pp. 328-66.

McDonnell, L.M. (1994), "Assessment policy as persuasion and regulation", *American Journal of Education*, Vol. 102 No. 4, pp. 394-420.

Marks, H.M. and Printy, S.M. (2003), "Principal leadership and school performance: an integration of transformational and instructional leadership", *Educational Administration Quarterly*, Vol. 39 No. 3, pp. 370-97.

Marzano, R., Waters, T. and McNulty, B. (2005), *School Leadership that Works: From Research to Results*, ASCD, Alexandria, VA.

Mintrop, H. and Sunderman, G. (2009), "Predictable failure of federal sanctions-driven accountability for school improvement – and why we may retain it anyway", *Educational Researcher*, Vol. 38 No. 5, pp. 353-64.

Nelson, B.S. and Sassi, A. (2005), *The Effective Principal: Instructional Leadership for High Quality Learning*, Teachers College Press, New York, NY.

Newmann, F., Smith, B., Allensworth, E. and Bryk, A.S. (2002), "Improving Chicago's schools: school instructional program coherence", *ERS Spectrum*, Vol. 20 No. 2, pp. 38-46.

O'Day, J. (2002), "Complexity, accountability, and school improvement", *Harvard Educational Review*, Vol. 72 No. 3, pp. 293-329.

Robinson, V. (2011), *Student-Centered Leadership*, Jossey-Bass, San Francisco, CA.

Robinson, V.M.J., Bendikson, L. and Hattie, J. (2011), "Leadership and student outcomes: are secondary schools unique?", in Robertson, J. and Timperley, H. (Eds), *Leadership and Learning*, Sage, London, pp. 131-42.

Robinson, V.M.J., Lloyd, C. and Rowe, K. (2008), "The impact of leadership on student outcomes, An analysis of the differential effects of leadership types", *Educational Administration Quarterly*, Vol. 44 No. 5, pp. 635-74.

Rorrer, A.K., Skrly, L. and Scheurich, J.J. (2008), "Districts as institutional actors in educational reform", *Educational Administration Quarterly*, Vol. 44 No. 3, pp. 307-57.

Rosenholtz, S.J. (1991), *Teachers' Workplace: The Social Organization of Schools*, Teachers College Press, New York, NY.

Spillane, J., Diamond, J.B. and Burch, P. (2002a), "Managing in the middle: school leaders and the enactment of accountability policy", *Educational Policy*, Vol. 16 No. 5, pp. 731-62.

Spillane, J., Reiser, B.J. and Reimer, T. (2002b), "Policy implementation and cognition: reframing and refocusing implementation research", *Review of Educational Research*, Vol. 72 No. 3, pp. 387-431.

Spillane, J.P. (1998), "State policy and the non-monolithic nature of the local school district: organizational and professional considerations", *American Educational Research Journal*, Vol. 35 No. 1, pp. 33-63.

Stein, M.K. and Nelson, B.S. (2003), "Leadership content knowledge", *Educational Evaluation and Policy Analysis*, Vol. 25 No. 4, pp. 423-48.

Thomas, J.B., Sussman, S.W. and Henderson, J.C. (2001), "Understanding 'strategic learning': linking organizational learning, knowledge management, and sensemaking", *Organization Science*, Vol. 12 No. 3, pp. 331-45.

Togneri, W. and Anderson, S.E. (2003), "How high poverty districts improve", *Leadership*, Vol. 33 No. 1, pp. 12-6.

Walsh, J.P. (1995), "Managerial and organizational cognition: notes from a trip down memory lane", *Organization Science*, Vol. 6 No. 3, pp. 280-321.

Weick, K.E., Sutcliffe, K.M. and Obstfeld, D. (2005), "Organizing and the process of sensemaking", *Organization Science*, Vol. 16 No. 4, pp. 409-21.

Wills, F.G. and Peterson, K.D. (1992), "External pressures for reform and strategy formation at the district level: superintendents' interpretations of state demands", *Educational Evaluation and Policy Analysis*, Vol. 14 No. 3, pp. 241-60.

Wohlstetter, P. (1991), "Accountability mechanisms for state education reform: some organizational alternatives", *Educational Evaluation and Policy Analysis*, Vol. 13 No. 1, pp. 31-48.

Youngs, P., Holdgreve-Resendez, R. and Qian, H. (2011), "The role of instructional program coherence in beginning elementary teachers' induction experiences", *The Elementary School Journal*, Vol. 111 No. 3, pp. 455-76.

Further reading

Grissom, J.A. and Loeb, S. (2011), "Triangulating principal effectiveness", *American Educational Research Journal*, Vol. 48 No. 5, pp. 1091-123.

Appendix

Measure	Stem and items	Scale reliability	Minimum-maximum/ mean/SD
Positive state policy index: degree of agreement with positively worded statements about the instructional focus and responsiveness of state policy (from principal survey)	To what extent do you agree that: state standards stimulate additional professional learning in our school; state policies help us accomplish our school's learning objectives; the state gives schools freedom and flexibility to do their work; the state communicates clearly with our district about educational policies	0.83 (n¼4)	Minimum/ maximum: 5-30 Mean: 22.4 SD: 4.08
District accountability: degree of agreement that the district was focussed on and could support the school's improvement efforts (from principal survey)	To what extent do you agree that: our district has the capacity for reliable assessment of student and school performance; our district incorporates student and school performance data in district-level decision making; our district assists schools with the use of student and school performance data for school improvement planning; the district uses student performance data to determine teacher professional development needs and resources	0.87 (n¼5)	Minimum/ maximum: 1-6 Mean: 5.32 SD: 0.65
Principal instructional leadership: teacher ratings of specific types of principal instructional leadership – frequency of or agreement about its occurrence (from 2008 teacher survey)	To what extent do you agree or disagree with the following statements about your school leader(s): my school leader clearly defines standards for instructional practices; how often in this school year has your school leader(s) [y] observed your classroom instruction; attended teacher planning meetings; made suggestions to improve classroom behaviour or classroom management; given you specific ideas for how to improve your instruction; buffered teachers from distractions to their instruction?	0.82 (n¼7)	Minimum/ maximum on factor score: -2.71 to 1.96 Mean: 0 SD: 1

Table AI.
Survey measures

About the authors
Karen Seashore Louis is a Regents Professor at the University of Minnesota, USA. Karen Seashore Louis is the corresponding author and can be contacted at: klouis@umn.edu
Viviane M. Robinson is a Distinguished Professor at the University of Auckland, New Zealand.