ABSTRACT

Title of Document: **SUPPORTS FOR PRINCIPALS' SENSEMAKING: LESSONS FROM THE INSTITUTE FOR LEARNING'S INSTRUCTIONAL LEADERSHIP PROGRAM IN BALTIMORE, MARYLAND**

Gina Schuyler Ikemoto, Ph.D., 2007

Directed By: **Dr. Meredith I. Honig, Education Policy and Leadership**

Current federal, state, and local policies increase demands on school principals to take an active role in leading instructional improvement within their schools. For many principals "instructional leadership" (IL) represents a fundamentally new set of knowledge, skills, and practices. Accordingly, principals need assistance in engaging in IL. However, research on IL and principal professional development generally has not elaborated what such assistance might entail or how to implement it. This study addresses this research gap. First, it frames the problem of assisting principals' engagement in IL as in part a challenge of supporting their sensemaking about what IL involves and how to exercise it in ways relevant to their local contexts. Then it elaborates how concepts from socio-cultural learning theory help reveal features of assistance that support such sensemaking processes. Data come from an in-depth case study of the Institute for Learning's (IFL's) Instructional Leadership Program (ILP) in Baltimore City Public Schools (BCPS) and include interviews, observations, and artifacts. The ILP provided an important case for this inquiry because it deliberately

aimed to support principals' sensemaking about IL as a cornerstone of its strategy for engaging a cohort of seventeen elementary school principals in IL.

Findings reveal that the extent to which the IFL actually supported principals' sensemaking was inhibited by such district conditions as limited time and resources and political distractions. Despite these conditions, principals responded to some IL ideas in ways that reflect reformers' intentions. Principals were more likely to do so when the ILP offered several different types of support for their sensemaking and less likely to do so when the ILP offered a limited number supports for their sensemaking. When the ILP provided a moderate number of different supports for sensemaking, principals' responses to the ideas tended to be more varied; in those cases, other factors including district conditions, school conditions, and principal background seemed to influence their responses more strongly than supports provided by the ILP. Implications address how policymakers, professional development providers, and researchers can support principals' engagement in IL.

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LESSONS FROM THE INSTITUTE FOR LEARNING'S INSTRUCTIONAL
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By

Gina Schuyler Ikemoto

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Advisory Committee:
Assistant Professor Meredith I. Honig, Chair
Associate Professor Robert Croninger
Professor Betty Malen
Associate Professor Hanne Mawhinney
Associate Professor Linda Valli

Dedication

I dedicate this dissertation to my loving husband, Pete. His unwavering support and devotion inspired me to maintain my focus and finish this work.

and longtime mentor. His commitment to finding ways to support urban school districts

in improving teaching and learning for all students was an inspiration for this work.

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List of Abbreviations

AAO   Academic Area Officer

AT   Accountable Talk^{SM}

BCPS   Baltimore City Public Schools

CA   Cognitive Apprenticeship

DL   Distributed Leadership

IFL   Institute for Learning

ILP   Instructional Leadership Program

LRDC   Learning Research and Development Center

PBPD   Practice-based Professional Development

PD   Professional Development

POLs   Principles of Learning^{SM}

Chapter 1: The Need to Support Principals' Instructional Leadership

The high-stakes accountability movement has meant that school leaders now operate in a world increasingly focused on the difficult and complex task of improving instruction and student achievement (Firestone & Riehl, 2005; Tucker & Codding, 2002). Historically, the principals' role has focused on management and administration. While principals were expected to facilitate professional growth of teachers, the classroom teacher was regarded as the instructional expert (Elmore, 2000; Hill, 2002). Within the last two decades, reforms such as standards-based instruction, curriculum alignment, and data-based decision-making have required school leaders to more actively support and participate in instructional matters than they did in the past (Gates, Ross & Brewer, 2000). The *No Child Left Behind* law in particular has increased demands on principals to lead instructional improvement by requiring them to monitor student progress towards standards and by holding them accountable for improvement.

The importance of principals engaging in instructional leadership—that is, in taking an active role in leading instructional improvement—is supported by various research studies that have documented the important role between instructional leadership and school effectiveness (Leithwood, Louis, Anderson & Wahlstrom, 2004; Waters, Marzano & McNulty, 2003; Hallinger & Heck, 1998, 1996b). While definitions of instructional leadership vary, the literature on this topic reflects a general consensus that instructional leaders help teachers to improve teaching and learning through specific activities such as: observing classrooms; analyzing student work and achievement data; providing professional development support to teachers; and holding teachers accountable for instructional improvement. However, research suggests that principals

traditionally have played a minor role in issues related to teaching and learning in their schools (Elmore, 2000). For example, in a study of over 500 principals, Graham (1997) found that only a quarter of the principals perceived themselves as instructional leaders and that a majority reported spending most of their time on administrative tasks.

This reported lack of instructional leadership in practice exists because many school leaders do not have the skills and knowledge to be instructional leaders (Hill, 2002; Lashway, 2002; Norton, 2002). Many school leaders were appointed to their positions in an era when instructional knowledge, skills and experience were not included or prioritized in their job description and training (Gates et al., 2000; National Institute on Educational Governance, Finance, Policymaking, and Management, 1999). Therefore, the new era of accountability necessitates new knowledge and skills on the part of all principals[1], and particularly on the part of principals serving low-performing schools where principals are under particularly intense pressure to improve instruction and student achievement. Since low-performing schools often serve minority and low-income students, enabling principals to enact and improve instructional leadership practices in these schools is critical not only to improving school and student performance, but also to addressing equity concerns embedded in the current national effort to enable all students to perform at high levels.

The literature on principal leadership underscores the importance of instructional leadership to improving teaching and learning, particularly in low performing schools and schools that serve minority and low-income students (Leithwood et al., 2004; Purkey &

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[1] Although literature on distributed leadership (see review by National College for School Leadership, 2003) suggests that instructional leadership responsibilities can be distributed over multiple leaders within a school, this literature also suggests principals still need new skills to understand and manage these new responsibilities.

Smith, 1983). However, the literature does not elaborate how to assist principals in enacting and improving instructional leadership practices (Leithwood et al, 2004; Smylie, Bennett, Konkol & Fendt, 2005). More research is needed to inform policy makers who want to support principals in improving their instructional leadership.

Generating knowledge about how policy makers can help principals build their capacity for instructional leadership is important not only because principals need to acquire new knowledge and skills to enact instructional leadership, but also because they need assistance in grappling with what it means to enact instructional leadership in their particular situation. Enacting instructional leadership is not always a straightforward process. It is situated—meaning that instructional leadership should be enacted differently depending on the situation (Spillane, Halverson & Diamond, 1999). For example, one principal might lead improvement in literacy instruction by having her staff analyze student writing as a means of systematically examining student needs and determining how to alter instruction to meet those needs. Another principal might accomplish the same goal by observing classroom instruction and providing teachers with one-on-one feedback regarding ways to improve writing instruction. These two cases illustrate different ways principals could draw on knowledge regarding high-quality writing instruction to lead instructional improvement in their schools. Therefore, what it means to enact instructional leadership could be defined differently depending on the situation and principals have to engage in sensemaking to determine which type of approach is the most appropriate for their particular situation. Further research is needed to not only answer the broad question of how to provide professional development that enables instructional leadership, but also the specific question of how to support

principals' sensemaking regarding how instructional leadership ideas should be enacted in their day-to-day practice.

Dissertation Rationale

This study seeks to provide empirical evidence regarding the types of professional development opportunities that support instructional leadership by examining the Institute for Learning (IFL) Instructional Leadership Program (ILP) for elementary principals in Baltimore City Public Schools (BCPS), Maryland. This case provided an opportunity to conduct an exploratory study of the relationship between a set of supports for principals' sensemaking and principals' engagement with instructional leadership ideas because the IFL was pro-actively attempting to support principals' sensemaking about instructional leadership ideas. I designed the study to answer three sets of research questions:

1. How did the IFL attempt to support principals' sensemaking about instructional leadership ideas?
2. How did principals respond to the ideas addressed by the ILP?
3. What influenced how principals responded? To what extent and how did the IFL's supports for sensemaking influence how principals responded?

This study contributes to the research base on how to design principal professional development by framing the problem of supporting engagement with instructional leadership ideas as a problem of supporting principals' sensemaking. It examines the extent to which concepts from learning theory help to elaborate the features of principal professional development that matter to whether and how principals understand and use ideas they are exposed to during professional development. In doing

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so, my study contributes to previous studies of principal professional development by exploring the utility of using a learning theory framework to examine and explain principal professional development outcomes. The study also contributes empirical evidence regarding whether and how the IFL's ILP supported principals' sensemaking of instructional leadership in BCPS. The lessons learned from this case are likely to be useful to policy makers and reformers who are pursuing instructional leadership reform efforts and particularly helpful to districts who are considering partnering with the IFL to support implementation of instructional leadership in their districts.

Overview

In chapter two, I review literature on instructional leadership, principal professional development, and policy implementation to reveal what researchers have found regarding how to enable enactment of instructional leadership. I found that the instructional leadership literature provides useful frameworks for defining instructional leadership and suggests that district support and professional development are important enablers of instructional leadership. This body of literature, however, provides very little empirical guidance regarding the kinds of professional development that enable instructional leadership. Therefore, I turned to principal professional development literature for evidence regarding the characteristics of principal professional development that generally enable principals to improve their practices. In general, I found that this literature was conceptually and empirically weak. Although professional associations have provided detailed recommendations regarding the nature of effective professional development for principals, these recommendations do not rest on empirical evidence. Finally, I review implementation research that uses an interpretive frame for theoretical

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and empirical evidence regarding how to support implementation of reform ideas like

instructional leadership—that is, ideas that require policy implementers to engage in

interpretation and decision-making to determine how to implement the ideas in their day-

to-day practice. I found that this literature provides useful conceptual guidance on what

the sensemaking process involves, the outcomes of the sensemaking process, and the

factors that influence the process. However, interpretive perspectives of policy

implementation do not provide explicit recommendations on how the sensemaking

process might be pro-actively supported to enable sensemaking outcomes that reflect the

intentions of reformers and policy makers.

In chapter three, I argue that supporting sensemaking can be defined as a problem

of supporting learning and therefore turn to socio-cultural learning theory for conceptual

guidance on the factors that reformers can use to pro-actively support learning. In

chapter four, I argue that the IFL's ILP for elementary principals in BCPS in 2005-06

provided a promising opportunity to examine a pro-active attempt to support principals'

sensemaking as a means of improving instructional leadership and discuss the methods I

used to examine this case.

Chapters five through eight provide research findings in regards to my research

questions. Chapter five presents evidence that the IFL did in fact intend to support

principals' sensemaking. In chapter six, I summarize principals' responses to the ILP

ideas and then I describe several patterns that I observed in these responses. Chapter

seven presents evidence regarding whether and how the IFL supports influenced

principals' sensemaking. In chapter eight, I describe how other factors related to the

district conditions, local school conditions, and principals' professional background also

influenced sensemaking outcomes. Chapter nine provides a summary and discusses

implications of this research.

Chapter Two: Prior Research Regarding How to Support Instructional Leadership

The increased emphasis on instructional leadership in the school leadership literature and policies such as *No Child Left Behind* raise important policy questions. What factors influence whether and how principals engage in instructional leadership? How can policy makers support principals in developing the knowledge and skills they need to enact and improve instructional leadership practices? These questions are particularly pressing for district leaders who are planning and implementing efforts to improve instructional leadership among principals in their districts.

In this chapter, I review three bodies of literature—instructional leadership, principal professional development, and interpretive perspectives of policy implementation—for evidence regarding how to support principals in enacting and improving their instructional leadership. Taken together, these three bodies of literature suggest that instructional leadership is a worthy reform for district leaders to pursue because instructional leadership is associated with improvements in teaching and learning. However, implementation of instructional leadership is likely to be fraught with difficulties because instructional leadership is situated—that is, instructional leadership can take different forms and shapes depending on the situation. As a result, principals have to determine what makes sense in terms of applying particular instructional leadership ideas to their situation. During this sensemaking process, principals are likely to misunderstand and simplify instructional leadership ideas in ways that lead to weak and varied implementation of instructional leadership across principals.

Although the literature suggests that professional development might improve

sensemaking and implementation outcomes, the literature does not provide empirical evidence regarding the specific features of assistance that professional development can incorporate to effectively assist sensemakers in crafting interpretations of reform ideas that reflect the conceptual underpinnings on which these ideas are based. I conclude this chapter by summarizing the limitations of the current literature and outlining the need for further conceptual guidance regarding how to support sensemaking.

Instructional Leadership

In this section, I turn to the literature on instructional leadership, which comes from a broader literature on principal leadership and studies of effective schools. I find that this literature does not provide explicit empirical guidance on how to improve instructional leadership per se but does provide frameworks and typologies that elaborate what instructional leadership entails, describes efforts to improve instructional leadership, and documents supportive conditions that have been present in cases where principals exercise instructional leadership.

Defining Instructional Leadership: An Ambiguous Idea

The literature on instructional leadership is large—I reviewed over 100 documents—and a great deal of it attempts to conceptualize instructional leadership, yielding multiple and sometimes conflicting definitions. In the words of one researcher who also reviewed the research in this area, "the most difficult of tasks when studying the principal's role as instructional leader is to find an authoritative definition of the concept" (Terry, 1996, p. 4). Goldring and Greenfield (2002) similarly argue that the literature has portrayed instructional leadership as conceptually unclear,

The diffuse and highly fragmented nature of theory and research on school and

school district administration and leadership reflects … conceptual fuzziness.

Divergent perspectives within the academy, among policy makers and

constituents at the local, state, and federal levels, and among school and district

administrators add to a growing swirl of competing and often conflicting role

images and expectations. (p. 1)

Many academics—who are considered to be school leadership experts (such as

Fullan, Krug, Murphy, Hallinger)—have written widely cited typologies of instructional

leadership, but their typologies often emphasize different activities and features of

instructional leadership. For example, Krug's (1992) taxonomy emphasizes five

instructional leadership activities including, (a) defining a mission, (b) managing

curriculum and instruction, (c) supervising teaching, (d) monitoring student progress, and

(e) promoting instructional climate. Meanwhile, Northern and Bailey (1991) identified

seven professional competencies that are apparent in instructional leaders including, (a)

visionary leadership, (b) strategic planning, (c) change agency, (d) communication, (e)

role modeling, (f) nurturing, and (g) disturbing. Although these typologies provide useful

conceptual guidance on potential dimensions of instructional leadership, they do not

reveal how to support principals in developing the competencies that they associate with

instructional leadership.

Empirical research similarly provides conflicting definitions of instructional

leadership. For example, some researchers (e.g., Supovitz & Polinco, 2001) focus

narrowly on the principal's role in dealing directly with instructional matters. Other

researchers (e.g., Scheerens & Bosker, 1997; Spillane et al., 1999) argue that instructional

leaders provide the conditions necessary for instructional improvement, which may include tasks that are not directly related to instruction, such as managing discipline and school budgets. Researchers also differ in their specification of the knowledge and skills that principals need to be instructional leaders. For example, Stein and Nelson (2003) argue that principals should have a thorough understanding of at least one academic content area. Meanwhile, Bottoms (2001) argues to the contrary—stating that principals only need to understand the big ideas in each content area.

The different definitions of instructional leadership in the literature might be explained in part by the situated nature of instructional leadership. Recent studies of instructional leadership are increasingly emphasizing the importance of a situated perspective on instructional leadership, suggesting that specifics of the situation—such as available resources, characteristics of staff, and district office support—define how leadership practices are and should be enacted (Spillane et al., 1999).

For example, one principal might enact the idea of building a professional learning community among teachers by providing substitute teachers that release classroom teachers to observe each other's practice and by facilitating grade level team meetings during which teachers provide each other with constructive criticism that enables instructional improvement. This particular approach might make sense in a situation where the principal had substitute teachers to relieve teachers and a master schedule that provided common planning time during which teachers could provide constructive feedback. Another principal might enact the idea of building professional learning community by encouraging teachers to use monthly professional development days to collectively analyze the alignment between diagnostic assessment data,

curriculum, and state tests and make decisions regarding how to focus their instruction on student needs. This approach might make sense in a situation in which the school had access to useful diagnostic data and professional development days during which teachers to could work on this task. As these two examples illustrate, there is not always a standard way to enact an instructional leadership idea like building professional learning communities that would be appropriate in all situations because a particular approach may or may not work given a particular set of time and resource constraints. Principals therefore have to interpret what "makes sense" for their situation.

A situated perspective suggests that examinations of instructional leadership practices should acknowledge that instructional leadership is often enacted by school principals differently in different schools, depending on aspects of the situation and the extent to which instructional practices are spread across multiple actors. In the words of one researcher,

> Because of the variations that exist in schools across our nation, the requirements
> of instructional leaders also vary. Situational leadership, based on the needs of
> the site forms the agenda. There is no foolproof prescription for implementing
> effective instructional leadership (Terry, 1996, p. 9).

Perhaps academics elaborate differing conceptions of instructional leadership because they examined how it was manifested in different situations. For example, perhaps direct involvement with instructional matters is a key feature of instructional leadership in some situations—such as situations in which the principal has the knowledge, legitimacy, and time to be directly involved—yet this direct involvement is not a key feature of instructional leadership in other situations—such as situations in

which other school leaders have the knowledge, legitimacy, and time to play this role. Therefore, lack of consensus in the literature regarding how to define instructional leadership might not be a problem of insufficient conceptualization or research. The lack of consensus may be indicative of the situated nature of instructional leadership itself.

Despite discrepancies within the instructional leadership literature, my review of this literature surfaced a set of instructional leadership activities that were consistently emphasized across multiple conceptual and empirical sources. More specifically, each of these activities was emphasized by at least a majority of the instructional leadership typologies that I reviewed and was supported by empirical studies that examined the relationship between leadership activities and student achievement. The activities through which principals exhibit instructional leadership included (1) focusing the school community on learning, (2) supporting teacher learning, and (3) using data to inform instructional improvement. These activities may have been more consistently emphasized by the literature because they represent generic activities that can be adapted to local circumstances. For example, as described below, there are a number of different ways in which principals could focus their school community on learning.

Focusing the school community on learning. First and foremost, principals are able to lead instructional improvement when they focus the school community on learning (Supovitz & Poglinco, 2001). They can employ several strategies to create this focus, such as focusing performance evaluations on student learning, talking about student learning, and prioritizing teaching and learning in faculty meeting agendas (Knapp, Copland & Talbert, 2003). Instructional leaders might also communicate the priority of teaching and learning by making themselves visible in classrooms. During

classroom visits, instructional leaders observe instructional practice and discuss lessons

with students. They use their knowledge of teaching and learning to provide valuable

feedback in ways that encourage and motivate teachers to improve their practice (Fink &

Resnick, 2001) and to promote reflection among teachers by making suggestions, giving

feedback, modeling, using inquiry, and giving praise (Blasé & Blasé, 1999).

Supporting teacher learning. In addition, instructional leaders encourage

continuous learning for teachers by supporting collaboration efforts among educators that

emphasize the study of teaching and learning (Supovitz & Poglinco, 2001). They might

provide full or part time instructional coaches or develop coaching relationships among

teachers, and encourage educators to use these coaching relationships to modify and

improve programs and to promote reflection and improvement of individual teachers'

practice (Stein & Nelson, 2003; Fink & Resnick, 2001; Blasé & Blasé, 1999).

Instructional leaders can also play a critical role in promoting continuous teacher

professional development by providing the time and resources that teachers need to

function as members of a professional learning community.

Using data to inform instructional improvement. Instructional leaders also

monitor student progress towards standards by examining student achievement data and

student work (Copland, 2003; Gates et al., 2000). They might ensure that the

instructional needs of all students are being met by facilitating school-wide, grade-level,

or one-on-one dialogues around analyses of student progress and making data-based

decisions to address unmet needs. These decisions typically include reallocation and

targeting of resources to support student learning, with a particular emphasis on

improving instruction.

Efforts to Support Instructional Leadership

What have been the lessons learned from previous efforts to deliberately support principals in enacting and improving instructional leadership practices? What conditions support instructional leadership? Only a handful of studies have used empirical data to examine attempts to support instructional leadership among principals, and even fewer studies have examined outcomes of these efforts.

Some studies have found that strong professional development and district support can enable principals to become stronger instructional leaders (Marsh, Kerr, Ikemoto, Darilek, Suttorp, Zimmer & Barney, 2005; Fink & Resnick, 2001). For example, Fink and Resnick (2001) examined the experiences of elementary principals in New York City District where principals were considered to be strong instructional leaders because they were leading instructional improvement in their schools—as evidenced by increasing student achievement. The authors found that district support enabled these principals to enact and improve their instructional leadership practices. District Two's strategies included monthly professional development conferences focused on teaching and learning, which played a critical role in developing a shared commitment to the districts initiatives and a broader vision of instructional improvement. Support groups for new principals, led monthly by the deputy superintendent, provided opportunities for new principals to raise problems and seek advice within a safe, problem-solving culture of continuous improvement. Study groups, led by district leaders or peers, focused on problems of practice chosen by principals; study group discussions were prompted by readings selected for joint study and invited outside experts. District Two also encouraged peer learning through formal "intervisitation" and

less formal "buddying." Intervisitations consisted of a formal visit of one principal to another principal's school to observe and analyze a particular aspect of practice. Buddying consisted of two or three principals meeting informally to discuss problems of practice. Finally, the District Two support system included individualized coaching, primarily led by the superintendent and deputy superintendent and supplemented by a system of mentor principals. Individualized coaching was reported to be particularly effective because it was a continuous process that occurred through meaningful activities, including a goals and objectives process, budget meetings, and formal supervisory observations of the school, known as WalkThroughs.

Additional research has echoed the importance of strategies used by District Two. For example, Speck and Krovetz (1996) found that mentoring systems for new principals can reduce professional isolation, boost collegiality, and encourage reflective thinking. Roberts (1991) found that peer coaching can result in self-perceived growth in principals' instructional leadership. More recently, I co-authored a comparative case study of three districts (Marsh et al., 2005) that found instructional leadership was supported by high-quality, continuous professional development for principals, supportive organizational structures, and supervisors who devoted time to supporting principals. Although limited in number, these studies collectively reinforce findings from studies of District Two[2].

Studies that address supports for instructional leadership, however, are weak in how they link these supports to desired outcomes. For example, the District Two study's claims regarding activities that supported principals' instructional leadership were largely based on the fact that these principals were reputed to be strong instructional leaders.

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[2] The services provided by the IFL, which was founded by Resnick, are modeled on the system of supports Resnick and Fink documented in District Two.

The only evidence that was presented by authors to support this claim was that student achievement was increasing, which arguably could have been attributed to a number of initiatives that were ongoing in that district at the time. Other studies have tended to rely solely on principals' perceptions of their instructional leadership as an outcome measure.

The limited studies that have measured outcomes of efforts to support instructional leadership (i.e., have measured principals' instructional leadership practices) have found that these efforts often resulted in uneven and weak implementation of the instructional leadership practices that these efforts attempted to promote (e.g., Marsh et al., 2005). For example, in our comparative study of three districts that attempted to improve instructional leadership, we found that principals across the three sites varied greatly in the degree to which they were acting as instructional leaders. In particular, variation existed in the degree to which principals used specific practices emphasized by the reform effort, such as skillfully observing instruction and providing valuable feedback, creating school-wide dialogues around models of quality student work, setting goals for instructional improvement, and assessing progress. These results are not surprising since they reflect common outcomes found in the policy implementation literature—which I review later in this chapter.

Summary

The instructional leadership literature describes multiple, and sometimes conflicting conceptions of instructional leadership. Furthermore, the literature suggests that instructional leadership is situated—that is, instructional leadership is enacted differently depending on the situation. Therefore, principals have to engage in sensemaking to interpret what instructional leadership means and how it relates to their

practice. The literature also suggests that improving instructional leadership is likely to

be a difficult task, but that strong professional development and district support can

enable enactment of instructional leadership.

Principal Professional Development

Given that the instructional leadership literature suggests that instructional

leadership can be enabled by what some researchers refer to as strong professional

development opportunities, I turned to the broader literature on principal professional

development for guidance on the kinds of principal professional development experiences

that support principals in learning about and using new reform ideas in general. That is,

the literature presented in this section is not necessarily specific to professional

development for instructional leadership. I was surprised to find that very little research

has empirically evaluated professional development for principals, and the existing

research is largely descriptive of particular professional development programs. As a

result, the research literature provides little conceptual or empirical guidance regarding

whether or how policy makers and reformers might support principals' engagement in

instructional leadership. I also include a review of literature from professional

organizations that provides widely cited recommendations regarding the general

characteristics of strong principal professional development.

Limited Research Regarding Principal Professional Development

Similar to other reviews of principal professional development literature (e.g.,

Davis, Darling-Hammond, LaPointe, Meyerson, 2005; Smylie, Bennett, Konkol, and

Fendt, 2005), I found that this literature is conceptually and empirically weak. To review

this literature, I conducted a thorough search on several library databases, followed leads

in bibliographies of these sources, and queried experts in this field. More specifically, I searched the ERIC and digital dissertation databases and my search terms included "principal and professional development", "principal and training", "instructional leadership and professional development", "instructional leadership and training", "school leadership and professional development" and "school leadership and training". I reviewed 71 documents as a result of this search and was unable to find a single study that provided compelling empirical evidence for its assertions about the characteristics of strong professional development for principals. Smylie et al. (2005) drew the same conclusion in their review of the research. In their words,

> There has been a great deal written about the preservice preparation, induction, and on-the-job professional development of school leaders. The research on outcomes is remarkably weak (see also Murphy & Vriesenga, 2004). In general, this work is conceptually ambiguous and atheoretical. Most studies are poorly constructed and rely on self-report data. The literature is dominated by descriptive, anecdotal, and promotional reports of local programs and practices, often written by those who develop or implement them. (p. 145)

I found, and these authors agree, that the literature on in-service professional development (compared to pre-service professional development) is particularly weak, with few evaluations that are systematic or that focus on outcomes—such as changes in principals' knowledge or practices. Instead, research in this area tends to report results based upon principals' perceptions of the usefulness of the professional development. For example, Peterson and Kelley (2002) conducted a study in which they reported several characteristics of successful principal in-service programs, suggesting that these

programs for example, "have a clear vision or purpose, are systematic, and are organized

around a thoughtful sequencing of the career development of knowledge, skills, and

abilities" (p. 341). I consider this research to be weak because Peterson and Kelley did

not specify their criteria for classifying particular programs as "successful". Instead, it

appears that these authors reviewed descriptions of "popular" programs and distilled the

attributes that the authors hypothesized as being related to the programs popularity, with

little to no evidence regarding the impact of these programs on principals' knowledge and

practices. This study is typical of the research on principal professional development.

Recommendations by Professional Associations

Several professional organizations—such as the National Staff Development

Council, the Interstate School Leaders Licensure Consortium, the Educational Research

Service, and the National Governors Association Center for Best Practice—have issued

recommendations regarding the characteristics of quality professional development[3].

These recommendations constitute normatively backed frameworks that have been

derived from research on teacher professional development and lessons learned from

principal professional development programs that have been reputed to be successful.

The recommendations suggest that professional development should be: long-term as

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[3] More specifically, the National Staff Development Council recommends that professional development should be long-term, job-embedded, linked to coherent curriculum, focused on student achievement; and should provide for emphasis on reflective practice, opportunities for peer discussions and coaching (Sparks and Hirsch, 2000). The Interstate School Leaders Licensure Consortium recommends that professional development validates centrality of teaching and learning, engages leaders in well-planned and integrated learning to improve student achievement, promotes collaboration, models effective learning processes, incorporates accountability measures (Council of Chief State School Officers, 1996). The Educational Research Service recommends that professional development is long-term, planned, job-embedded, focused on student achievement, supportive of reflective practice, and provides opportunities for peer collaboration (Educational Research Service, 1999). The National Governors' Association Center for Best Practice recommends that professional development focuses on student learning and specific problems of practice, reinforces collaboration among principals and teachers, links directly to day-to-day work in real schools, sustains consistent focus over time, and uses feedback from teaching and learning for program evaluation (Mazzeo, 2003).

opposed to sporadic or one-shot; job-embedded; focused on teaching and learning and

student achievement; well-planned and coherent with other learning opportunities;

supportive of reflective practice; and should promote peer collaboration. These

recommendations are widely cited. However, as Leithwood et al. (2004) note,

"Recommendations such as these… are not based on evidence of improvements in

leadership leading to greater student learning as the fundamental criteria for success" (p

67). Nonetheless, they represent a consensus in the field of principal professional

development regarding how these professional development experiences ought to be

designed and implemented.

Policy Implementation Research

Although the instructional leadership and principal professional development

literatures provide some ideas regarding how to support instructional leadership, the

utility of these frameworks for explaining principal professional development outcomes

has not been empirically examined. Furthermore, these bodies of literature fail to explain

why—as documented by Marsh et al. (2005)—some efforts that utilize lessons from prior

research still result in uneven and weak implementation of instructional leadership. The

instructional leadership literature does suggest however that the situated nature of

instructional leadership is likely to present a particular implementation challenge since

principals need to determine whether and how instructional leadership ideas fit with their

local situation. Therefore, I turn to the broader policy implementation literature for

answers to the following questions: (1) What might explain uneven and weak

implementation outcomes of efforts to support instructional leadership, and (2) What

lessons has implementation research learned regarding how to support implementation of

situated reform ideas? I focused my review of the policy implementation literature on interpretive perspectives of policy implementation because it highlights implementers' interpretations of policy messages as a key dimension of the implementation process.

Interpretive Explanations of Policy Implementation Outcomes

What might cause weak and uneven implementation of ambiguous ideas? Studies of education policy implementation suggest that implementation of any reform idea can be an elusive goal. This literature reveals that most efforts to implement education reforms broadly yield sporadic implementation, meaning that new practices are initially adopted only by a few and with varying degrees of depth (McLaughlin, 1991; Odden, 1991).   As a result, new reforms typically fail to have a sustained impact on large numbers of schools (Tyack & Cuban, 1995), and are not implemented in ways that result in substantive changes in the status quo (Elmore, 1996).

Researchers working in an interpretive tradition argue that traditional perspectives on implementation—which often emphasize lack of will or capacity on the part of policy implementers—are insufficient for explaining whether and how policies are implemented.   These traditional perspectives are limited because they typically portray policy messages as givens and assume that policies communicate explicit messages that are intentionally transmitted and received (Yanow, 1996).   These traditional conceptions of policy fail to acknowledge that policies are often ambiguous, unclear, and send conflicting messages. In the words of one researcher critiquing traditional perspectives, "What is ignored, or at least remains implicit, in most of these accounts is that implementers must not only attend to the policy stimulus but must also make sense of that stimulus" (Spillane, 2000, p. 146). Interpretive perspectives, on the other hand,

acknowledge that policy implementers must interpret the purpose and intention of the policies in order to decide whether and how to implement the reform ideas embedded in them. These perspectives suggest that variation in implementation is not a problem to be avoided but rather an appropriate result of implementers' attempts to make sense of ambiguous ideas and determine how to implement them in different contexts (Honig, 2006).

Several recent empirical studies of policy implementation (e.g., Coburn, 2001; Goldstein, 2003; Spillane, 2000) have applied interpretive perspectives to document how sensemaking processes—processes by which implementers interpret what a policy is demanding of them and what to do (or not do) in response to policy (Weick, 1995)— explain policy implementation outcomes. During the sensemaking process, potential implementers choose whether to embrace, oppose, modify, or circumvent policy (Spillane, 2000; Weatherly & Lipsky, 1977). As a result, policy implementers ultimately decide whether a reform gets implemented, and if so, the nature of implementation (Lipsky, 1980; Spillane, 2000; Weatherley & Lipsky, 1977). Some of these studies have specifically documented that principals' sensemaking influences whether and how they interpret and decide how to implement instructional leadership ideas (Ruff & Shoho, 2005), particularly ideas related to teacher evaluations (Goldstein, 2003; Halverson, Kelley & Kimball, 2004).

For example, Halverson et al. (2004) found that the nature of implementation of a standards-based teacher evaluation policy was influenced by how principals made sense of the policy and decided to apply it to their situation. The authors found that as a result of this sensemaking process, principals co-opted, ignored, or adapted key features of the

teacher evaluation policy in accordance with principals' local context. None of the teacher evaluation reform efforts, however, included efforts to provide professional development for principals or other attempts to support principals' sensemaking about the reform ideas. So while they support the notion that principals' sensemaking affects how principals respond to and use the ideas—these studies do not inform the central question addressed by my dissertation regarding how to pro-actively support principals' sensemaking such that their responses reflect reformers' intentions.

As a result of the sensemaking process, individual policy implementers may create understandings and make decisions that differ from other policy implementers, which results in varied implementation of the policy ideas (Yanow, 1996, Spillane, 2005). They may also tend to create understandings that are different from policy makers' intentions and that do not reflect the underlying principles of the reform ideas embedded in policy, which results in weak implementation (Spillane, 2005; Hill, 2001; Jennings, 1996). These altered interpretations and applications of ideas, however, are not the result of noncompliance or laziness on the part of policy implementers. They are the result of a necessary process during which policy implementers are making their best efforts to respond to conflicting messages and to appropriate ambiguous ideas to particular situations (Spillane, Reiser & Reimer, 2002).

As illustrated in Figure 1, sensemaking is the process whereby policy implementers decide what ideas to attend to, interpret those ideas, and decide how to use them. The outcomes of this sensemaking process are the decisions that are made and the understandings that are constructed by principals. These senseamaking outcomes then influence policy implementation outcomes, namely whether and how practices change.

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│                            ┌───────────────────┐                          │
│                            │ Sensemaking       │                          │
│   ┌──────────────────┐     │ Outcomes          │                          │
│   │ Sensemaking      │     │ • Decisions       │                          │
│   │ • Attention      │     │   regarding       │     ┌──────────────────┐  │
│   │ • Interpretation │ ──► │   whether & how   │ ──► │ Nature of Policy │  │
│   │ • Decision making│     │   to attend to    │     │ Implementation   │  │
│   └──────────────────┘     │   ideas           │     └──────────────────┘  │
│                            │ • Understandings  │                          │
│                            │   of ideas        │                          │
│                            │ • Decisions about │                          │
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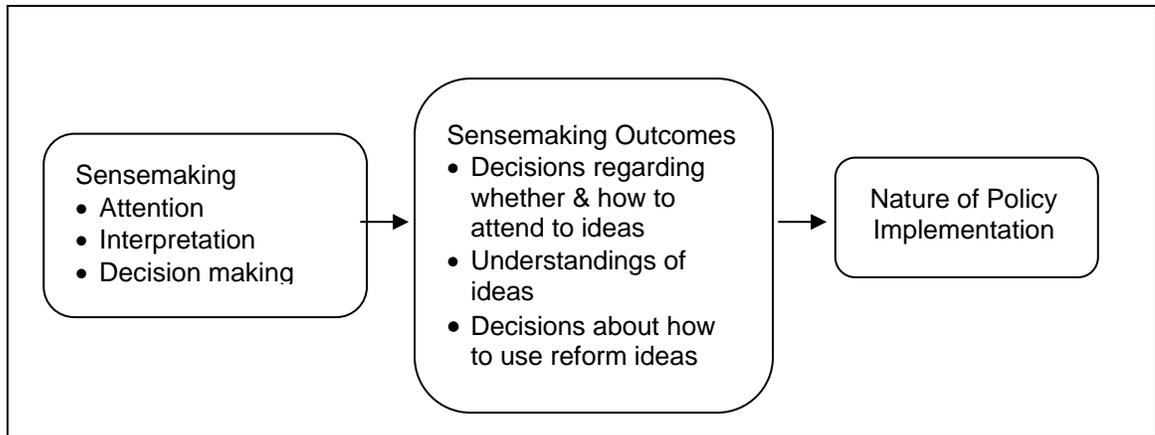
Figure 1: How Sensemaking Influences Policy Implementation

Despite the linear representation of how sensemaking influences policy

implementation outcomes in the figure, sensemaking is an iterative and ongoing process.

For example, policy implementers might make particular decisions about what a reform

idea means and how they want to respond, but they might revise those decisions once

they have an opportunity to use the idea in practice.

Interpretive perspectives of policy implementation suggest that improving

implementation of a complex idea like instructional leadership is a problem of

influencing the sensemaking process. That is, improving implementation of instructional

leadership ideas requires influencing how principals attend to those ideas, interpret them,

and how they decide to enact them. What is already known about how the sensemaking

process influences sensemaking outcomes? What factors influence the sensemaking

process? In the following subsections, I draw on interpretive perspectives of policy

implementation to argue that this literature identifies the outcomes of the sensemaking

process and the factors that influence this process, but very little of this literature has

examined whether sensemaking can be pro-actively supported.[4] That is, very little

research has examined ways in which to support policy implementers in constructing

understandings of reform ideas that reflect the underlying principles of the policy.

Outcomes of the Sensemaking Process

Given that sensemaking is a process that involves focusing attention,

interpretation and decision making, the interim outcomes of sensemaking are the

understandings that are created and the decisions that are made. More specifically, the

literature suggests that outcomes of the sensemaking process include:

- Decisions regarding whether and how to attend to particular policy ideas;

- Understandings of those ideas; and

- Decisions regarding whether and how to implement the ideas.

These interim outcomes—which are depicted in figure 1 and discussed in more

detail below—are not necessarily mutually exclusive. For example, in deciding whether

to engage with ideas, policy implementers tend to discuss rationale—that is, whether and

how the idea is likely to influence their goals—which furthers understanding of the

original idea.

Decisions regarding whether and how to attend to particular policy ideas (or

aspects of policy ideas). Individuals and organizations tend to notice and attend to

information that is easy to understand and implement, confirms their competencies, and is

consistent with prior understandings and worldviews (Spillane, 2000a; Spillane et al.,

2006). In the process of reconciling new information with their existing knowledge,

beliefs and experiences, policy implementers often focus on the familiar and concrete

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[4] One exception is a study by Halverson, Kelley and Kimball (2004) that examined whether and how a comprehensive teacher evaluation framework assisted principals in making sense of ideas related to effective teacher evaluations.

aspects of the policy, thereby redefining and simplifying the reform idea (Spillane et al., 2006). For example, Spillane (2000a) found that district leaders were more likely to gravitate towards the mathematics reform ideas that were familiar and understandable to them. Since the reform lacked clarity regarding the purpose of math manipulatives, district leaders understood the purpose to be motivating students to learn procedural mathematics rather than their intended purpose of enabling higher-order mathematical understanding.

Understanding of policy ideas (once noticed). Individuals and groups tend to construct different interpretations of the same idea. For example, in a study of how teachers interpreted messages about how to teach reading, Coburn (2001) found that different groups of teachers developed different understandings of the same messages. For example, one group interpreted the idea of *using assessment to inform instruction* as meaning they should plan lessons according to a student's process on a sequence of skills whereas another group of teachers interpreted the same idea to mean that they should plan lessons in response to the needs of children rather than in accordance with a sequence of skills. Individuals and organizations also frequently misunderstand policy messages. That is, the interpretations they create are different from those intended by policy makers (Hill, 2001; Spillane, 2004). This occurs in part because they miss deeper relationships when they focus on superficial features. In doing so, they translate the policy messages into something that is manageable and implementable, given their constraints.

Decisions regarding whether and how to implement the ideas. Sensemaking not only shapes what individuals and organizations notice and how they understand those

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messages, it also shapes how they respond to the message (Halverson et al., 2004).

During this "gatekeeping" process (Coburn, 2001), they may chose to dismiss a policy if they believe it is inappropriate for there situation, feel it is unmanageable, or are philosophically opposed to the policy. For example, Coburn (2001) found that teachers decided to dismiss messages about reading instruction when they thought the idea was: not comprehensible; not applicable to their grade level; too difficult for their students; unmanageable; or counter to their philosophical beliefs. For the messages that were not dismissed during the gatekeeping process, individuals and organizations engage in sensemaking to decide the technicalities of how to implement them into practice.

How outcomes of the sensemaking process explain policy implementation. Overall, the research suggests that sensemaking often leads to variation in understandings and implementation across people, situations, time, and geographical space (Yanow, 1996). The research also suggests that sensemaking often leads to weak implementation of policy messages (i.e., implementation that does not match the foundational principles on which the policy was based) because the sensemaking process resulted in misunderstandings of policy messages and how they relate to practice (Spillane, 2005; Spillane et al., 2006).

Grossman (1999) provides conceptual guidance regarding these levels of implementation, which she refers to as "degrees of appropriation". She outlines five categories to differentiate implementation outcomes that reflect shifts in conceptual understanding and core practices from outcomes that are more superficial in nature. These categories (as cited in Honig, 2006, p. 32) are:

- Lack of appropriation: Not using the information or failure to change

- Appropriating a label: Adopting language relevant to the new information/ form of participation but the new information does not shape decisions or practices

- Appropriating surface structures: "When a person learns some or most of the features of [new information or practices] yet does not understand how those features contribute to the conceptual whole" (p.17)

- Appropriating conceptual underpinnings: When an individual "grasps the theoretical basis that informs and motivates the [information or practice]"; individuals who operate at this level are "likely able to make use of [the information] in new contexts and for solving new problems" (p. 17);

- Achieving mastery: Transforming practice in ways consistent with acting on new information effectively.

These categories reflect that the three interim outcomes—attention, understanding, and decisions regarding use—are interrelated and taken together result in responses that exist on a continuum from weak to strong. For example, appropriating with conceptual underpinnings involves attending to the idea, understanding the theoretical basis of the idea, and deciding to use it in ways that reflect the theoretical basis and fit with the local context. In other words, attention, understandings and decisions regarding use define a particular type of appropriation that can then be defined as relatively weak or strong depending on where that appropriation falls within Grossman's continuum.

Summary. Interpretive perspectives of policy implementation suggest that principals are likely to demonstrate varied implementation because they are likely to have

different responses to the ideas. That is, they would be inclined to understand the ideas differently and make different decisions regarding whether and how to attend to and use the ideas. While variation alone could be considered a positive outcome for situated reform ideas that are intended to be adapted to local contexts, this variation could also be considered a negative outcome to the extent that the variations deviate from the underlying intensions of reformers. Interpretive perspectives also suggest that principals' responses are likely to be relatively weak—meaning that they are not likely to reflect reformers' intentions—because policy implementers will tend to misunderstand and misuse the ideas. How can policy makers pro-actively intervene in the sensemaking process to promote sensemaking outcomes that yield strong and consistent implementation? While interpretive perspectives of policy implementation do not provide direct answers to this question, this literature does identify factors that impact the sensemaking process. To the extent that policy makers can influence these factors— which I describe in the next section—they might be able to influence sensemaking and policy implementation outcomes.

Factors Impacting the Sensemaking Process

Research using interpretive perspectives of policy implementation consistently identifies several factors as important influences on the sensemaking process, including the degree of ambiguity about the reform idea, prior beliefs and experiences of policy implementers, opportunities for interpersonal interaction, tools, and leadership. Interpretive literature, however, does not specify whether any of these factors could be used to pro-actively support sensemaking.

Degree of ambiguity. The sensemaking process is influenced in part by the

degree to which the reform idea is ambiguous and otherwise invites interpretation. Weick (1995) suggests that ambiguity can be helpful in prompting sensemaking. When policy implementers are unclear about a policy's meaning or when a policy's meaning is not known, they might be more likely to ask questions and talk to others in ways that enable them to develop deeper understandings of the policy ideas. However, ambiguity can cause variability in understandings because it leaves more room for interpretation. For example, Goldstein (2003) found that the ambiguity of a new teacher evaluation policy led to different understandings regarding who should conduct the summative evaluations of teachers, which resulted in implementation of the policy that did not match the intentions of the policy makers.

Prior beliefs and experiences. Implementers' beliefs and experiences shape how they notice and interpret policy messages. They use schemas—internal cognitive structures that organize information and ideas—to assimilate new knowledge and information, and these schemas are based upon their existing knowledge, beliefs and experiences (Spillane et al., 2002). In the process of "mapping" new information onto existing schemas, potential implementers often focus on the familiar and concrete aspects of the policy, thereby redefining and simplifying the reform practice (Spillane, 2000a). As previously mentioned, Coburn found that teachers developed different understandings of reading reform ideas. She also found that this occurred because "different groups were composed of different teachers with contrasting worldviews, preexisting practices, and shared understandings" (p.157).

Opportunities for interpersonal interaction. Opportunities for interpersonal interaction influence sensemaking (Coburn, 2001; Spillane & Zeuli, 1999). When

confronted with a policy, individuals talk with their colleagues, peers, and other members of their personal and professional networks to make sense of the policy. The opinions and perspectives put forth by others influences the understanding that the individual creates. As Weick (1995) argues, "Sensemaking is never solitary because what a person does internally is contingent on others" (p. 40). Interpersonal interaction can occur in formal settings (e.g., discussions during professional development sessions) or in informal settings (e.g., conversations in the work parking lot). The outcomes of these interactions depend on the configuration of individuals involved in the conversation, as well as the degree to which there are opportunities for mutual discussion and reflection (Coburn, 2001).

Tools. Interpretive perspectives suggest that knowledge is embedded the objects, artifacts, tools, and books that potential implementers use in their everyday practice (Greeno, Collins & Resnick, 1996). Boundary objects—which are objects that serve as an interface for different communities of practice—are a particular type of tool that enables sensemaking by facilitating transfer of knowledge and theory to potential implementers in concrete and potentially useable forms. For example, curriculum materials carry information from content experts to teachers regarding the content students should be taught and the instruction that should be used to teach it. Boundary objects—that are carried from one community to another—focus attention of potential implementers in ways that facilitate conversation and meaning making (Cobb, McClain, Lamberg & Dean, 2003). Everyday materials and artifacts can also facilitate sensemaking by supporting "rich" conversations about reform ideas among policy implementers (Spillane & Zeuli, 1999). On the other hand, Halverson et al. (2004) found

that a tool to facilitate teacher evaluations did not necessarily help principals in making sense of a new evaluation system, "local implementation of the evaluation system varied substantially from school to school, and was shaped by the ways in which principals understood their own role, their context, and the evaluation artifact" (p. 179). This research suggests that tools do not necessarily support sensemaking in ways that lead to stronger or more consistent implementation.

Leadership. Organizational leaders such as principals and central office leaders can directly influence how their staff makes sense of policies by filtering the policy message and by influencing opportunities for their staff to discuss the ideas. For example, Coburn (2005) found that principals influenced teachers' enactment of changing reading policy in California by shaping teachers' access to policy ideas, participating in the social process of interpretations and adaptation, and creating substantively different conditions for teacher learning in schools. Furthermore, multiple leaders can send conflicting messages about a reform idea that create ambiguity that leads to variation in understanding and implementation of the idea (Goldstein, 2003).

Need for Further Research on Supports for Sensemaking

Although interpretive perspectives of policy implementation provide guidance on the factors that influence sensemaking, they have not empirically examined whether sensemaking can be pro-actively supported. For example, the fact that tools and opportunities for interpersonal interaction seem to promote sensemaking outcomes that match policy makers' intentions might suggest that policy makers should employ these strategies to support sensemaking. However, most of the literature stops short of making these recommendations. Almost none of the studies examined pro-active attempts to

influence these factors and are therefore unable to directly and empirically provide these types of recommendations. Further research is needed to determine whether policy makers can pro-actively support sensemaking in ways that lead to appropriations of reform ideas that reflect the conceptual underpinnings of the reform effort.

Chapter Summary

In summary, three bodies of literature reviewed in this chapter—instructional leadership, principal professional development, and interpretive perspectives of policy implementation—suggest that improving instructional leadership is likely to be a difficult endeavor. The ambiguous and situated nature of instructional leadership means that principals will have to make sense of the ideas to determine whether and how to implement them in their local situation. Some literature suggests that districts can support this sensemaking process by providing professional development opportunities that assist principals in learning about the ideas and grappling with how to apply them.

These three bodies of literature, however, provide limited guidance regarding the types of professional development that are likely to support principals in crafting understandings and responses to reform ideas that reflect district leaders intensions. The sensemaking literature identifies factors that influence sensemaking but does not suggest whether these factors could be manipulated to pro-actively support particular sensemaking outcomes. The principal professional development literature provides some guidance on broad types of professional development strategies that are likely to support principals in learning about instructional leadership, but this literature does not elaborate specific forms of assistance that are likely to support principals' sensemaking. This literature also lacks strong empirical evidence to support its claims. Given that the

principal professional development literature provided a weak conceptual foundation and little empirical evidence on which to base a conceptual framework, I decided to search for another body of literature that could guide my examination of supports for sensemaking.

I decided to use socio-cultural learning theory for a number of reasons. First, the idea of pro-actively assisting principals' in making sense of new ideas seemed conceptually analogous to promoting learning in that both endeavors are aimed at helping individuals to understand key ideas and concepts. According to the Merriam-Webster dictionary, both learning and sensemaking are processes of gaining or creating understanding. It is not surprising then that the sensemaking literature draws heavily from socio-cultural learning theory to explain the sensemaking process and the factors that influence it. For example, both sensemaking and learning theory literature emphasize how these processes are influenced by individuals' prior understandings and experiences, social interactions, and tools. It therefore seemed worthwhile to examine whether this theory could help me to identify and explain strategies that could be used by the IFL and BCPS to pro-actively promote the sensemaking process. Third, socio-cultural learning theory provided a robust and established theoretical framework for identifying the conditions that were likely to matter to principals' learning. This was particularly important to me because I had decided to focus my degree in the area of social foundations, which emphasizes the importance and value of foundational social theories in examining social phenomenon. Finally, several academics (e.g., Leithwood, 2004) reference concepts from socio-cultural learning theory—such as the importance of situated learning—in justifying their assertions regarding the characteristics of effective

professional development. Although these linkages to socio-cultural learning theory have

not been supported by empirical evidence, the fact that other researchers are making

theoretical linkages seemed to imply that this theoretical framework would help me to

identify what aspects of the IFL's ILP matter and why. I describe my socio-cultural

learning theory framework in the following chapter.

Chapter 3: Supports for Sensemaking: Conceptions from Socio-Cultural Learning Theory

Given that sensemaking is arguably analogous to learning because both processes involve the construction of understandings, I turned to socio-cultural learning theory for conceptual guidance on what learning involves and the conditions that support it. As depicted in Figure 2, socio-cultural learning theory suggests that sensemaking has three dimensions: cognitive, social and situational. It also suggests several supports that assistance providers can pro-actively use to improve learning, including opportunities for rich dialogue, situation-specific activities, tools, modeling, and application and feedback. In this chapter, I review these dimensions and supports and then discuss implications for my case.

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│  │  Supports for Learning  │      │        Cognitive        │   │
│  │  • Opportunities for     │      │        Dimensions       │   │
│  │    rich dialogue         │      │            ↓            │   │
│  │  • Situation-specific   │ ──→  │       Principals'       │   │
│  │    activities            │      │        Learning         │   │
│  │  • Tools                 │      │         ↗     ↖         │   │
│  │  • Modeling              │      │   Social    Situational │   │
│  │  • Application & Feedback │      │  Dimensions  Dimensions │   │
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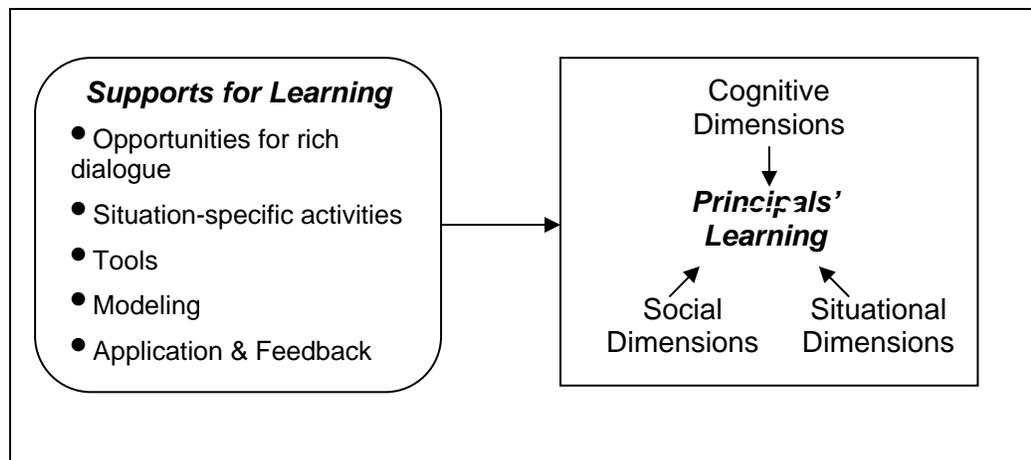
Figure 2. Learning Theory Suggests Dimensions and Supports that Matter to Principals' Sensemaking

In describing these concepts and relationships, I argue that constructs from socio-cultural learning theory reinforce and extend findings from interpretive perspectives of policy implementation. For example, socio-cultural learning theory reinforces findings

regarding the importance of social interactions, but it also elaborates this construct by specifying particular aspects of these interactions that matter (e.g., groups of three or more individuals are more productive in enabling learning than groups of two individuals). Perhaps most importantly, socio-cultural learning literature offers empirical evidence regarding forms of assistance that can pro-actively support sensemaking as learning.

Cognitive, Social and Situational Dimensions of the Learning Process

Socio-cultural learning theory frames sensemaking as learning and suggests that learning involves cognitive, social, and situational dimensions. Each of these dimensions highlights different aspects of what the learning process involves and the factors that influence it. I separate these dimensions for the purposes of organization and elaboration. However, in the following section, I explain how any given learning process inherently and simultaneously involves cognitive, social and situational dimensions.

Cognitive Dimensions

Learning, in part, involves internal neurological information processing by individuals (Gardner, 1985). These cognitive processes are influenced by prior knowledge and experiences—which are stored in cognitive structures including schemas, worldviews, and identities.

Prior knowledge and experience. In the process of learning, individuals draw on their prior understandings and experiences (Bartlett, 1932; Greeno, Collins, & Resnick, 1996). They are likely to notice new information that aligns with their prior understandings (Rumelhart, 1980). For example, if principals understood and believed that classroom observations were a fundamental aspect of instructional leadership prior to

participating in the IFL's ILP—they would be more likely to notice aspects of the ILP

that focused on instructional leadership as observing classrooms. Similarly, they would

be more likely to notice and attend to information about observing classrooms that fits

with their prior experiences.

Cognitive structures. Individuals' prior understandings about particular ideas and

how they relate to the rest of the world are not stored as discrete pieces of information.

They are encoded into mental models also knows as worldviews or schemas. These

higher-order knowledge structures link related concepts together into a theoretical

framework that explains the external world.   Individuals draw on these theories to make

predictions and determine action that will lead to their desired outcome (Rumelhart,

1980).

Cognitive theorists have argued that cognitive structures mediate the external

world and internal mental models by serving as a lens that influences what individuals

notice and how they interpret it (Derry, Gance, Gance & Schlager, 2000; McVee,

Dunsmore & Gavelek, 2005). In doing so, individuals tend to exhibit what Hutchins

(1991) refers to as "confirmation bias" in which they affirm prior understandings and

discount, ignore, or reinterpret disconfirming evidence in ways that reinforce their beliefs

and theories about how the world works, which can sometimes lead to faulty

interpretations.

For example, in a comparative case study of three principals, Ruff & Shoho

(2005) found that differences in mental models among three principals resulted in

different conceptions of instructional leadership and differing levels of integration of

instructional leadership into their practice. These findings reinforce and extend

interpretive perspectives of policy implementation that suggest cognitive structures influence sensemaking as learning. Both sets of literature suggest that principals in the ILP are more likely to notice and attend to information that fits with their prior understandings, experiences and theories about how the world works. To the extent that principals have similarities with regards to these factors (e.g., similar prior understandings), I might expect them to respond in similar ways. However, to the extent that they are different, I might expect them to develop different understandings of the same ideas.

Social Dimensions

Learning occurs through social interaction and conversations with others (Salomon & Perkins, 1998; Resnick, 1991). During conversations, individuals signal, clarify, and negotiate meaning of ideas discussed (Vaughan, 1996). The opinions and perspectives put forth by others influence the understanding that individuals create.

For example, in a study of Japanese classrooms, Hatano & Inagaki (1991) found that:

> Group discussion on an issue is likely to make students recognize that their comprehension is not adequate. In the course of discussion, students find out that there exists a number of ideas that are plausible although different from their own. … Group discussion motivates people to collect more pieces of information about the issue of the discussion and to understand the issue more deeply… Because group members have been exposed to plausible explanations in the process of discussion, they can revise or elaborate their knowledge easily by incorporating some of them when the feedback reveals the falsity of their predictions. (p. 346)

This quote provides specific explanations of how group discussions prompt deeper understandings. Among them, these types of discussions can challenge existing understandings and provide alternative explanations. Some learning theorists argue that learning inherently involves social interactions, which they define learning as participation in the social process of knowledge construction (Salomon & Perkins, 1998).

Regardless of whether learning involves or is influenced by social processes, the social dimension of learning suggest that principals are likely to improve their understanding of instructional leadership ideas in the process of discussing them with professional development providers and their peers in the program. The nature of this interaction—such as the configurations of individuals and the language they use—is likely to influence the understandings they construct.

Configurations of individuals. Social learning can occur in a number of settings and configurations. For example, Hatanno & Inagaki (1991) hypothesize four characteristics of groups that enable learning: horizontal interaction; three or more members; involvement of empirical confirmation; and room for individual knowledge acquisition. These researchers found that horizontal interaction—that is, interaction among peers—is more productive in promoting learning than vertical interaction—that is, interaction between more and less mature members of a group—because people are more motivated to express their ideas and construct knowledge when working with peers than when than when working with someone they believe already possesses or can construct that knowledge. Groups with three or more members can enhance sensemaking because a third party can make conversations more dynamic and enduring than conversations between two people. Empirical confirmation improves learning because people are more

likely to assimilate information when they are convinced of its plausibility by evidence that—in their perception—supports the information. Finally, learning is improved when group interaction allows individuals to pursue their intrinsic motivation to understand by encouraging them to ask questions and seek answers rather than when group interaction discourages them from pursuing understanding for the sake of efficiency.

Language. Language plays a particularly important role in social interaction as a part of learning because the language group members use during conversation helps them to develop deeper understandings than they might otherwise develop on their own (Resnick, 1991; Vygotsky, 1978) by sending cues as to how new concepts relate to old concepts. For example, Heath (1991) found that language played a fundamental role in how little league baseball players socially made sense of the game of baseball. She found that the little league coach and players habitually engaged in "eventcasting" (i.e., verbally describing events underway). The vocabulary and tone of these dialogues shaped understandings of the game of baseball by influencing what players noticed and how they interpreted those events.

Socio-cultural learning theory suggests that these social factors—including configurations of individuals and language—would influence how principals construct understandings of instructional leadership ideas. That is, principals' understandings of ILP ideas in BCPS would depend on whether they have opportunities to discuss the ideas in groups of three or more peers and on the tone and vocabulary of the language used during those conversations.

Situational Dimensions

Socio-cultural learning theorists argue that individuals and organizations have to

grapple with how new information relates to the local situation (Greeno, 1997) and that

they learn through participation in everyday activity (Brown, Collins & Duguid, 1989;

Engeström, 1999; Lave & Wenger, 1991). This idea is implicit in the common phrase,

"learning by doing". For example, Brown et al. (1989) reference how people learn new

vocabulary much more quickly in the context of ordinary communication than when they

are presented with new vocabulary in de-contextualized and abstract forms in a classroom

setting and then asked to transport that knowledge to a real-world setting. This

perspective challenges traditional accounts of learning in which learners acquire abstract

knowledge in one context (e.g., classroom) and transport it to another context (e.g., work

environment).

Some situated perspectives of learning describe situated learning in terms of a

local place and culture while others describe situated learning in terms of participation in

a socio-cultural system.

Situated learning as local place. A local place or setting shapes learning

(Anderson, Reder & Simon, 1996; Cobb & Bowers, 1999) in that learners construct

understandings of new ideas by relating the abstract concept underlying the idea to a

practical application relevant to their situation. For example, when learning about the

instructional leadership practice of data-driven decision making, principals'

understandings of this practice are likely to be influenced by the types of data that are

collected in their state, district and school. Principals might ignore or de-emphasize

aspects of data-driven decision making that are not possible in their local situation—

perhaps because certain types of data are not available—in the process of fitting new

ideas with their local situation. Learners' evolve their understanding of an idea each time

they apply it because "new situations, negotiations, and activities inevitably recast it in a new, more densely textured form" (Brown et al., 1989). As individuals attempt to incorporate a new idea into their practice, the results of that change (i.e., how new information plays out in local context) creates new information that individuals use to further make sense of the new idea and its applicability to their local context (Salomon & Perkins, 1998). For example, principals' understandings of data-driven decision making are likely to be influenced by the extent to which they experience positive or negative results in their attempts to use this idea in their local school. Since the characteristics of the local context—such as the culture and resources of a particular school—can influence learning, the same principal might develop different understandings of an idea if he or she were situated in a different school. Similarly principals' learning is also likely to be influenced by the district context which has its own set of characteristics. For example, in the case of data-driven decision making, the district situation might influence the amount and type of data and data systems available.

Situated learning as participation in a socio-cultural system. Some socio-cultural learning theorists object to defining situation in terms of application of ideas to a "place" and prefer to define it as participation in a socio-cultural system because they believe that individuals exist in a socio-cultural system regardless of their geographical position (Cobb & Bowers, 1999; Lave, 1988; Rogoff, 1995). These theorists argue that individuals cannot be divorced from their socio-cultural systems (Greeno, 1997). Lave and Wenger (1991) argue that much learning occurs via "legitimate peripheral participation" in which people learn by participating in the actual practice of an expert, but only to a limited degree and with limited responsibility for the ultimate product as a

whole. From this perspective, situated learning occurs by participating in a community

of practice and individuals draw on their identities as members of these communities to

make sense of their practice and to move from more peripheral to central forms of

participation in that practice. In other words, their learning is situated in the community

of practice. Therefore, the factors that are likely to matter to learning are the

characteristics of the socio-cultural system and opportunities for participation in it.

Regardless of whether characteristics of the situation can be manipulated in ways

that change learning outcomes, the school and district context are likely to explain how

principals respond to ideas addressed by the ILP because these entities represent both the

place and primary socio-cultural system in which principals operate. Not only do

principals exist in a "place" with particular attributes—e.g., a district with particular

types of data that are available—they also participate in a districts' culture. As

participants of this socio-cultural system, principals' might be influenced by the extent to

which the district culture does or does not view data as an important and valuable tool for

decision making. They might also be influenced by the extent to which this system

includes experts in data-driven decision making and provides principals with

opportunities to engage in data-driven decision making with these experts.

Interdependency of Cognitive, Social, & Situational Factors

Learning is inherently and simultaneously cognitive, social and situative in its

nature (Salomon & Perkins, 1998). For example, individuals are likely to construct

different understandings of ideas as they participate in social interactions with other

individuals. Similarly, conversations among the same group of individuals might yield

different understandings and decisions if those conversations occurred in a different place

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or socio-cultural system. Furthermore, the factors that influence these dimensions of learning are inter-related. For example, individuals' worldviews are strongly influenced by the socio-cultural system in which they participate. As such, the constructs discussed here are likely to interact with each other in ways that ultimately influence principals' understandings of ILP ideas. The next sub-section addresses whether and how assistance providers can intervene in this multi-faceted process to ultimately influence the understanding that is constructed.

Supports for Learning

Socio-cultural learning theory has identified several forms of support that assistance providers (such as teachers, coaches, and mentors) can use to pro-actively support learning. Although many of these supports have been identified in studies of children's learning, learning theorists often argue that the same principles can be applied to adult learning (e.g., Tharp & Gallimore, 1988). These supports include provision of opportunities for rich dialogue, situation-specific activities, tools, modeling and opportunities for application and feedback. Similar to the dimensions of learning, these supports are inter-related ideas that often go hand-in-hand, yet I separate them for the purposes of elaboration and then discuss their interconnectedness. This framework suggests that BCPS principals would be more likely to construct understandings of ILP ideas that align with IFL intentions if the IFL provided these supports during the ILP.

Opportunities for Rich Dialogue

Some research suggests that particular forms of conversation—such as those that provide opportunities for mutual discussion and reflection—enable learning. This is not surprising given that learning theory suggests that individuals negotiate and clarify

meaning during the course of conversations.

Assistance providers can influence these opportunities by structuring patterns of interactions. For example, they can arrange who talks with whom in what settings and can influence the character of the conversation by providing structures for engagement and reflection. Based upon Hatanno and Inagaki's research discussed in the previous section, learning is improved when conversations involve horizontal interaction, three or more members, empirical confirmation, and room for individuals to pursue their intrinsic motivation to understand. Therefore, assistance providers might be able to improve learning if they create these conditions.

Cognitive Structuring

Cognitive structures support learning by assisting the learner in organizing ideas and helping them to structure their thinking and learning (Duffy, Roehler, Meloth & Vavrus, 1986). In the words of Tharp & Gallimore (1988), "Cognitive structuring assists by providing explanatory and belief structures that organize and justify" (p. 63). They can be complex—such as worldviews or theories—or they can be as simple as naming a complex idea. Tharp and Gallimore suggest there are two types of cognitive structures that can be used to support learning: one type structures explanation and the other type structures cognitive activities. An example of the first type is when classroom lectures or textbooks support learning by explaining particular constructs that serve as "buckets" and "frameworks" that learners can use to organize new ideas. On the other hand, cognitive structures can also be rules or steps of a process that enable learners to develop understanding. An example of this second type of cognitive structure is when a teacher provides students with reading strategies they can employ to determine the meaning of an

unknown word (Duffy et al., 1986).

Cognitive structures that support learning have also been referred to as "tools" by some researchers (Engeström, 1999; Resnick, 1991; Vygotsky; 1978). Similar to Tharp and Gallimore's distinction between two types of cognitive structures, researchers that examine tools differentiate between tools that support conceptual understanding from tools that structure processes or activities.   Conceptual tools include frameworks, principles, and language that mainly specify and elaborate concepts (Grossman et al., 1999; Resnick, 1991). Process tools structure activities during which learners negotiate and construct meaning for particular ideas. For example, the IFL often asks principals to engage in Learning Walks, which are systematic observations of teaching and learning that are guided by a protocol. The Learning Walk protocols are considered a tool because they scaffold this activity. This tool simultaneously supports enactment of instructional leadership while it also supports principals in constructing understanding of instructional practice.

Artifacts of everyday practice can be a kind of tool that supports learning when they facilitate transfer of knowledge and theory in concrete and potentially useable forms (Greeno et al., 1996; Salomon & Perkins, 1998). For example, curriculum materials are artifacts of educators' practice and can be considered tools because they carry and structure information about what should be taught to students and how. Similar to interpretive perspectives that emphasize the role of tools in sensemaking, socio-cultural learning theory suggests that the IFL should provide principals with conceptual and process tools to support their understanding of ILP ideas.

Modeling

Learning is enabled by the presence of "masters" when these experts model how to deepen engagement in a particular practice. For example, an expert might demonstrate how to implement a new idea in practice. Modeling strategies are often coupled with opportunities for learners to practice ideas and receive feedback (Lave & Wenger, 1991). That is, after demonstrating a particular practice, the expert might provide the learner with an opportunity to practice implementing the idea and then offer feedback to the learning. However, Tharp and Gallimore (1988) argue that modeling can be helpful in-of-itself.

> Modeled activities can be transformed into images and verbal symbols that guide
> subsequent performances. Indeed, research has shown that active coding of
> modeled activities into descriptions or labels or vivid imagery increases learning
> and retention of complex skills. Through watching others, then, a person can
> form an idea of the components of a complex behavior and can begin to visualize
> how the pieces could be assembled and sequenced in various other settings. All
> of this can be achieved through central processing, without having performed the
> action. (p. 48)

Collins, Brown & Holum (2003) argue that modeling is a key aspect of cognitive apprentice relationships because the master helps to make cognitive processes "visible" in the same way that physical activities of a tradesman were visible in traditional apprenticeship models. When experts articulate what they are thinking while engaging in a practice, they are "making thinking explicit" or engaging in "metacognition". This type of assistance helps apprentices to move beyond superficial understandings because the

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modeling provides as visualization of expert practice against which they can compare their practice and progress (Lave, 1988). Metacognition further assists them in making these connections by focusing their attention on particular aspects of the expert's practice and helping them to understand why the expert considers those aspects to be important.

Opportunities to Practice and Receive Feedback

Learning is enabled when learners have structured opportunities during which they can receive feedback from an expert (Lave & Wenger, 1991; Rogoff, 1990; Tharp & Gallimore, 1988). These opportunities often occur when learners are practicing application of an idea, during which time the expert might coach the apprentice through the activity by providing "scaffolding" and then "fading" as the learners attempt to perform the task by themselves (Collins et al., 1991; Lave & Wenger, 1991).

According to Tharp and Gallimore (1988), feedback is only useful in supporting learning when it is compared to an established standard. In their words, "Simply providing performance information is insufficient; there will be no performance assistance unless the [feedback] is compared to some standard" (p. 55). This perspective suggests that assistance providers, such as the IFL, can support learning by providing opportunities for learners to practice applying new ideas and by providing structured feedback that compares their practice to a standard.

Focusing Practice on Authentic Activities

Assistance providers can enable learning when they situate learning tasks in what Brown et al. (1989) refer to as "authentic activities", which are coherent, meaningful, and purposeful events. For example, teacher evaluations are authentic activities in that they are purposeful activities that principals might carry out as a normal part of their day-to-

day responsibilities. When assistance providers ask learners to apply new ideas in the process of completing real-life tasks, like teacher evaluations, their motivation to learn and their understanding of new ideas improves (Rogoff, 1990; Salomon & Perkins, 1998). In the words of Brown et al., (1991),

> When tasks arise in the context of designing and creating tangible products, apprentices naturally understand the reasons for undertaking the process of apprenticeship. They are motivated to work and to learn the subcomponents of the task, because they realize the value of the finished product. (p. 3)

These opportunities for practicing application of ideas to authentic activities are helpful in part because they provide opportunities for learners to grapple with how new information fits with their local situation. These perspectives suggest that assistance providers should provide learners with opportunities to apply new ideas to activities that they would normally carry out as part of their day to day practice and have meaning and purpose from the perspective of the learners.

To the extent that any of these supports are provided to principals, I would expect them to have richer opportunities to learn about the reform ideas and I would expect them to appropriate them in ways that reflect the underlying principles of reform ideas.

Implications for My Case

This conceptual framework called my attention in data collection and analysis to whether and how cognitive, social, and situational factors influenced how principals constructed understanding of reform ideas addressed by the ILP. Cognitive dimensions of learning suggest that principals would have been more likely to notice and attend to information that fit with their prior understandings and worldviews. Social dimensions of

learning suggest that the understandings principals developed would have depended in part on the opportunities for social interaction and the structures and language that shaped this interaction. Situational dimensions of learning suggest that the learning process would have been influenced by the local school context and the district context. These various factors were likely to have interacted with each other in ways that ultimately influenced principals' learning.

The framework also suggests that the IFL could have pro-actively supported principals in learning about ILP ideas if they provided particular forms of support, including opportunities for rich dialogue, situation-specific activities, tools, and coaching/modeling, and opportunities for application and feedback. I used this learning theory framework to identify and focus on four facets of my case that were likely to explain how principals made sense of ILP ideas, including principal background, local school context, district context, and IFL supports. These conditions for prinicpals' sensemaking are depicted in Figure 3. In the next chapter, I explain how I examined these four aspects of the case for evidence related to the constructs surfaced by socio-cultural learning theory.
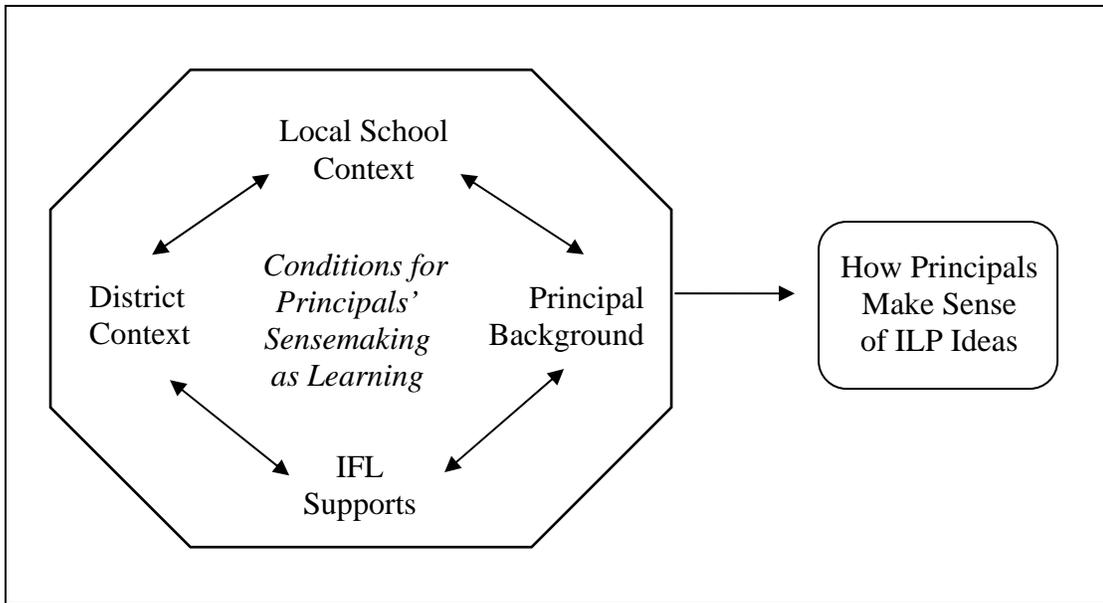
Figure 3. Conditions for Principals' Sensemaking Influences How Principals Make

Sense of ILP Ideas

Chapter 4: Research Design and Methodology

This study used a single-case study approach (Yin, 2003). Case study

methodology was appropriate because I was exploring how and why questions about a

phenomenon within a real-life context—that is, how the Institute for Learning (IFL)

attempted to support principals' sensemaking of Instructional Leadership Program (ILP)

ideas and why principals responded to the ideas in the way that they did. In this chapter,

I explain why I expected the IFL's ILP in Baltimore City Public Schools (BCPS) to be a

fruitful case for examining supports for principals' sensemaking. I also list detailed

research questions and describe how I designed data collection and analysis to answer

these questions. I end by discussing ethical and political considerations as well as

limitations of the study.

Case Selection

I expected the IFL's ILP for elementary principals in BCPS to be a promising site

for conducting an empirical study of supports for sensemaking because I was familiar

with the IFL's work from three previous studies, through which I had recognized several

of the supports highlighted by socio-cultural learning theory reflected in the strategies the

IFL typically used to conduct its ILP.[5] Across these studies, I had observed more than 14

days of IFL professional development (PD) sessions in eight different settings. Almost

all of these sessions were targeted towards principals, but they also often involved district

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[5] The first research study examined technological tools (known as NetLearn tools) that the IFL had
developed and was using in its ILP across five districts. The second study evaluated a version of the ILP
that the IFL had created for seven "affiliate" districts that were not full partners with the IFL but sent a
cadre of leaders to attend the ILP in Pittsburgh. The third was a comparative case study of three school
districts that had partnered with the IFL—with a focus on how the ILP supported instructional leadership in
these three districts.

leaders and school-based coaches. Regardless of the audience and topic of the PD session, there were several common features that seemed relevant to promoting sensemaking. First, the IFL seemed to embrace a situated view of instructional leadership and viewed its role as helping individuals to make sense of how reform ideas related to local situations. For example, the IFL almost never assumed sole responsibility for interpreting reform ideas, nor did it specify exactly how principals—and other practitioners that participated in its trainings—should use those ideas. Instead, the IFL typically provided research articles and gave participants opportunities to discuss and grapple with what the ideas meant and how they related to their day-to-day practice. I also observed the IFL employing strategies that socio-cultural learning theory suggests would support learning—such as modeling and providing tools and artifacts from the local context to assist participants in engaging in this sensemaking process. These links to socio-cultural learning theory were not surprising since the IFL was founded by a well known learning theorist, Lauren Resnick, and housed in the Learning and Research Development Center (LRDC) at the University of Pittsburgh. The IFL frequently consulted with learning theorists from LRDC in developing the content and supports for its professional development programs.

I had reason to believe that the IFL would provide supports in BCPS that were similar to what I had observed in other districts because the IFL indicated these intensions during conversations that I had with IFL and district leaders during the prior school year (2004-05). In fact, the IFL, BCPS and I had jointly written a proposal to the Institute for Education Sciences for my employer, the RAND Corporation, to evaluate the ILP in BCPS. Although the proposal was not actually funded, the IFL communicated its

original intentions to me as part of the proposal writing process. For example, the IFL provided me with descriptions of the modules (i.e., lessons) it intended to address in the ILP. The IFL indicated in these descriptions that it intended to provide videos, student work, and other artifacts of practice to support BCPS principals in making sense of instructional leadership ideas. Although I consulted with professors at the University of Maryland and other professional colleagues, I was unable to identify any other sites for which I was reasonably certain the program would be implemented in the 2005-06 school year and that the case would be an example of pro-actively supporting principals' sensemaking.

I anticipated that studying this phenomenon in a low-performing urban district like BCPS was likely to yield valuable implications about supporting sensemaking because it resembled the type of district in which most policy makers and reformers want to improve instructional leadership. As I discussed in chapter one, principals in low-performing schools and districts—like BCPS—are experiencing intense pressure to become better instructional leaders as a means of improving instruction and student achievement in their schools. BCPS had been labeled a failing system by state leaders and was experiencing state intervention and oversight as a result. Given the uncertainty and political distractions that this situation caused for principals—which I describe more in chapter eight—BCPS represented a place where implementation of efforts like the ILP would be challenging, particularly for an effort like the IFL's ILP that intended to support deep understanding of complex ideas. Therefore, findings regarding efforts to support principals in this type of district promised to be particularly relevant and useful to the national push for improving instructional leadership as a means for improving low-

performing schools.

The IFL's ILP in BCPS was also logistically feasible case to study because first, I had established relationships with IFL and BCPS that afforded me access that I needed for data collection. Second, BCPS was in easy commuting distance so that I could affordably conduct intensive data collection required to measure sensemaking. As I describe in more detail later in this chapter, I spent approximately 30 days in the field engaging in ongoing observations of ILP sessions and principals' practice and conducting multiple, lengthy interviews with principals, district leaders, and IFL staff. This extensive field work was necessary to yield data regarding how principals were making sense of particular reform ideas. I did not have travel funding that would have allowed me to spend this amount of time collecting data in a distant location. As such, this case provided a promising and convenient opportunity to study a pro-active attempt to support sensemaking about instructional leadership.

Research Questions

My review of literature in chapter two suggested that more empirical evidence was needed regarding how policy makers could improve instructional leadership and whether and how supports for learning could be used to support principals' sensemaking such that principals responded to instructional leadership ideas in ways intended by reformers. I attempted to address these research gaps by crafting the following questions about the IFL's ILP in BCPS:

1. How did the IFL attempt to support principals' sensemaking?

a. How did the ILF intend to support sensemaking? What was the design of the Instructional Leadership program (ILP)? To what extent did intended supports reflect concepts from socio-cultural learning theory?

b. What strategies did the IFL actually implement to support sensemaking? To what extent did actual supports reflect concepts from socio-cultural learning theory?

2. How did principals respond to the ideas addressed by the ILP?

a. What ideas did they attend to?

b. What was their understanding of the ideas?

c. What decisions did they make regarding whether and how to use the ideas?

3. What influenced how principals responded?

a. To what extent and how did the IFL's supports for sensemaking influence how principals responded?

b. To what extent and how did other factors—such as principals' backgrounds, schools contexts, and district context—influence how principals responded?

As I elaborate below, I designed my data collection and analysis methods to address these research questions.

Data Collection

I collected data between August 2005 and May 2006 (with the exception of one member-checking meeting that I held with IFL fellows in December 2006). In total, I conducted over 184 hours of observations and 70 hours of interviews, and I reviewed

over 88 artifacts and 27 newspaper articles. I also spent at least six hours member-

checking with the IFL. Table 1 provides more details regarding the extent and timing of

particular data collection activities. In this sub-section, I organize my discussion of these

data collection activities by the research questions.

Table 1.

Timeline of Data Collection Activities

Data Collection Activity	Timeframe
Observations of 4 district meetings (~18 hours)	08/17/05, 09/27/05, 12/21/05, 05/07/06
ILP sessions • Observations of all 7 sessions (~50 hours) • Collection of artifacts (~51 artifacts) • Informal interviews of IFL staff (~3 hours)	09/30/05, 10/28/05, 11/11/05, 01/06/06, 01/20/06, 02/10/06, 03/03/06
1st round of interviews (90 minutes each) • 2 IFL fellows (~3 hours) • 7 district leaders (~10 hours) • 14 principals (~20 hours)[6]	09/05—11/05
Observations of 5 principals (all-day) • Shadowing of day-to-day activities (~116 hours) • Informal interviews (~10 hours) • Collection of artifacts (~22 artifacts)	01/06—05/06
2nd round of interviews (90 minutes) • 17 principals (~24 hours) • Review of artifacts (~15 artifacts)	05/06
Collection of 27 local newspaper articles	Ongoing
Member-checking with IFL • 2 phone conversations with lead fellow (~2 hours) • 2 in-person meetings with IFL fellows in Pittsburgh (~4 hours)	02/06/06, 03/15/06, 05/01/06, 12/12/06, ongoing during & after ILP sessions

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[6] Only 14 principals were interviewed in the first round because three principals had not attended the first two ILP sessions and therefore were not officially part of the program at the time I conducted this round of interviews.

IFL Attempts to Support Sensemaking

To answer the first research question about IFL attempts to support sensemaking, I conducted formal interviews—for approximately 90 minutes each—of the two IFL staff members (called fellows) in charge of designing and leading the ILP. During these interviews, I asked fellows for their perspectives regarding the goals, content, and intended outcomes of the ILP. To capture actual implementation of supports for sensemaking, I attended all seven of the day-long ILP sessions, during which I took copious notes focused on capturing confirming and disconfirming evidence of supports for sensemaking.

For example, "opportunities for rich dialogue" is one of the supports for sensemaking that I highlighted in my conceptual framework in chapter three. Therefore, I tried to capture specific IFL statements and actions that appeared to support rich dialogue among the participants, and then I attended to nature of the dialogue by noting specific interchanges among the participants. I recorded principals' seating patterns and attendance, including instances when particular principals arrived late or left early. I collected all materials distributed to ILP participants, including copies of IFL slides, agendas, task sheets, articles, and artifacts of practice (such as transcripts from videos and examples of student work). In addition, I reviewed electronic versions of IFL presentation slides that IFL fellows sent to me for four of the seven sessions. These electronic files often included their talking points for particular slides and notes to each other on what they considered important to cover. During the sessions, I sometimes informally asked fellows to comment on their purpose and intentions. For example, while participants were watching a video I asked one of the fellows why they had decided

to show a video and how she expected it to prompt principals' understanding of the idea being addressed. I documented these exchanges in my observation notes for the sessions. After the sessions, I typically made arrangements to meet with the fellows or offered to drive them to the airport or train station, during which time I would ask questions about features of the program, how they intended the features to support principals' sensemaking, and how they expected principals to respond to the ideas that they had addressed that day. In several cases, I recorded these conversations with a digital voice recorder. Otherwise, I documented them in field notes as soon as I returned home.

Principals' Responses

I drew on the literature on sensemaking to define outcomes of the sensemaking process in my case. I referred to these outcomes as "principals' responses", which—according to sensemaking theory—include whether and how principals attended to the ideas, how they understood the ideas, and whether and how they decided to use the ideas.[7] To answer this research question, I drew on principals' responses during 90-minute interviews conducted in April to May of 2006. During these interviews, I first asked principals to identify the two or three ideas they valued most from the ILP and to explain why they viewed them as valuable. I then prompted them on each of the major reform ideas—unless they had not attended one or more sessions, in which case I did not ask them about the ideas addressed in the missed session(s). I was concerned that principals might have difficulty recalling particular sessions and ideas even if they attended the sessions. Therefore, I provided principals with my carefully organized binder of materials from the IFL sessions and encouraged them to take several minutes to review the materials relevant to each session before responding to my questions.

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[7] I define these dimensions of principals' responses in the analysis sub-section.

My conceptual framework suggested that individuals would translate and create their own meaning for new ideas that they were exposed to (Goetz & LeCompte, 1984). As such, I was concerned that principals' self-reports might not provide valid and reliable information regarding whether and how they decided to use the ideas. That is, I was concerned that principals might for example report deciding to use ideas, but their understanding of what it means to use the ideas might be different from the IFL's intentions. Therefore, I took several measures to triangulate self-reports of their responses to ILP ideas with other data sources.

First, I asked principals to bring artifacts of their practice to the interview. Most of the principals' supervisors—Area Academic Officers (AAOs)—required principals to maintain binders in which they kept artifacts from school-based PD and records from observations of teachers. Since my ongoing observations of principals' practice suggested that the most common way in which principals used the ILP ideas was by addressing the ideas in school-based PD or focusing on the ideas during classroom observations, these binders and the artifacts they contained often provided confirming or disconfirming evidence regarding whether the ways in which principals used the ideas actually reflected reformers intentions. For example, two different principals told me that they had used the ILP module on fluency—which I describe in more detail in the next chapter—with their staff during a designated PD day. When I examined their PD materials, I noticed that one principal addressed the idea as a 20-minute agenda item among several other items while the other principal spent the entire PD day on the literacy module and essentially replicated the ILP activities with her staff. By examining the materials that the principals used for these PD sessions—including the actual

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language principals used in written documents to describe the ideas to their teachers—I was able to learn more about how the principals understood the ideas and whether their understandings and usages reflected IFL intentions.

I similarly triangulated principals self-reports of how they observed teacher practice with observation notes they kept in their files. For example, some principals used an observation form that explicitly prompted them to take notes on whether teachers were using Accountable Talk[SM] (AT)—another ILP idea that I also describe in the next chapter. When principals' notes specifically referenced a particular idea, I interpreted this data as confirmation of self-reports that they were attending to, understanding, and using the idea. Often, the content of the notes shed light on their understanding of the idea and provided a level a specificity that helped me to assess whether the usage reflected IFL intentions. While four principals did not provide artifacts, the majority (13) did.

Second, I asked principals in interviews to provide detailed descriptions of instances when they had used ideas. For example, if a principal told me that he had emphasized an instructional strategy like AT in his daily classroom observations and feedback to teachers, I asked the principal to think of a specific teacher and to recount exactly what he had noticed about AT in that teacher's classroom and the specific feedback he had given the teacher.

Third, I asked a set of similar questions during the first round of interviews in fall 2005 and in the second round of interviews in spring 2006. That is, during both rounds of interviews, I asked principals to describe the focus of their classroom observations and school-based PD for faculty in their schools. This enabled me to compare principals'

responses from the beginning to the end of the program rather than relying only on their own analyses of how their focus and practice had changed over the course of the year.

Fourth, I observed a sample of five principals for four days each to gather additional data to triangulate principals' self-reports regarding their responses to ILP ideas. I used three criteria to select these principals.

- I focused on eight of the seventeen principals because these eight were the only principals that had consistently attended all of the first three ILP sessions. I did not want to observe principals for evidence of how they responded to ILP ideas if they had not attended the relevant ILP session and therefore had not been exposed to the IFL's supports for their sensemaking of the ideas. I anticipated that if the IFL's supports for sensemaking were able to influence sensemaking, this sample would provide the best opportunity for detecting and understanding that impact.

- I excluded principals who had been reluctant to be interviewed during my first round of interviews because I anticipated that my observations would be more feasible if principals were comfortable being shadowed by a researcher and willing to openly discuss their practice with me.

- I chose at least one principal from each of the four district regions because principal and district leader responses during my first round of interviews suggested that the regional context might be important to understanding whether and how principals responded to IFL ideas.

I arranged to visit each of these principals for a full day once a month between January 2006 and May 2006. I asked principals to choose days during which they

anticipated engaging in instructional leadership tasks related to literacy because—as I

discuss in the following chapter—the ILP was focused on supporting instructional

leadership in the area of literacy.   More specifically, I encouraged principals to schedule

my visit on days during which they would be observing literacy classrooms, conversing

with teachers about literacy instruction, or conducting school-based PD related to

literacy.[8] I focused my observations and note taking on the ideas that principals attended

to during these tasks, including non-ILP ideas.[9] When principals did attend to ILP ideas,

I gathered data that reflected principals' understandings and uses of these ideas. For

example, when principals conducted post-observations conversations with teachers, I

recorded the exact language the principals used to describe and emphasize ILP ideas. I

also asked principals to reflect on their practice between tasks or at the end of the day.

For example, I asked the principals to "share their thinking" about post-observation

conversations, during which one principal explained that she had decided to emphasize

particular instructional improvements that were "doable" given the teacher's experience

level and learning trajectory.

I iteratively collected data from principals and the IFL to determine whether

principals' responses matched IFL intentions. During two phone conversations and two

meetings with the IFL, I asked fellows to engage in "member-checking" by confirming or

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[8] I originally intended to observe only the planned instructional leadership activity, but quickly learned that principals' days were often rescheduled at the last minute. For example, classroom observations were often disrupted by discipline issues or central office requests. Therefore, the observation was postponed until later in the day and it was beneficial for me to plan to be on-hand throughout the day to be able to adjust to these schedule changes. I also took this opportunity to gather data regarding informal instances of instructional leadership and factors that influenced whether and how principals carried out instructional leadership tasks.

[9] My note taking during principal observations was greatly aided by use of a tablet PC, on which I could take cursive notes while walking with the principal. I easily converted these handwritten notes to a typed format that could be uploaded to data analysis software. These observations were also aided by a very small voice recorder that was clipped to my belt. I used this recorder as principals and I walked from one classroom to the next to easily record multiple brief exchanges regarding what principals had noticed and attended to during a classroom observation.

challenging my interpretations of their intentions. In several cases, I mentioned specific responses that I had observed and asked fellows to comment on the extent to which they considered the response to reflect the underlying principles of the reform idea.[10]

Factors that Explained Principals' Responses

I collected data from interviews, observations and artifacts regarding factors that my conceptual framework suggested would be relevant to my third research question regarding the factors that explained principals' responses. These factors included principals' background, the local school context, and the broader district context. During the first round of interviews of principals, I gathered data about principals' prior knowledge and background by asking questions regarding their career path, years of experience, and previous PD experiences. I also asked questions that elicited their prior knowledge about particular reform ideas that I knew would be addressed in the ILP. I gathered information about their identity by asking them to describe their leadership philosophy and to comment on the extent to which they viewed themselves as instructional leaders.

I gathered data about the local school context by asking principals to describe their schools' student and teacher demographics, achievement status (such as whether they were designated as in need of improvement by NCLB guidelines), and their schools' instructional improvement needs. I triangulated these reports with data that were publicly available on the internet—such as school report cards—and with interview responses from AAOs. I asked principals to provide their perspectives on particular aspects of the district context, including availability of resources—such as staff, time and materials, extent of support from supervisors, and district messages about expectations and

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[10] I posed these examples as hypothetical scenarios to maintain principals' confidentiality.

priorities. I also interviewed all four of the elementary AAOs and the three top district

leaders that oversaw instructional matters, including the superintendent, chief academic

officer, and deputy academic officer for additional data regarding the district context. I

supplemented these data with 27 local newspaper articles that I collected throughout the

school year. In addition, the principal observations often enabled me to gather several

concrete and detailed examples regarding principal, school and district factors that

emerged as themes in the broader set of principal interviews. For example, principals

often shared copies of emails that they received from central office administrators that

reflected aspects of the district context.

Data Analysis

My data analysis process consisted of several steps, including data organizing,

coding, developing theoretical explanations, and checking validity and reliability.

Data Organizing

I recorded and transcribed all interviews. I entered the transcriptions, observation

notes, and electronic documents—such as electronic versions of the IFL's PowerPoint

slides from each ILP session—into ATLAS.ti, which is a qualitative data management

and analysis software program. When artifacts were not available electronically, I used

color-coded Post-It Flags as a tool for organizing hard-copy artifacts. For example, I

marked all data relevant to providing cognitive structures with a red flag.

Coding

I drew on my conceptual framework and literature reviews to develop a set of

codes that applied to each of the research questions. For example, I coded data collected

for the first research question, "What supports did the IFL provide to support sensemaking?", for evidence of the supports for sensemaking that I had identified from socio-cultural learning theory—such as modeling, tools, and artifacts of practice. For the second research question, I created narrative summaries of how each principal responded to each idea. These narratives described how the principal attended to, understood, and decided to use the idea because my review of sensemaking literature—in chapter two—indicated these are the outcomes of the sensemaking process. Although I did ask principals to self-report how they actually used ideas, my intention was to use this data as evidence of how principals' decided to use ideas rather than evidence of actual use. I decided to focus my data collection and analysis on principals' decisions regarding use rather than actual use because I had limited resources to collect additional data to triangulate principals' self-reports of actual use. The following is an example of a narrative summary of one principal's response to the idea of AT:

> [Principal X] responded to the idea of Accountable Talk by deciding to focus on this idea during her classroom observations of teachers. In her words, "I look for it [AT] all the time". During the interview, she presented me with copies of the observation forms she completes during these observations. The form included a prompt for Accountable Talk and a space where I observed she had taken notes on what she had witnessed regarding Accountable Talk during the observation. A brief skim of these ~20 forms provided confirming evidence that she had decided to attend to and use the AT idea. When I asked her to describe a teacher who was using AT well and another teacher who was not, her descriptions of AT talk reflected understandings of the idea that fit with reformers' intentions.

As this example illustrates, my descriptions of principals' responses addressed how principals attended to, understood and decided to use the idea. I then adapted Grossman's (1999) degrees of appropriation—which I reviewed in chapter two—to code each principal's response on a scale of weak to strong. I considered responses that reflected reformers intentions as being stronger responses. More specifically, I used the following four categories to code principal responses: failure to appropriate the idea, appropriation of simplified understandings, or appropriation of conceptual underpinnings. For example, I coded the response above as "appropriation of conceptual underpinnings" because the principal attended to and decided to use the idea of AT and her use reflected understandings that fit with the IFL's intentions. In assigning these codes, I considered the possibility that principals could appropriate ideas with conceptual underpinnings even when they decided not to use the idea. As I discussed above, I conducted "member-checking" activities with IFL fellows to validate my assignment of these codes.

Finally, I coded data regarding the third research question, "What factors explained responses?", with codes that reflected concepts from my conceptual framework such as principals' background and aspects of the district and local school context. Across the research questions, I used sub-codes to track when interview data had been confirmed or challenged by other data such as observations and artifacts. I also created additional sub-codes for concepts that were not reflected in my initial code list (Merriam, 1998)—for example, I identified and tracked "poor communication" as one key factor related to the district context—and revisited previously coded data until I had used the same lens to examine all the data.

Developing Theoretical Explanations

I arrayed my analyzed data in ways that allowed me to identify patterns that led to a theoretical explanation of the case (Merriam, 1998). For example—as I discuss in detail in chapter six—I used a table format to array coded principal responses by individual ILP ideas and noticed a pattern that some ideas received more consistent responses than other ideas. I hypothesized that particular ideas received more consistent responses because the IFL had provided more support for principals' sensemaking of these ideas. Then, I created a new table that allowed me to examine this relationship.

In developing a theoretical explanation of how various factors influenced principals' responses to ILP ideas, I constantly examined and revisited my data to look for disconfirming evidence. My process reflected the six steps that Yin (2003) refers to as an "explanation building" process: (a) making an initial theoretical statement about the behavior, (b) comparing findings from a single case to the statement, (c) revising the statement, (d) comparing other details of the case against the revision, (e) comparing the revision to the facts of additional cases, and (f) repeating the process as needed. As part of this process, I invited reviewers and other researchers to suggest alternative explanations to consider, and I examined the data for evidence related to these rival explanations. This analysis process allowed me to test the completeness and appropriateness of my conceptual framework in capturing and explaining how various factors—including supports for sensemaking—influenced how principals responded to ILP ideas.

Checking for Validity and Reliability

I used multiple strategies to check the validity and trustworthiness of my research

findings. As described above, I triangulated data (Yin, 2003) by utilizing multiple data collection methods, such as interviews, observations and artifacts. These multiple methods allowed me to examine the degree to which participants' self-reports of their behavior were consistent with their actual behavior as observed by me and documented by artifacts. After interviewees made statements, I often shared my interpretations with interviewees during the course of the interview and asked them to comment on the accuracy of my description of thoughts and behavior. Finally, I looked at the degree to which my findings confirmed or disputed existing theory and critically examined potential explanations for differences and similarities.

Ethical and Political Considerations

My study directly addressed a problem of practical concern for BCPS leaders and the IFL—that is, knowing whether and how principals were responding to ILP ideas. I tapped this interest to help gain access to BCPS by promising to provide formative feedback they could use to make improvements in the program, assuming that improvements were needed. Since I was willing to provide this feedback, district leaders and principals seemed particularly willing to make time for interviews and observations. At the same time, this promise meant that I had to take extra precautions to protect principals' confidentiality and find ways to report my findings to BCPS leaders in ways that did not compromise the confidentiality of particular principals.

I addressed these ethical concerns by crafting feedback that was based upon aggregated data, and I emphasized findings that were common across all principals. For example, in providing my feedback and writing this dissertation, I chose illustrative examples of negative responses that did not reveal the identity of principals. I also

discussed my planned feedback with a sample of principals who reviewed the findings with a focus on whether any of the feedback was likely to identify them or otherwise be problematic for them. Although this process did not lead me to change my key findings, it did limit my ability to reference specific examples from my data that illustrate and justify my findings because these examples may have been identifiable and damaging to the reputations of the principals they involved.

Chapter 5: IFL Intentions to Support Sensemaking

My prior studies of the Institute for Learning (IFL) and preliminary conversations with IFL leaders suggested that in general the IFL aimed to support principals' sensemaking—but to what extent did the IFL and BCPS leaders actually intend for the Instructional Leadership Program (ILP) to provide such support for elementary principals in Baltimore City Public Schools (BCPS)?

In this chapter, I argue that the IFL's ILP in BCPS was in fact a case of the phenomenon I had hoped to study—a pro-active attempt to support principals' sensemaking. I first present evidence that the IFL was focused on assisting principals in learning about foundational ideas related to instructional leadership, and its goals were aligned with what theory identifies as the outcomes of the sensemaking process, which I outlined in my problem statement. That is, the IFL wanted principals to attend to particular ideas, understand the conceptual underpinnings of these ideas, and decide to use them in ways that were appropriate to their local situation.   I next argue that the IFL's approach to supporting sensemaking is worthy of study because its general structure reflected recommendations for effective principal professional development that I summarized in my review of the principal professional development literature in chapter two. That is, the IFL structured the ILP with the intention to provide ongoing job-embedded professional development that was linked to curriculum, that focused on a problem of practice, and that provided opportunities for reflection, peer discussions, and coaching. Finally, I provide evidence that the IFL designed individual lessons (i.e., modules) with the intention of providing supports that socio-cultural learning theory suggests would improve sensemaking outcomes. These supports—which I reviewed in

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my conceptual framework in chapter three—included opportunities for rich dialogue, cognitive structuring, modeling, opportunities to practice, and focusing on authentic activities.

I found that the IFL's approach to supporting principals' sensemaking about instructional leadership was not to directly support sensemaking about the idea of instructional leadership in the sense that the IFL was not engaging principals in making sense of the direct question of "what does it mean to be an instructional leader". Rather, the IFL was attempting to assist principals in making sense of what the IFL called "foundational ideas" that addressed questions of "what does high quality literacy instruction look like" and "what kinds of professional development enable teachers to implement high quality literacy instruction". The IFL intended for principals to draw on and apply these foundational ideas regarding literacy instruction and teacher professional development in the process of enacting instructional leadership.

The findings presented in this chapter are largely based upon formal interviews and informal conversations with IFL staff and district leaders as well as my analysis of documents collected from these individuals—including a program proposal and planning documents shared among the IFL staff and district leaders. [11] I triangulated and supplemented these data with materials that were distributed at the ILP sessions. Much of my evidence for IFL intentions was based upon statements in IFL documents (such as planning documents and presentation materials) that could not be attributed to particular individuals because these documents were designed with input from at least six IFL staff members. While two staff members known as fellows were primarily responsible for

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[11] The district leaders include the superintendent, chief academic officer, and deputy chief academic officer. I do not attribute specific intentions to individual district leaders because I promised them anonymity in my consent statement.

implementation of the ILP, interview responses and documents indicated that design of the ILP usually reflected the intentions of the IFL overall rather than the individual intentions of particular fellows and instead refer to IFL intentions. Therefore, I purposefully do not attempt to attribute intentions to specific individuals. Even when my data allow me to attribute intentions to specific individuals, I do not make these attributions because I promised interview respondents confidentiality in my consent statement.

IFL Intentions for Program Content Emphasized Principals' Learning of Foundational Ideas Related to Instruction and Instructional Leadership

The IFL designed the ILP to support engagement in what it called "foundational ideas"—that is, key ideas related to what is known about rigorous literacy instruction and the conditions in schools that support rigorous literacy instruction. A presentation slide that the IFL fellows used in the first ILP session provides evidence for the focus on foundational ideas. The slide was titled, "Expectations for the Course of Study" and the first bullet read, "Participants will engage as learners in foundational ideas study that will enable us to develop the habits of mind necessary to create learning environments that make high-quality instruction accessible to all students". This statement also provides evidence that IFL's focus was on principals' *learning* by stating that the primary purpose was to "engage as learners". Although the IFL intended for principals to apply these ideas to their day-to-day practices as instructional leaders, the learning was considered a goal and expectation in-of-itself regardless of whether they actually used what they learned.

The IFL planning documents outlined the IFL's intentions to provide thirteen

modules (i.e., lessons) organized around foundational ideas related to literacy, student

learning, and teacher learning. These specific ideas—as labeled in the planning

documents—included "a vision of lesson study", "effort-based learning", "studying a

blending lesson for its links to standards", "the role of fluency in learning to read",

"practice-based professional development", "distributed instructional leadership",

"assessing fluency", "school instructional program coherence", "promoting

comprehension through Accountable Talk", "theme as a framework for comprehension",

"central concepts and vocabulary", "assessing comprehension through Accountable

Talk", and "creating high-quality classroom assignments". The IFL intended to cover

these thirteen modules over the course of 10 all-day (9am to 3pm) sessions scheduled

between September 2005 and May 2006.

Table 2.

Layers of Leadership Content Knowledge Addressed by IFL Modules

Layer	Type of knowledge	Modules
1	Knowledge of subject matter, how students learn, and the best ways of teaching that subject matter	• Studying a blending lesson for links to standards • The role of fluency in learning to read • Assessing fluency • Promoting comprehension through Accountable Talk • Creating high-quality classroom assignments • Effort-based learning
2	Knowledge of how teachers learn and how to support teachers in developing layer 1 knowledge	• Practice-based professional development • A vision of lesson study
3	Knowledge of how to lead instructional reform by creating environments that lead to development of layer 1 and layer 2 knowledge	• Distributed instructional leadership • School instructional program coherence

As shown in Table 2, the majority of modules focused primarily on ideas related to knowledge of subject matter, how students learn, and ways of teaching that subject matter. During an interview, one of the IFL fellows cited Stein and Nelson's research on leadership content knowledge (Stein & Nelson, 2003) to justify the IFL's decision to focus on ideas related to subject matter knowledge (i.e., knowledge of literacy) and teacher professional development in a program aimed at promoting instructional leadership.[12] Stein and Nelson argue that instructional leaders draw on "leadership content knowledge"—which is the knowledge of subjects and how students learn them. They conceptualize leadership content knowledge as residing within a set of embedded layers. The core layer involves knowledge of subject matter, how students learn that subject matter, and the best ways of teaching that subject matter (a.k.a., pedagogical content knowledge). The next layer involves knowing how teachers learn and how to support teachers in developing pedagogical content knowledge. For principals, a third layer involves knowing how to lead instructional reform by creating environments that lead to improvements in teaching and learning across their schools.

Table 2 organizes the IFL modules according to Stein and Nelson's layers of leadership knowledge. Although most of the modules addressed the first layer of knowledge, the IFL sometimes intended to extend modules that addressed the first layer in ways that supported outer layers of knowledge as well—for example, by discussing implications of knowledge regarding how to assess fluency for how to support teacher learning and lead instructional improvement—the IFL embedded supports in these modules that were primarily aimed at supporting sensemaking of the foundational idea

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[12] Stein's research was conducted under the auspices of the Learning Research and Development Center, which is the parent organization for the IFL.

itself.

The IFL fellows intended for principals to use these layers of knowledge to, in their words "deepen" ongoing instructional leadership practices. For example, when I asked one fellow how leadership content knowledge was related to instructional leadership practices, she responded,

So it might be something where, as a principal, what do I do? You know I might sit down in a grade level meeting. I might go in and sit in and observe a classroom. I have opportunities to give feedback to my teachers. Well, now [that I have knowledge of these foundational ideas] … I have a set of knowledge now that helps me to be more informed about what I should be looking for … when I see something, I know what I'm looking at now, and … I can offer now specific feedback to my staff.

This fellow did not necessarily intend for principals to engage in *new* practices— that is, she recognized that principals might already be observing classrooms and participating in grade level meetings. However, she did intend for principals to have better knowledge of "foundational ideas" that could inform and shape how they engage in these routine practices. In other words, the fellow did not intend for the ILP to change principals' practice—which contrasts with other instructional leadership programs that intend for principals to spend more time observing classrooms and otherwise engaging in activities that relate to instruction. Instead, this fellow emphasized her intention to change the nature of how principals engaged in these activities by providing them with knowledge of content and how students learn that influences what they notice during observations as well as knowledge of how teachers learn that influences the nature of

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feedback that they provide to teachers during grade level meetings.

Both IFL fellows repeatedly articulated what I refer to as a "situational view of instructional leadership". That is, they argued in interviews that evidence of implementing foundational ideas would depend on a principal's local situation, including the current state of affairs with regards to teaching and learning in their school and what the principal was trying to accomplish. Although instructional leadership can be generically defined as leading instructional improvement within a school, their situational view of instructional leadership emphasized that what it means to enact instructional leadership and what it would look like could be different depending on the situation.

For example, when I first asked fellows how they wanted principals to respond to the idea of practice-based professional development (PBPD), I expected them to describe specific actions that they hoped principals would take. For example, they might have said that they wanted principals to use artifacts of practice in their professional development with teachers. Instead, one fellow replied,

> So our hope is that … they bring this PD back to their schools, and maybe they
> have a lead team or someone that they might say, "Partner with me to think
> through how we can start to institute these ways of working, in the different
> structures or venues that we have in this school." So that way of working can
> happen at staff meetings, at grade level team meetings, in mentoring relationships,
> or in learning groups.

This fellow was explaining her belief that PBPD can be manifested in many different ways. In this interview, she objected to my probing that encouraged her to specify how principals should apply the idea of PBPD to their practice. As she states in

the quotation above, she thought principals should share ideas with other leaders in the school and collaboratively determine how a practice-based way of working could be incorporated into their schools, depending on the PD structures they have available to them. In some cases, applying PBPD might mean that the principal leads a professional development session with teachers that involves analysis of student work (one type of artifact that might be used in PBPD) *if* this particular activity is aligned with the professional development goals of the school. However, other applications of PBPD might be more appropriate depending on the goals of the PD and the time and other resources available to the principal. Therefore, the IFL fellows did not want to specify exactly how they expected principals to apply ideas addressed by the ILP.

Although the IFL fellows acknowledged that it would be appropriate for principals to apply ILP ideas in different ways depending on the local situation, they also reported that they did at minimum expect the principals to attend to, understand, and decide to use the ideas. For example—even though the fellows expressed a position in which principals should have discretion in how they apply their knowledge regarding assessing fluency—they should be deciding to apply the idea. In other words, the fellows did not expect principals to necessarily conduct PD with teachers on assessing fluency, but they did suggest that principals should at least be paying attention to whether and how their school assesses fluency and be using this assessment to make informed decisions regarding whether to address the idea of assessing fluency in teacher PD.

When commenting on what might count as disappointing evidence of learning from the ILP, one fellow responded, "[Principals] gotta know what to look for. If they don't even know [a foundational idea] is missing—that's a problem." The fellows also

expressed concerns that principals might misunderstand or misappropriate ideas from the ILP. For example, when I asked the fellows whether they could imagine a way in which principals might misunderstand or misapply the idea of PBPD, one fellow replied,

> Oh sure. Lots of times people will use videos and say that's practice-based professional development. But they don't set it up. They don't make it a useful learning experience.

This fellow was referring to very explicit guidance that she had provided in the ILP regarding effective use of videos. She had emphasized the importance of providing background information and framing the goal of examining the video before showing it. She had also insisted on the importance of providing teachers with a "lens" or analytical frame to guide their observation of the video. Her interview statement acknowledged that principals might use video in ways that did not reflect her explicit intentions.[13]

In sum, the IFL's goals seemed consistent with the outcomes of sensemaking. That is, the IFL wanted principals to attend to particular ideas, understand the conceptual underpinnings of these ideas, and decide to use them in ways that were appropriate to their local situation.

IFL Intentions for Program Structure Reflected Recommendations from Literature on Principal Professional Development

In this sub-section, I argue that the program structure for the ILP reflected findings from the literature on principal professional development that I reviewed in chapter two. The IFL designed the ILP to be focused on a local problem of practice, linked to curriculum, and supportive of ongoing job-embedded opportunities for

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[13] As I describe later in this chapter, the IFL implemented several measures that were intended to prevent misunderstandings and simplification of foundational ideas.

reflection, peer discussions and coaching. In my problem statement, I pointed out that very few studies have attempted to empirically examine the basis of these recommendations. Given that the IFL's ILP was aligned with recommendations in the literature, it was a strategic opportunity to address whether and how these professional development characteristics helped to improve instructional leadership.

Focused on a Local Problem of Practice

The fellows reported that the IFL intended for the ILP curriculum to address a particular problem of practice specific to BCPS as opposed to being a generic curriculum designed without the particulars of BCPS in mind. Similar to previous studies of the IFL (Marsh et al., 2005; Honig & Ikemoto, 2007), I found that the IFL intended to work with district leaders to identify a local problem of practice and to tailor the ILP to address that problem. IFL fellows and district leaders reported that as a result of this process they jointly decided that the ILP should be designed to assist BCPS in districtwide implementation of the Open Court literacy curriculum. All three of the district leaders indicated in interviews that they were concerned with what one labeled a "quality of implementation" problem. In the words of one,

> Baltimore has a history of not doing the best job of implementing programs with fidelity. We start with something, a great idea, and then we have to put Baltimore into it, but to the point that sometimes we really take away the basic tenants of the program and then wonder why things don't work.

Two of the three district leaders expressed concern regarding whether elementary schools would implement the Open Court literacy curriculum with sufficient quality to significantly improve literacy achievement. They hypothesized in interviews that the key

to quality implementation was in developing teachers' expertise in literacy so that

teachers could understand the tenets of the Open Court curriculum and therefore be

willing and able to implement those tenets. Importantly, these district leaders said that

principals as instructional leaders should play a key role in developing their teachers'

knowledge and overseeing quality implementation of Open Court. However, they

reported that principals need their own content knowledge to play this role. In the words

of one,

> How I see it is, if we want to improve achievement, we have to improve
>
> instruction. If we want to improve instruction, we have to improve teachers'
>
> knowledge and skills. If we want to do that, we need to start with the principals—
>
> because they are the ones that can make the rest happen.

Given district leaders' desire to focus on a particular problem—implementation of

Open Court—the IFL tailored the original focus of the ILP so that its support for

instructional leadership was aligned with this problem of practice. A description of the

ILP that was written by the IFL in spring 2005 described a program that would be

focused on developing principals' capacity to engage in specific instructional leadership

practices, such as conducting classroom observations, conferring with teachers,

examining student work, and developing school-wide PD plans.

For example, the following excerpt from this proposal explains how one module

would engage principals in improving their practice related to conferring with teachers,

> *[Module] Four: Conferring with Teachers.* This [module] will teach principals
>
> how to conduct regular one-on-one conferences with teachers about the progress
>
> of students. By comparing student data with the instruction offered in the

classroom, principals will be able to establish a particular form of accountability

that is focused on students. As a result, principals will be able to identify

teachers' professional development needs and support differentiated professional

development. (Ikemoto, 2005, p. 5)

After conferring with district leaders during the planning stages of the ILP,

however, the IFL fellows shifted the focus of the ILP away from the original focus on

principal practices—such as conferring with teachers. This shift occurred because the

conferral process led the IFL and district leaders to jointly decide to focus the ILP on

what the IFL referred to as "foundational ideas" about literacy instruction as a means of

supporting implementation of the Open Court literacy curriculum. To support this goal,

the IFL fellows and district leaders reported that they thought it was more important to

focus the ILP on developing principals' content knowledge about literacy than on the

generic instructional leadership practices outlined in the original proposal.

Linked to Curriculum

By the time the ILP began in September 2005, the IFL fellows and BCPS leaders

had decided that the ILP for elementary principals should be targeted towards developing

principals' leadership content knowledge in literacy so that they would be better able to

support implementation of the Open Court curriculum in their schools. The IFL fellows

intended to assist principals in making sense of how foundational ideas about how

students learn to read related to the Open Court curriculum by making explicit linkages

between the two. In the words of one IFL fellow,

The pattern for the way in which we'll be working throughout the course is that

they'll [the participants will] have an opportunity to engage in PD around a

"foundational idea" module. We'll look at what does research say about it. And then they'll experience a task that connects the idea to Open Court.

For example, the materials that the IFL prepared for the module on "theme as a framework for supporting comprehension" indicated that the IFL intended to engage principals in a task of examining thematic units from the Grade 2 Open Court curriculum. More specifically, the planned task asked principals to examine an Open Court unit and discuss how the unit's theme—kindness—could help students deepen their comprehension.

Ongoing, Job-embedded Opportunities for Reflection, Peer Discussions and Coaching

The IFL intended for the ILP sessions to be on-going in that they were scheduled to occur throughout the school year on a somewhat monthly basis between September 2005 and June 2006.[14] One district leader reported that the district had actually requested that a bulk of the sessions occur during the summer. However, the IFL had pushed back on this idea citing literature that suggests that professional development should be ongoing and occur throughout the course of the school year. The IFL also intended for the sessions to be job-embedded in that they were scheduled from 9am to 3pm on Fridays, which were regular paid work days. In the words of one fellow, "They [principals] need to see this learning as a critical part of their job—not an optional thing that happens on weekends or during the summer".

The IFL also intended for these ongoing job-embedded opportunities to engage principals in activities that intertwined reflection, peer discussion, and coaching. For example, one fellow described in an informal interview that she had intended to provide

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[14] The intended dates according to planning documents were: 09/30/05, 10/28/05, 11/11/05, 12/09/05, 01/06/06, 01/20/06, 02/10/06, 03/03/06, 04/07/06, and a date to-be-determined.

principals with structured opportunities to visit one another's schools. During these

visits, she intended for principals to reflect on the presence of particular ideas in the host

school and for them to engage in peer discussion about their reflections. She also hoped

to build principals' inclinations and capacity to use these visits as opportunities for peer

coaching in which principals provide feedback to one another on their application of

ideas from the ILP. The IFL also described these intentions in a proposal for funding of

the program that was submitted to the U.S. Department of Education,

> As recommended by national organizations such as National Staff Development
>
> Council, Interstate Leaders Licensure Consortium, and the National Governors'
>
> Association, the proposed IFL Instructional Leadership Program will incorporate
>
> both reflective practice and opportunities for peer collaboration into a program
>
> that teaches principles of leadership and instruction. Principals will be organized
>
> into peer learning communities that meet on a monthly basis to examine research
>
> and work together to solve problems of leadership practice. The program will
>
> include group training sessions, structured school visits and informal "buddying,"
>
> or intervisitation, among a cohort of trainees along with appropriate amounts of
>
> private study.

The IFL fellows also indicated to me in informal conversations that they had

purposefully required the ILP sessions to be all-day sessions to allow time for peer

dialogue, reflection and coaching. However, the IFL's original intentions with regards to

"structured school visits and informal buddying" were removed during the planning

process. This cutback occurred—according to one district leader—because funding was

ultimately less than district leaders had expected, and the district therefore limited the ILP

to one day per session rather than the originally planned day and a half per session. Although the IFL still intended to provide opportunities for peer dialogue and reflection within the full-day session, the removal of the half-days prevented time for observing and coaching principals on their application of ILP ideas within their schools.

IFL Intentions for Module Activities Embodied Supports for Sensemaking

Each module highlighted a particular foundational idea, and the IFL intended for each module to include a set of supports to assist principals in making sense of that foundational idea. While the general program structure reflected recommendations from the literature on principal PD, the design of learning activities within the modules reflected supports that were consistent with the characteristics of assistance that socio-cultural learning theory suggests would support sensemaking, including: opportunities for rich dialogue, cognitive structuring, modeling, opportunities to practice and receive feedback, and focusing on authentic activities. Although socio-cultural learning theory sometimes appears to point to similar characteristics emphasized by the principal PD literature—as discussed in the previous sub-section—I separate and elaborate on these literatures for two reasons. First, findings from socio-cultural learning theory have a more solid theoretical and empirical basis than findings from principal PD literature. Second, socio-cultural learning theory often adds nuance not emphasized by the principal PD literature. For example, the principal PD literature suggests that principals should have time for peer discussions, but the socio-cultural learning theory suggests that the nature of these conversations matters a great deal. I elaborate on these distinctions within the discussion of each type of support.

Opportunities for Rich Dialogue

As previously mentioned, the IFL intended to provide time for peer dialogue. The fellows also intended to create conditions that enabled and encouraged principals to engage in "rich dialogue". The fellows considered conversations to be "rich" when principals used constructive debate to critique their own ideas and the ideas of their peers. In their words, the fellows wanted principals to "push each other's thinking". The fellows intended to provide principals with tools and conditions that enabled this particular type of dialogue. For example, one fellow told me during an informal conversation that she intended to have the ILP participants establish norms for professional conversations that would encourage trusting and honest dialogue. She also reported that she planned to encourage them to use features of Accountable Talk, such as holding themselves accountable to evidence from articles and artifacts of practice when making claims during conversations.

Cognitive Structuring

The IFL planned to provide tools and other cognitive structures to assist ILP participants in conceptually naming and organizing concepts. For example, one fellow told me in an informal conversation that she planned to review the IFL's Principles of Learning (POLs)—a list of characteristics of rigorous standards-based instruction— because POLs gave a name to important ideas. In her words, "[The POLs] give [principals] a name, an [conceptual] anchor, to focus their attention [when they observe instruction]". Socio-cultural learning theory suggests that this type of cognitive structuring could assist principals in making sense of foundational ideas because cognitive structuring is a tool for building understanding and making linkages between

theory and practice. The IFL deliberately intended to provide this support, as described

in the funding proposal for the ILP—"Each unit will include tools and protocols that both

support the participants' learning and offer scaffolds for implementation at their schools"

(Ikemoto, 2005, p. 4)—and by a fellow during a formal interview,

> We intentionally construct opportunities or tasks or experiences that will allow
>
> them to see how what they're learning applies to their work and come to those
>
> conclusions for themselves. It's not just a hope [that they see applications] … we
>
> scaffold to get them to that place.

Modeling

The IFL intended to model at least some of the foundational ideas in the process

of leading the ILP sessions by demonstrating how ideas could be applied in practice.

Both fellows mentioned on at least two different occasions that they intended to model

the idea of PBPD for principals. As one said during a formal interview,

> [The ILP participants] are going to have a PD module that allows them to actually
>
> experience as learners, engage as learners in practice-based PD. And then we [the
>
> IFL fellows] are going to ask them to then go back to their respective schools and
>
> begin implementing the kinds of PD that we modeled for them.

In reviewing my data, I found that all of the fellow's examples of how they

intended to support sensemaking via modeling were related to the particular idea of

PBPD. Therefore, I am not sure whether they intended to use modeling to support

sensemaking of other ideas, such as ideas related to subject matter knowledge.

Opportunities to Practice and Receive Feedback

The IFL intended to provide opportunities for principals to practice applying

foundational ideas and to receive feedback on their application. Each module was designed to include a homework assignment that the fellows asked principals to complete before the next ILP session. According to both fellows, these assignments were intended to provide principals with opportunities to practice applying foundational ideas as a means of supporting their understanding of those ideas. In the words of one, "We will provide them with assignments to get them to that place [of conceptual understanding] because the assignments will give them an opportunity to practice it." According to announcements that fellows made during the ILP sessions, they also intended for principals to bring their completed assignments to the next ILP session so that they could debrief their experiences and provide feedback to one another. This intention was also made explicit in the funding proposal which said, "the IFL will ask participants to carry out leadership 'assignments' in their schools and to bring back artifacts of practice resulting from their in-school activities for discussion" (Ikemoto, 2005, p. 4).

Focusing on Authentic Activities

Some evidence suggested that the IFL intended for practice activities to be focused on "authentic activities", meaning activities that had a real-life purpose and carried consequences in terms of influencing the status quo. For example, a classroom observation would not be considered to be an authentic activity if its only purpose was to fulfill a homework assignment. The same observation would be authentic if it was an observation that the principal carried out as part of his or her "real-life" duties, such as an observation conducted for a formal teacher evaluation. The IFL aimed to focus the entire ILP on an authentic activity by linking the ILP focus and in-session activities to the Open Court literacy curriculum—as discussed in the previous sub-section. However, the IFL

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homework assignments also encouraged principals to practice application of particular

ideas in the context of authentic activities. For example, one fellow said while assigning

homework to ILP participants, "We're asking you to look at a blending lesson because

we think it's something that you're likely to be doing anyway, right? This [assignment]

is just to focus that observation a bit more". This comment to the ILP participants

suggested that she was trying to link the homework to a "real-life" purposeful activity.

However, the importance of focusing on authentic activities was not emphasized in

planning documents, the funding proposal, or fellows during formal interviews or

informal conversations. Because I have only one type of data in support of IFL

intentionality regarding authentic activities, I hypothesized that IFL intentions for this

type of support for sensemaking may not have been as strong as they were for other types

of supports.

Summary

In this chapter, I argued that the IFL deliberately designed its ILP in BCPS to

support principals' sensemaking of foundational ideas related to literacy, high-quality

literacy instruction, and conditions that support high-quality literacy instruction. The IFL

attempted to align the program structure with recommendations from the principal PD

literature—and in implementing these recommendations, the IFL also provided a

structure in which it could provide supports for sensemaking. It designed modules for

each idea that incorporated strategies of assistance that socio-cultural learning theory

suggests are likely to support sensemaking. I discuss how principals responded to these

ideas in chapter six and then I return to the question of whether and how the IFL's

supports for sensemaking influenced how principals responded in chapter seven. In

chapter seven, I also address whether and how intended supports were actually

implemented by the IFL. Chapter eight explains how factors related to district context,

local school context, and principal background interacted with supports for sensemaking

to further explain principals' responses. This final findings chapter highlights the

problem of an intended program meeting the realities of an urban, under-performing

school district.

Chapter 6: Principals' Responses to Instructional Leadership Program Ideas

How did principals in Baltimore City Public Schools (BCPS) understand and use instructional leadership ideas supported by the Institute for Learning (IFL)? In this chapter, I first explain how I measured outcomes of principals' sensemaking about instructional leadership, which I refer to as "principals' responses". Then I summarize principals' responses to the foundational ideas addressed by the Instructional Leadership Program (ILP) and I describe several patterns that I observed in these responses. Some of my findings reinforce previous research findings that individuals tend to vary in how they respond to particular ideas and that the meanings they create are often different from policy makers intentions (e.g., Coburn, 2001; Spillane, 2005). My findings also reinforce previous research that studied outcomes of instructional leadership improvement efforts in that I found responses to be generally weaker and more varied than policy makers intended.

However, I also found exceptions to this general pattern. By conducting an analysis of how each individual principal responded to each of the foundational ideas addressed by the ILP, I was able to document that individuals' responses to three of the ILP ideas—Accountable Talk, Distributed Leadership, and Cognitive Apprenticeship— were consistent across principals that attended the sessions in which these ideas were addressed. Previous research has largely attributed sensemaking outcomes to individual characteristics (such as their prior knowledge and beliefs). I found that sensemaking also depends on the idea itself and the supports that are provided to assist individuals in making sense of that idea. Because these findings focus on supports for sensemaking, I

discuss them in more depth in chapters seven and eight, which focus on factors that explain the sensemaking outcomes observed in my study. In this chapter, I focus on describing the ideas and how principals responded.

<p style="text-align:center">Overview of Principals' Responses</p>

As I described in my methods chapter, I drew on my conceptual framework to code how each of the 17 principals responded to each of the eight foundational ideas actually addressed by the ILP, including Accountable Talk (AT), Practice-based Professional Development (PBPD), Effort-based Intelligence, Fluency, Making Connections to Standards, Theme, Distributed Leadership (DL), and Cognitive Apprenticeship (CA). Given the IFL's situated view of instructional leadership, I anticipated that the IFL would desire some variation in responses. At the same time, the IFL would not desire variation that failed to reflect the conceptual underpinnings of the idea. Therefore, I differentiated and coded principals' responses according to the extent to which these responses reflected conceptual underpinnings of the ideas. In assigning these codes, I considered how principals attended to, understood, and decided to use each of these ideas. I began my analysis by attempting to code each principal's response to each idea according to Grossman's (1999) five degrees of appropriation: (1) lack of appropriation; (2) appropriating a label; (3) appropriating surface structures; (4) appropriating conceptual underpinnings; and (5) achieving mastery. However, I quickly found that these five categories were too fine grained for the data that I was able to collect. For example, I found it difficult to conceptually differentiate examples of "appropriating a label" from examples of "appropriating a surface feature". Therefore, I simplified Grossman's categories into three main categories of responses that represented

conceptually discrete categories represented in my data. These three categories included:

1) lack of appropriation; 2) appropriation of simplified understandings; and 3) appropriation of conceptual underpinnings.

The first category—lack of appropriation—reflected responses in which principals did not recall the idea despite attending the session that addressed the idea as well as responses in which the principals deliberately decided not to attend to or use the idea. I considered these two responses to be similar because—despite probing—I was not always able to distinguish between the two cases. For example, I found it difficult to distinguish instances in which a principal did not use an idea because he or she forgot the idea from instances when the principal forgot about the idea because he or she had decided the idea was not relevant or useful.

The second category—appropriation of simplified understandings—included responses in which principals reported attending to and using the idea, but their descriptions of their usage and other data suggested that principals had simplified the idea into an application that was inconsistent with IFL intentions. This category subsumed two of Grossman's categories: "appropriating a label" which she defines as adopting language relevant to the new information but in ways that the new information does not shape decisions or practices and "appropriating surface structures" which she defines as learning some or most of the features without understanding how the features contribute to the conceptual whole. Again, I collapsed Grossman's categories because my examples seemed to simultaneously be instances of both appropriating a label and appropriating a surface structure.

My third category—appropriation of conceptual underpinnings—included

responses and actions that reflected principals understanding and using ideas in ways that were consistent with the intentions of the IFL. I did not consider appropriation to be analogous to actual use because principals could appropriate an idea with conceptual underpinnings by deciding not to use the idea. This category was consistent with Grossman's category of "appropriate of conceptual underpinnings" and also included her category "achieving mastery" which she defines as transforming practice in ways consistent with acting on new information effectively. Taken together, I argue that these responses exist on a continuum of weak to strong responses. I categorize lack of appropriation and appropriation of simplified understandings as weak responses and I categorize appropriation of conceptual underpinnings as a strong response. I did not however consider weak responses to be a negative or undesirable outcome. To the contrary, as I argue in the final chapter, even weak responses could be considered desirable responses given that the BCPS's context posed several challenges to implementation.

As I described in my methods chapter, I conducted follow-up interviews with IFL fellows to distinguish when particular responses should be coded as appropriation of simplified understanding versus appropriation of conceptual underpinnings. Despite these efforts, I did not have sufficient data to code principals' responses in some cases. This scenario sometimes occurred because interviews were cut short by unexpected situations that principals had to address. In other cases, I had some data regarding a principal's response, but it was insufficient for classifying the degree of appropriation. In both of these cases, I coded these responses as having insufficient data. When principals had been absent from a particular session—and therefore had not been exposed to the

idea(s) addressed that day—I coded them as absent. Even though principals might have

been appropriating some of the ILP ideas without being exposed to them through the IFL,

I did not attempt to track these instances because I had limited access to principals and

wanted to focus my interviews on understanding how they responded to ideas for which

the IFL had an opportunity to support their sensemaking.[15]

Table 3 depicts each principal's coded response to each ILP idea. I ordered the

ILP ideas from the idea that received the strongest responses to ideas that received the

weakest responses. This ordering illustrates that principals consistently responded

strongly (as indicated by the darkly shaded "C" for appropriation with conceptual

underpinnings) to the first idea—AT. This ordering also illustrates that principals

consistently responded weakly to the last two ideas—DL, which principals consistently

appropriated with simplified understandings (as indicated by "S" for simplified

understandings), and CA, which principals consistently did not appropriate at all (as

indicated by "L" for lack of appropriation). All three of these patterns represent findings

that deviate from previous research that would have predicted that particular principals

could have been categorized as responding strongly or weakly to ILP ideas. By

conducting a detailed analysis of each principal's responses to each idea, I was able to

detect that any given principal was likely to respond strongly to some ideas and weakly to

other ideas—that is, particular principals did not emerge as either strong or weak

responders.

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[15] In a few cases where I did have opportunities to probe on how principals responded to ideas addressed
during sessions that they failed to attend, I found that principals tended to report not attending to or using
the idea because they had not been exposed to it.

Table 3.

Principals' Responses to ILP Ideas

	Ideas							
	Accountable Talk	Practice-based PD	Effort-based intelligence	Fluency	Connecting to standards	Theme	Distributed leadership	Cognitive apprenticeship
Principal A	C	S	C	S	L	C	S	L
Principal B	C	S	S	C	S	—	S	L
Principal C	C	C	—	S	S	C	S	L
Principal D	C	C	S	A	S	L	L	L
Principal E	C	C	C	C	A	L	S	L
Principal F	A	S	C	C	L	L	A	L
Principal G	C	C	—	A	C	A	S	L
Principal H	—	—	L	A	C	—	S	A
Principal I	C	L	—	A	S	A	L	L
Principal J	C	C	A	C	C	—	S	A
Principal K	C	C	—	A	S	A	S	L
Principal L	A	L	L	—	S	C	A	A
Principal M	C	A	S	L	C	A	L	A
Principal N	A	L	C	—	S	A	A	C
Principal O	—	A	A	C	A	L	S	A
Principal P	C	A	A	L	A	—	L	A
Principal Q	C	A	A	—	A	—	S	A

Note: C = appropriation with conceptual underpinnings; S = appropriation with simplified understandings; L = lack of appropriation; A = absent from module; — indicates missing data; ideas are ordered from strongest responses to weakest responses and principals are ordered from highest to lowest attendance.

My findings do however reinforce previous research that would have predicted that principals would exhibit various levels of appropriation—that is, for most ideas, some principals appropriated these ideas with conceptual underpinnings, some appropriated with simplified understandings, and some failed to appropriate the ideas at all. This pattern of a range of responses was true for five ideas—including PBPD, Effort-based Intelligence, Fluency, Connecting to Standards, and Theme. Table 4

illustrates this variance by summarizing the number of principals exhibiting each type of response. I shaded the cells representing the three exceptions that I described above in which a vast majority of principals that were exposed to a module responded in a clearly consistent fashion. These exceptions occurred in response to the idea of AT—which the vast majority of principals appropriated with conceptual underpinnings, DL—which the majority of principals appropriated with simplified understandings, and CA—which the majority of principals did not appropriate. Although in some cases, a larger number of principals responded in a particular way (e.g., seven principals appropriated PBPD with conceptual underpinnings), these patterns were not as strong as the shaded cells in Table 4 in which over two-thirds of principals responded with a particular type of response.

Table 4.

Number of Principals Exhibiting Each Type of Response to ILP Ideas

Type of Response	Ideas							
	Accountable Talk	Practice-based PD	Effort-based intelligence	Fluency	Connecting to standards	Theme	Distributed leadership	Cognitive apprenticeship
Absent	3	4	4	5	4	5	3	7
Insufficient data to code response	2	1	4	3	0	5	0	0
Lack of appropriation	0	3	2	2	2	4	4	9
Appropriation with simplified understandings	0	3	3	2	7	0	10	0
Appropriation with conceptual underpinnings	12	6	4	5	4	3	0	1

Although I found several patterns associated with particular ideas, I did *not* find

any patterns associated with particular principals. That is, I did not find any examples of principals who consistently appropriated all ideas with conceptual underpinnings nor did I find examples of principals who consistently failed to appropriate all ideas. Instead, as shown in Table 4, individual principals tended to exhibit different types of responses to different ideas. That is, each principal tended to appropriate at least two or three ideas with conceptual underpinnings, appropriate two or three ideas with simplified understandings, and failed to appropriate two or three ideas. While some principals did respond strongly to more ideas than other principals, the variation was limited. Given that principals did not appear to group themselves in how they responded—e.g., it was not the case that one set of principals responded in one way while another set of principals responded in another way—my findings do not support claims that particular kinds of principals (e.g., principals serving under a particular supervisor) were more likely to respond in a particular way. These patterns may not have emerged because the seventeen principals were actually quite similar to one another. As I described in my methods chapter, the district leaders invited this particular set of principals to participate in the ILP because the district leaders considered these principals to be strong instructional leaders. If the principals had more varied backgrounds (e.g., district leaders extended invitations to principals that were considered both weak and strong instructional leaders), I may have been able to detect patterns in how these different types of principals responded to the ILP ideas. I did however find that prior experiences and local situations helped to explain nuances in principals' responses, which I describe in more detail in the following chapter.

My analysis yielded the following findings with regards to how principals

responded to ILP ideas, which I discuss in the following sub-sections:

- Principals tended to appropriate the idea of AT with conceptual underpinnings;

- Principals tended to appropriate the idea of DL with simplified understandings;

- Principals tended not to appropriate the idea of CA;

- Principals tended to appropriate ideas of PBPD, Effort-based Intelligence, Fluency, Connecting to Standards, and Theme in ways that ranged from lack of appropriation to appropriation with conceptual underpinnings.

In the following sub-sections, I elaborate on each of these findings by describing particular ideas—including how the IFL intended principals to appropriate them—and by presenting evidence regarding how principals responded to the ideas. In the next chapter, I argue that these patterns are best explained by the extent of supports for sensemaking provided by the IFL. That is, principals consistently responded strongly to AT because the IFL provided the most extensive set of supports for this idea. Meanwhile, principals consistently responded weakly to ideas of DL and CA because the IFL provided minimal levels of support for these ideas. When the IFL provided a moderate level of supports, variation in principals' responses was explained by factors highlighted in the sensemaking literature, such as principals' prior knowledge and experience and the local context. These explanations of principals' responses are elaborated in chapter seven.

Principals Tended to Appropriate Accountable Talk with Conceptual Underpinnings

Although principals typically differed from each other in how they responded to most ideas, they consistently responded strongly to the idea of AT. As illustrated by

Table 4, 12 principals responded to this idea by appropriating it with conceptual underpinnings. I had insufficient data to decide whether the reported appropriation of the other two principals that attended the session reflected simplified understandings or conceptual underpinnings. However, even if they had responded differently from their peers, the pattern of responses to AT would still show a distinctly consistent and positive response to this particular idea.

The idea of AT emphasized that students learn more and comprehend better when they engage in particular forms of conversation. The IFL fellows used the following quote from the *Primary Literacy Standards* to summarize this idea in their presentation slides,

> Accountable Talk[SM] is not empty chatter; it seriously responds to and further develop what others in the group say. Students introduce and ask for knowledge that is accurate and relevant to the text under discussion. They use evidence from the text in ways that are appropriate and follow established norms of good reasoning. (Primary Literacy Standards, p. 25)

Thirteen of fourteen principals who attended the session that addressed AT said that it was one of the most valuable ideas addressed by the ILP. These 13 principals consistently reported remembering the AT module and reported learning from it. The following quote provides a typical example of how principals described the ways in which the AT module helped them to make sense of AT,

> What IFL helped me to focus on was that AT isn't just about children talking to children and the teacher talking less. What I learned is that it is about getting children to think more rigorously and talk more rigorously.

Another principal used the following words to explain how the AT module helped her to deepen her understanding of AT,

She [the IFL fellow] showed us a tape and we were supposed to write down what we heard going on that could move that instruction. It was through that tape and through listening to what other people were seeing and hearing in conversations helped me to determine what I, too, needed to be looking at and hearing. Before, I heard children talking. You know, I could hear it. I even knew it was rich talk … but I didn't know what to say to a teacher to get her to understand how to get to that point.

This principal had an appreciation of the importance of AT before the session, but she felt the activities the IFL used to engage the participants in this topic—that is, talking with other participants about the specific teacher moves that supported AT—helped her to develop a deeper understanding of AT and how to articulate it to teachers.[16]

Several principals reported that the session had "shifted", "deepened", or "clarified" their understanding of AT. As one principal put it,

I truly got a clear understanding of what AT was, opposed to different ideas that were out there. I got an understanding that AT was being accountable to the information, accountable to the group, and it wasn't a series of sentence starters, or how many people talk.

Principals' descriptions of their shifts in understanding were consistent with theory's differentiation between understandings focused on surface structures (i.e., the sentence starters) and understandings of conceptual underpinnings (i.e., how sentence

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[16] To protect the confidentiality of principals, pronouns used to describe particular principals may or may not reflect their actual gender.

starters enable comprehension). However, my findings regarding how principals

responded to AT differ from previous empirical research that suggests principals

generally would have tended to focus on sentence starters rather than the function of the

sentence starters (Spillane, 2000a).

My observations of two principals confirmed their self-reports that the ILP had

influenced their understanding and uses of AT. During my all-day observations of these

principals, I accompanied them on their own observations of classrooms and once we

were in the hallway, I asked them what they had noticed. Before the AT session, these

two principals noticed that in their words "there was too much teacher talk" and I

witnessed them telling teachers they wanted to see students talking more and the teacher

conducting more facilitation. After the module on AT, they reported realizing that the

nature of the student talk mattered—not just that there was more of it. After the module,

I observed them paying more attention to what students were saying to each other and

whether the nature of the students' conversations was prompting their learning. More

specifically, I witnessed them moving closer to students and taking more notes on what

the students were saying then they had prior to the AT module. I also saw principals alter

their feedback to teachers accordingly. During follow-up conversations with IFL fellows,

they confirmed that these shifts in principals' understandings and practices reflected the

conceptual underpinnings intended by the IFL.

Six of the fourteen principals who went to the AT module also decided to train

their teachers on AT and began to more explicitly monitor and reinforce its use in the

classroom (as opposed to the more subtle shift in feedback that I described in the last

paragraph). Additional data sources suggested that these principals carried out these

activities in ways that reflected conceptual underpinnings of AT. For example, I

observed one principal dedicate an entire PD session to AT and then lead teachers in

conducting classroom observations during which they looked for evidence of AT and

engaged in conversations about what counted as AT. During these conversations, the

principal reinforced with her staff that AT involved more than just giving students time to

talk—it involved providing structures for the conversation that prompted students to have

"rich" conversations that furthered their understanding of the material.

Principals Tended to Appropriate the Idea of Distributed Leadership with Simplified

Understandings

The idea of DL received consistently weak responses from principals in that 10 of

the 14 principals that attended this session appropriated the idea with simplified

understandings. This finding is consistent with prior studies of sensemaking that suggest

policy implementers are likely to simplify and translate reform ideas into familiar notions

(Coburn, 2001; Spillane, 1999; Spillane & Jennings, 1996). However, my data suggests

that this sensemaking outcome may be more typical for some ideas than others because

this pattern was more prevalent in the responses to DL compared to responses to other

ideas (such as AT). This pattern was particularly noteworthy in that DL was addressed in

the same session as AT, which was the second to last session of the ILP. Given that the

same principals were exposed to these two different ideas on the same day and yet had

very different types of responses to the two ideas suggests that these differences cannot

be attributed to characteristics of the principals or the timeframe in which they were

exposed to the ideas.

The IFL fellows summarized the idea of DL by presenting a slide with the

following quote from a research article on DL,

> School leadership is best understood as a distributed practice, stretched over the
> school's social and situational contexts … By taking leadership practice in a
> school as the unit of analysis, rather than an individual leader, our distributed
> theory of leadership focuses on how leadership practice is distributed among both
> positional and informal leaders … To understand the knowledge needed for
> leadership practice … one needs to move beyond an analysis of individual
> knowledge and consider what these leaders know and do together. (Spillane,
> Halverson, and Diamond, 1999)

The IFL suggested that school leadership is stronger when multiple individuals
within the school participate in carrying out leadership tasks, particularly tasks related to
instructional leadership. As one IFL fellow remarked during her presentation,

> Distributed leadership is useful because more people are involved in trying to
> solve instructional problems. There are also more people to share the work, so
> you can provide teachers with differentiated, targeted PD that focuses on their
> needs.

Throughout the module, the IFL encouraged principals to foster DL in their
schools and areas. More specifically, the fellows intended for principals to critically
examine whether DL was being practiced in their schools and areas and to consider
revising structural procedures, actions, tools and artifacts that might perpetuate
individualistic views of leadership.

Despite the IFL's focus on the idea of DL, 4 of the 14 principals that attended this
session did not remember that this idea had been addressed in the ILP when I interviewed

them. This finding was particularly striking since it was a recent session and the same

principals consistently recalled the AT portion of the session. Although the other 10

principals did remember the module, they reported that they found the module to be of

little use to them because they already viewed themselves as practicing DL. Results of

my further probing suggested that they were not responding to the module as IFL had

intended them to because they considered themselves to be practicing DL because they

had latched onto ideas that were familiar and declared these as evidence of practicing DL.

For example, several principals pointed out that they had assistant principals and school-

based coaches that formally share their leadership responsibilities as evidence that they

were sharing leadership. A couple went so far as to say that the module was a waste of

time because BCPS is—in their words—"already doing it".

Although it would have been possible to code a decision not attend to or use an

idea as appropriation with conceptual underpinnings, I did not do so in these cases

because conversations with IFL fellows suggested that principals' decisions not to attend

to or use DL were not reflective of the conceptual underpinnings of the idea. The IFL

fellows indicated to me in interviews that they were aware that principals formally

delegated some of their responsibilities to assistant principals and coaches but that they

did not consider this arrangement alone to be evidence of DL. Their intent in addressing

DL in the ILP was to get principals to think more critically about this idea. They wanted

the principals to focus attention on the structures and routines that existed in their

buildings and to challenge themselves to think of ways to take the idea of DL, in one

fellow's words, "a step further".   When I asked this fellow to explain what she meant by

taking it a step further, she replied,

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They might have a coach and an assistant principal. But delegating leadership is not the same thing as sharing leadership … with the homework—they were supposed to think about how they might change something [in their practice]. Not so that the coach is just trying to put together a PD that the principal designed—but so that the coach is taking intellectual responsibility for that task.

Through this statement and others, this fellow expressed her intention that principals would purposefully think about how to enrich DL in their buildings, regardless of whether they were already had particular structures in place. In other words, the IFL acknowledged that principals might already be distributing leadership within their schools, but that they expected principals to deepen this practice.

I labeled the responses from 10 principals that reported they had decided to use DL as having responded by appropriating simplified understandings because they appeared to be using the terminology of DL to describe their prior practices, which were not consistent with depth of DL the IFL intended. For example, 8 of these principals told me in interviews that they liked the DL module because it acknowledged and reinforced the idea that they were not solely responsible for leadership in their buildings—which was a welcomed idea at a time when the district was increasing their responsibilities and they were hearing reports of several other principals being fired for not adequately increasing school performance. In the words of one, "It's [DL is] something we are already doing, but it's [DL is] good because it helps us feel less guilty about delegating to others [e.g., assistant principals and coaches]".

Principals Tended Not to Appropriate the Idea of Cognitive Apprenticeship

The idea of CA received consistently weak responses from principals. Nine of the

ten principals that attended the session that addressed this idea did not appropriate it. First I describe how the IFL intended for principals to respond and then I explain why I coded most principals' responses as reflecting a lack of appropriation.

CA is the idea that teachers can use apprenticeship strategies to develop their students' cognitive skills. These CA strategies (as directly quoted from an IFL slide) include:

Coaching: teacher observes and facilitates while students perform a task

Scaffolding: teacher provides supports to help the student perform a task

Articulation: teacher encourages students to verbalize their knowledge and thinking

Intrinsic motivation: students set personal goals to seek skills and solutions

Increasing complexity: meaningful tasks gradually increasing in difficulty

The IFL fellows implicitly suggested in their presentation of the CA module that principals as instructional leaders should understand that these strategies represent aspects of high quality teaching and that they should support teachers in implementing these strategies via PD and monitoring of instruction. More specifically, they intended for principals to use ideas related to CA as a conceptual lens for examining instruction within their building and to respond to areas where instruction could be improved by incorporating CA strategies.

Only one principal reported attending to, understanding, and deciding to use the CA idea. In reviewing the materials from the module, she stated,

Oh yeah. We do this [focus on CA strategies]. Whenever I'm observing a reading lesson, I'm looking to see what supports the teacher gives to the students

… they should be going over prior knowledge and they should be asking students

questions as they do their guided reading.

I examined notes she shared from her formal teacher observations and found that

these notes provided supporting evidence that she was appropriating CA with conceptual

underpinnings. For example, on one form, she had written to the teacher,

Two students were lost during the lesson. Try having the students do a couple of

[practice problems] on the board before you move on. You could also have other

students explain their peers' work. That way they [stronger students] stay

engaged while you reinforce for the others [weaker students].

I coded this principal as having appropriated conceptual underpinnings because

her feedback to teachers provided evidence that she was monitoring and reinforcing use

of CA strategies with her teachers. In the example above, she specifically asked the

teacher to observe and facilitate while students perform a task (i.e., coaching) and to

encourage students to verbalize their knowledge and thinking (i.e., articulation).

Meanwhile, seven of ten principals that attended the ILP session that dealt with

CA reported that they did not recall engaging with this idea until I prompted them with

materials from the module. Even then, the majority of principals told me in interviews

that they could not remember what CA meant or why it might have been important to

study as part of the ILP. Although two principals appeared to recall the session easily

during my interviews with them, they reported that they had chosen not to attend to or

use the ideas, as evidenced by the following exchange that I had with one of these

principals during an interview,

Interviewer: Do you remember the module on cognitive apprenticeship?

Principal: I'm drawing a blank—which one was that?

Interviewer: That's alright. Why don't you skim that section of the binder to see if the article and task ring any bells.

Principal: [As she looked at the binder of materials] Are you sure I was there on this day? Honestly, I'm not remembering any of this … oh wait, now I remember. This is the one where we watched the video of kids talking about the fathers.

Interviewer: Yes, that's the one. What was your sense of what that module was all about?

Principal: I remember that we looked at the video and talked about the things that the teacher was doing to help the kids. That teacher was obviously really good at what she was doing.

Interviewer: Do you think the ideas that you discussed during this module had any implications for what you need to attend to or do in your school?

Principal: No not really. I mean nothing comes to mind.

Since nine principals similarly failed to remember the idea or attend to it, did not seem to understand the idea, and decided not to use it—I coded their responses as "lack of appropriation".

Principals' Responses to Most ILP Ideas Ranged from Lack of Appropriation to Appropriation with Conceptual Underpinnings

While principals tended to be consistent with each other in how they responded to a few ideas, they varied from each other in how they responded to most of the ideas. For example, the column of Table 4 that reports principals' responses to the idea of making

connections to standards indicates that four principals responded with appropriation of conceptual underpinnings, seven principals responded with appropriations of simplified understandings, and two principals did not appropriate this idea. The table also indicates that four of the principals were absent from the session that addressed this idea. This range of responses was true for most of the ILP ideas, including making connections to standards, PBPD, effort-based intelligence, fluency, and theme.

Table 5 depicts how three principals responded to three of the reform ideas. I chose to highlight these responses because they are illustrative examples of how principals' responses varied across principals and ideas. That is, a particular principal typically responded positively to some ideas and failed to remember or appropriate other ideas. Similarly, these examples illustrate how some principals responded strongly to a particular idea while other principals responded weakly. In the following sub-sections, I compare and contrast these examples by discussing the three different principals' responses to each of the three ideas: making connections to standards, the role of fluency in comprehension, and PBPD. Within each of these sub-sections, I order my discussion of principals' responses from strong responses to weak responses.

Table 5.

Illustrative Examples of Variation in Principal Responses

	Reform Ideas		
	Making connections to standards	**Role of fluency in comprehension**	**Practice-based professional development**
Principal D	Appropriation of simplified understandings	Absent	Appropriation of conceptual underpinnings
Principal F	Absent	Appropriation of conceptual underpinnings	Appropriation of simplified understandings
Principal M	Appropriation of conceptual underpinnings	Lack of appropriation	Absent

Making Connections to Standards

One of the main ideas addressed by the ILP was that high quality instruction

includes explicit and easy to understand links to state standards. During the module that

addressed this idea, one IFL fellow acknowledged in her presentation that making

connections to standards is a well known idea among educators, but she also pointed out

that districts often adopt national curriculum programs that do not make explicit

connections to state standards. These curricula, including Open Court, are written

generically so that they can be used by educators across many states. Therefore, the IFL

intended for principals to take responsibility for ensuring that their teachers carefully

analyze whether and how the chosen curriculum addresses particular state standards and

for ensuring that teachers supplement and extend lessons to address standards that are not

directly and explicitly covered by the curriculum. The IFL intended for principals to

determine how to take on this responsibility depending on their local circumstances.

Although they did not specify specific actions that principals should take, they did expect principals to be able to demonstrate evidence that they were taking steps to ensure that all standards were being adequately covered.

My interviews and observations of principals D, F, and M suggested that individual principals responded differently to the idea of making connections to standards. As depicted in Table 5, I coded Principal D's response as appropriation of simplified understandings and Principal M's response as appropriation of conceptual underpinnings. I did not code Principal F's response because she was absent during the session when the making connections to standards idea was addressed.

Principal M responded to this module by making it the cornerstone of ongoing PD for her staff—in ways that reflected appropriation of conceptual underpinnings. This principal reported that she was leading a school that had been making significant improvements in student achievement on the state assessments by using the Balanced Literacy curriculum model. She reported that her staff was feeling frustrated because the district had required the school to adopt the Open Court curriculum despite reported successes with the Balanced Literacy curriculum. The principal reported that the IFL module on making connections to standards prompted her to devise a strategy for making a case to the district regarding why her school should be allowed to keep at least some parts of the Balanced Literacy curriculum. She led grade level teams in analyzing connections between state standards and the two curriculum programs. The principal reported that as a result of this process, she and her staff found evidence supporting their general intuition that the Balanced Literacy program addressed some standards more thoroughly than the Open Court curriculum, but they also found that the Open Court

curriculum was more thorough for other standards. Over the course of the school year, each team created a framework that outlined and justified the curricular materials they intended to use for each standard. The principal compiled the analyses and recommendations into a binder—that I reviewed during a school visit—that documented how the school intended to draw on both curricula to address the state standards. According to the principal, this process also enabled the staff to focus more thoughtfully than they previously had regarding the types of instruction their students needed to be able to master particular standards. Although the IFL had not specified this exact application of the ideas covered in the ILP module on making connections to standards, IFL staff confirmed in follow-up conversations that this principals' application reflected their underlying message that schools needed to think critically about the curricula they are assigning to teachers and they should take responsibility for ensuring that the standards are adequately addressed.

I coded Principal D's response as reflecting simplified understandings because she responded to my interview questions about this module by saying that the module did not have any meaningful implications for her because she was already holding teachers accountable for making connections. Although it is possible that this principal could have appropriated with conceptual underpinnings by deciding not to use the idea to change her practice, her responses to further probing suggested that her understandings of what it means to make connections to standards did not reflect the conceptual underpinnings of the idea. When I asked her how she was holding teachers accountable, she described a common practice in which she required teachers to write the state standards addressed by their lessons on the board each day. She said this practice was

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important because students and visiting observers needed to know what the teacher intended to accomplish with the lesson. Her appropriation, however, did not reflect the IFL's intention that she ask the critical question, "Does the lesson sufficiently prepare students to meet the relevant standards?" Instead, she had translated the analytical task of linking curriculum to standards into a simpler task of identifying relevant standards.

Role of Fluency in Comprehension

Another IFL module addressed the idea that when students learn to be fluent— that is, when they learn to read accurately, effortlessly, and with expression—they are better able to comprehend the text that they are reading. The IFL fellows presented evidence suggesting that teachers generally do not attend to fluency, despite the fact that research has documented the important role fluency plays in enabling students to read. The IFL fellows suggested during their presentation that principals as instructional leaders should: ensure that their teachers are knowledgeable about fluency and its relationship to comprehension, provide materials (i.e., assessments and leveled readers) that teachers can use to focus on fluency; and monitor the instructional program to ensure that fluency is sufficiently addressed. The IFL fellows did not specify exactly how they intended for principals to carry out these responsibilities because they encouraged principals to determine the most appropriate way to incorporate them into their practice depending on the principals' local situation.

As illustrated in Table 5, principals F and M responded differently from each other to this reform idea. I coded principal F as having appropriated the idea with conceptual underpinnings. This principal reported replicating the IFL module on fluency with her staff during a PD day. When I asked why she had chosen to spend valuable PD

time on this topic, she replied,

> I didn't realize [fluency was not being addressed] until [the ILP] went over it. I immediately noticed [fluency] was something that was missing from our program. I wanted teachers to realize that it's about more than how fast a kid reads … I wanted [teachers] to see how it could help [student learn to comprehend].

This quote provides evidence that Principal F had decided to take on the responsibility of ensuring that her teachers were knowledgeable about fluency. This principal emailed me an electronic version of the fluency slides she used with her staff during the PD day. From these slides, I was able to confirm that she had in fact decided to address this idea in PD with teachers and that she had provided materials to teachers that the teachers could use to support fluency in their classrooms. Furthermore, I observed this principal looking for evidence that fluency was being addressed by teachers when I accompanied her on classroom observations subsequent to the fluency PD she had provided for teachers. For example, I witnessed her advising a teacher that she had missed an opportunity to reinforce fluency skills. These various data sources indicated that principal F had appropriated with conceptual underpinnings because she had decided to build teachers' knowledge regarding fluency and she was attending to fluency's usage in her schools' instructional program.

Principal M did not appropriate the fluency idea. When I interviewed her, she did not recall the fluency module until I prompted her memory with artifacts from the IFL module. When I asked her to speculate on the reasons why she didn't remember the session, she told me that her teachers already had a good understanding of fluency and she reminded me that they were already focused on their alignment activity. In her

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words, "I just didn't think it was important". I coded her response as a "lack of appropriation" because she had not attended to the idea or decided to use it. Although deciding not to use an idea is not necessarily evidence of lack of appropriation, I coded it as such because IFL fellows indicated in follow-up conversations that this response did not match their intentions because they would have expected the principal to at least have remembered the idea and thought it was important to address with her teachers—even if the school was too busy to attend to it right away.

Practice-based Professional Development

The second and third sessions of the ILP addressed a module on PBPD, during which the IFL fellows suggested to principals that they should be providing this type of PD to their staff. I observed the fellows emphasizing that principals as instructional leaders should pursue several strategies to create enabling conditions for PBPD. First, they suggested that principals establish new cultural norms of interaction that support a disposition of inquiry. Second, they suggested that principals provide teachers with "analytic tools that assist them in taking a stance of inquiry", and they pointed to the task sheets used in the ILP as an example of how to do this. Third, they advised principals to use artifacts of practice—including student work, teacher developed tasks, and videos of classrooms—in their PD for teachers.

During end-of-the-year interviews, I asked principals to share materials from the school-based PD that they had designed and conducted during the school year, and I prompted them for evidence that they had attempted to establish norms, provide analytic tools, and use artifacts of practice. My goal in asking these questions was not to measure implementation of these practices, but rather to use them as an entry point into a

conversation about how the principal had decided to design teacher PD and whether they had attended to ideas regarding PBPD in the process. Principal D reported several concrete examples of how she had decided to use all three recommendations in her school-based PD in ways that seemed to reflect intentions of the IFL. I triangulated these reports with observations and artifacts that she shared from her PD. For example, I accompanied Principals D and her 4th grade teachers on a set of structured observations of 4th grade classrooms. During the debriefing conversation that occurred after the observations, I witnessed the principal and coach reviewing the intent of the observations—that is, the purpose was professional learning, not evaluation—and establishing norms for providing feedback. For example, they asked everyone in the group to use a respectful tone and be careful not to imply that they knew more or could teach better than the teacher receiving the feedback.

Principal D also provided an observation form that asked observers to rate whether they saw no, some or a great deal of evidence that the teacher was encouraging students to explaining their thinking. This form served as an analytical tool that focused the observations and subsequent conversation on a particular aspect of instruction and assisted the teachers in having a rigorous conversation about what did or did not count as "students explaining their thinking" and "teacher moves" that encouraged students to do so. The evidence from this observation suggests that Principal D not only decided to provide opportunities for teachers to consider artifacts of practice—but she also decided to attend to the conditions that support PBPD by establishing norms and providing analytical tools for observation. That is, Principal D appropriated the idea of PBPD in ways that echoed the conceptual underpinnings of the idea and reflected IFL intentions.

Principal F, on the other hand, did not seem to be influenced by the IFL's

recommendations regarding PBPD. This principal reported in interviews that she was

using the IFL ideas a great deal during her PD with teachers, so I asked her to share

artifacts from the PD session in which she reviewed fluency with her staff. Despite the

fact that she reviewed this topic with her staff on a day that was designated as a PD day,

the agenda indicated that only 20 minutes was allocated to fluency. During the 20

minutes, she presented Power Point slides that she had copied from the IFL's presentation

and then provided time for teachers to discuss how they intended to address fluency in

their classrooms. Unlike the session conducted by the IFL, Principal F reported that she

did not distribute the fluency articles or provide time for teachers to consider whether and

how fluency was or was not addressed by the Open Court curriculum. She spent the

majority of the 20 minutes summarizing the main points of the articles in a lecture format

that did *not* incorporate building norms, using analytical tools, or examining artifacts of

practice. Even though Principal F said she was using PBPD with her teachers, the

examples that she provided suggested that her application of the ideas did not reflect

appropriation of conceptual underpinnings of PBPD.

These examples of principals' responses to reform ideas illustrate how principals'

responses typically varied across principals and ideas. That is, a particular principal

typically responded positively to some ideas and failed to remember or appropriate other

ideas. For example, Principal M appropriated the idea of making connections to

standards in ways that reflected conceptual underpinnings, but she also failed to

remember fluency ideas. Likewise, there was generally a range of responses to particular

ideas. For example, some principals (such as Principal D) incorporated the underlying

principles of PBPD while others (such as Principal F) responded to it in a way that reinforced the status quo.

I did not find any principal characteristics that helped to explain the overall pattern of responses. As I outlined in my methods chapter, I gathered data about principals' background by asking questions regarding their career path, years of experience, previous PD experiences, and prior knowledge about particular reform ideas. I also asked principals a series of questions about their beliefs regarding the role of the principal, particularly as it relates to instructional improvement. I hypothesized that their sensemaking would be influenced by these views. However, as I elaborate in chapter eight, I found that these principal characteristics were not helpful in explaining the overall pattern of responses. However, as I noted earlier, principal characteristics may not have been an important factor in my case because there was limited variance in types of principals that were invited to participate in the ILP. That is, all of the principals were generally experienced principals who were selected in part because they had prior knowledge about instruction and similar views about the importance of instructional leadership.

Summary

Some of my findings regarding principals' responses to ILP ideas reinforced previous policy implementation research that also found that responses tend to vary. However, I also found important exceptions to this pattern. More specifically, principals' responses to the idea of AT consistently tended to reflect appropriation with conceptual underpinnings, their responses to ideas of DL consistently tended to reflect appropriation with simplified understandings, and their responses to the idea of CA consistently tended

to reflect failure to appropriate these ideas at all.

Interestingly, particular modules or ideas appeared to be the exception—not particular principals. My conceptual framework suggested that I might have expected that particular individuals would have responded strongly to all of the ideas while other individuals would have responded weakly to all of the ideas. This outcome, however, was not the case. As Table 3 illustrated, each principal responded strongly to some ideas and weakly to others. In the following two chapters, I examine factors that help to explain both variation and consistency in responses. In the final chapter, I argue that principals' responses—despite their variability—could be viewed as generally positive given challenging aspects of the BCPS context at the time of this study. That is, the fact that principals generally attended to and decided to use ILP ideas—even if their appropriations did not reflect conceptual underpinnings—could be considered promising given the uncertainty and distractions caused by BCPS's status as a low-performing district. I elaborate on how this context influenced principals' responses in chapter eight.

Chapter 7: Influence of IFL Supports on Principal Responses

In chapter five, I argued that the Institute for Learning (IFL) intended to provide particular forms of assistance that socio-cultural learning theory suggests would have supported principals in making sense of the ideas addressed by the Instructional Leadership Program (ILP) in ways the IFL intended. These forms of assistance included opportunities for rich dialogue, cognitive structuring, modeling, opportunities to practice and receive feedback, and authentic activities. In chapter six, I argued that principals tended to exhibit different kinds of responses to different ideas. To what extent did the IFL actually provide the supports it intended to provide and to what extent did the supports seem to be associated with how principals responded to ILP ideas?

In this chapter, I address these questions by first describing different forms of assistance that the IFL provided and then explaining my analysis of how these supports seemed to have influenced principals' responses. Both sets of findings are based upon an analysis of observation notes that I took during ILP sessions and materials that the IFL distributed during these sessions. I coded these data sources for evidence of the forms of assistance that I outlined in my conceptual framework. Then I analyzed the extent to which patterns in forms of assistance provided were associated with patterns in principals' responses. I triangulated results of this analysis with my observations and principals' self reports of how the IFL assisted their sensemaking. I also examined my data for disconfirming evidence and alternative explanations.

I argue that some IFL modules provided a more extensive range of supports for principals' sensemaking than other modules, and this variation was associated with different patterns in how principals responded to those ideas. Principals' responses were

stronger to ideas for which the IFL provided a larger number of different types of supports. For example, the IFL provided six different forms of assistance to support principals' sensemaking about Accountable Talk (AT)—which received consistently strong responses from principals—but only two forms of assistance to support principals' sensemaking about Cognitive Apprenticeship (CA)—which received consistently weak responses from principals.[17]

The IFL supports, however, were insufficient in explaining all of the observed outcomes. In chapter eight, I draw on other components of my conceptual framework to elaborate and explain other factors that mattered to principals' responses.

Actual Supports for Principals' Sensemaking

I found that the IFL actually provided the following forms of assistance that my conceptual framework suggested would support principals' sensemaking: opportunities for rich dialogue; cognitive structuring in the form of analysis activities, formal research knowledge, and disruption of prior cognitive frames; modeling; and opportunities to practice application of ideas and to receive feedback. Although analysis activities, formal research knowledge and disruption of prior cognitive frames appear as new terminology here, they are actually different versions of what theory refers to as "cognitive structuring". I also found that IFL provided a greater range of supports for sensemaking for some modules than it did for others. In other words, the range of supports for sensemaking varied across ideas. I define "extent of supports for sensemaking" as the number of different forms of assistance provided during a module. Although the quality or intensity of assistance may have mattered as much if not more than the range, I did not

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[17]I discussed detailed descriptions of principals' responses to particular ideas in chapter six.

have a framework for making claims about variance in quality and intensity. For

example, my literature review did not suggest ways in which I could conceptualize and

therefore differentiate high quality modeling from low quality modeling. In my final

chapter, I recommend that future research examine this aspect of assistance.

Table 6 illustrates the extent of supports for sensemaking that the IFL provided

for each module. Even though the IFL included similar agenda items (i.e., reading,

discussion, task, and reflection) for almost all of the modules, some modules included

more forms of assistance than others. I first describe each of the forms of assistance in

order of their prevalence, and then I discuss how they varied across modules.

Table 6.

IFL Modules Varied in Extent of Support They Provided for Sensemaking

Modules		Forms of Assistance					
		Rich dialogue	Analysis activities	Formal research knowledge	Disrupting prior cognitive frames	Modeling	Application & feedback
	Accountable Talk	X	X	X	X	X	X
	Practice-based PD	X	X	X	X	X	
	Effort-based intelligence	X	X	X	X		
	Fluency	X	X	X	X		
	Connecting to standards	X	X		X		
	Theme	X	X		X		
	Distributed leadership	X		X			
	Cognitive apprenticeship		X	X			

Note: Shading indicates form of assistance was provided during module.

Opportunities for Rich Dialogue

My conceptual framework predicted that principals would be more likely to understand the conceptual underpinnings of ideas if they had opportunities to engage in particular forms of conversation—such as those that provide opportunities for mutual discussion and reflection—during the ILP sessions. In chapter five, I reported that the IFL fellows intended to prompt what they called "rich dialogue" in which principals use constructive debate to critique their own ideas and the ideas of their peers. The IFL actually provided support for these particular types of interactions in seven of eight modules by providing time (usually 20 to 120 minutes) during the agenda for participants to discuss articles or to reflect on their own practice. The IFL fellows also implemented several strategies to enrich these dialogues, such as providing guiding questions to structure small group conversations, instituting norms of professional conversations, and teaching ILP participants to incorporate AT strategies into their dialogue with one another.

The IFL almost always provided guiding questions to structure and focus small group conversations. For example, the IFL provided the following questions to guide small groups in their discussion of the article, "A Social-Cognitive Approach to Motivation and Personality", by Carol Dweck and Ellen Leggett,

- Discuss what the authors mean by "the helpless" and "the mastery" oriented patterns that they observed in children. How do these two patterns affect how children respond to difficult tasks? (pp. 257-260 and pp. 260-262)

- In order for students to meet or exceed the standards, they must be engaged in academically rigorous curriculum and tasks. What is the implication for

teaching practice for students with a performance goal orientation versus a

learning orientation (table 4, pp. 264)

- Take our indicators for Socializing Intelligence. What connections do you see

  between Socializing Intelligence and the views expressed in this article? In

  what ways do you see the views of learning orientation and incremental

  intelligence as being relevant to the adult learning communities that you

  support and lead?

In this case, the IFL fellows asked each group to answer these questions on chart

paper. Then each group presented its answers and the IFL fellows led a whole-group

discussion summarizing and synthesizing the responses provided by each group.

The IFL also deliberately attempted to encourage rich dialogue by emphasizing

the role of communities of practice in fostering learning. As they led session

presentations, the fellows explained to participants that they were trying to build a

community of practice among the participants and that a first step was to establish norms

that would enable trusting and open conversations. During the second session, the

fellows facilitated a two-hour process of brainstorming, discussing and establishing

"Norms for Professional Conversations" that were then posted on the wall and revisited

at the beginning of each subsequent session. These norms—as summarized in an IFL

slide—were,

- Keep the confidence of what's said in the group

- Facilitator chooses lens for study

- Agree to read/watch/talk through the designated lens

- Keep comments specific and on task

- Cite specific examples from text or video using language that is respectful

- Be active listeners and build on others' ideas

- Promote a risk free environment

- Allow divergent thinking

- Use this opportunity as a lab; Help each other along to learn and grow

The fellows reinforced the importance of rich dialogue each time they asked

participants to engage in whole-group or small-group conversations. For example, one

fellow said to participants while leading a discussion, "You know, so often we sit in these

meetings and we feel like it would be rude to disagree with someone else. But that's

when we learn. When we push at each other's thinking." This quote and the norms for

professional conversations provide evidence that the IFL was attempting to foster a

particular type of social interaction that my conceptual framework suggested would

prompt sensemaking.

Analysis Activities

My conceptual framework suggested that the IFL could enable principals'

sensemaking by engaging them in step-by-step processes that assist them in constructing

understanding. During seven of the eight modules, IFL fellows engaged ILP participants

in structured analysis activities (what the IFL referred to as "tasks") that entailed

examining a given idea in the context of "artifacts of practice". These artifacts of

practice included videos and transcripts of classroom practice, examples of student work,

and copies of text from student reading materials. The artifacts contained rich details that

provided—as one fellow put it—"grist" for the conversation. Although many of these

artifacts came from other districts, the IFL also provided artifacts that were specifically

relevant to BCPS—such as local standards and curriculum materials—which had the added benefit of enabling participants to grapple with how theoretical ideas related to their local situation.

During one module, for example, the IFL fellows presented research suggesting that thematic units are an important aspect of literacy instruction. They also pointed to Open Court curriculum materials calling for teachers to use theme. The IFL highlighted schema theory as the underlying rationale for the importance of using theme and provided the following direct quote describing schema theory from Billmeyer and Barton (1988),

> Researchers believe that what we know is stored in knowledge frameworks called 'schemata'. Learners draw on these schemata to make inferences and predictions, organize and reflect on new information, and elaborate on it (Vacca and Vacca, 1993). When learners are confronted with 'new' information, they try to make sense of it by seeing how it fits with what they already know. In other words, they try to match this new information with existing schema so that it can be understood.

In the introduction to the analysis activity, the IFL presentation explained how research suggests that theme can provide an organizing framework (i.e., schemata) for students to make sense of new information. The IFL fellows then provided participants with copies of two stories from the Open Court thematic unit on "kindness" and asked them to engage in the following task,

- Individually read the stories

- With a partner, use the stories, teacher's edition excerpts and the standards to

answer the guiding questions:

- What is the intended student learning about kindness from the entire unit?

- What do you want students to learn about kindness from each story?

- What comparisons about kindness do you want students to make between these stories? What difficulties do you anticipate?

- In what ways will understanding the theme of kindness help students deepen their comprehension? What standards are being addressed by this learning?

- In what ways can principals support teachers in doing this kind of advance planning?

This task—particularly the question, "In what ways will understanding the theme of kindness help students deepen their comprehension?"—required participants to draw on artifacts of practice from their local situation (i.e., Open Court curriculum materials) to analytically examine the relationship between theory (i.e., schema theory) and practice (i.e., a unit on kindness). As a result, participants were given an opportunity to think through an example of how theme deepens comprehension that was relevant to their day-to-day practice. As we watched participants engage in this task, one fellow said to me in a sidebar conversation,

> Everybody's heard "theme" is important. You could see it here when I started [the module on theme] that they [the participants] were thinking "yeah, yeah, yeah—we know this". But now [as the groups are engaged in the task] you can see they're understanding *why* [italics added] it's important.

Formal research knowledge

The IFL began six of eight modules by presenting principals with formal research knowledge in the form of journal articles or other published documents that the fellows referred to as "readings". I considered these readings to be conceptual tools because they provided language and frameworks that theory suggests would assist principals in constructing understandings of new ideas.

For example, during the session on fluency, the IFL distributed the following three articles:

- Worthy, J. & Broaddus, K. (2001). Fluency beyond the primary grades: From group performance to silent, independent reading. *The Reading Teacher*, 55(4), 334-343.

- Richards, M. (2000). Be a good detective: Solve the case of oral reading fluency. *The Reading Teacher*, 53(7), 534-539.

- Adler, C.R. (Ed.). (2001). Put reading first: The research building blocks for teaching children to read, kindergarten through grade 3. Jessup, MD: National Institute for Literacy at ED Pubs.

The fellows told me that they spent valuable session time having participants read these articles—rather than simply reviewing and summarizing the content for the participants—because they wanted participants to understand the underlying theory. In one fellow's words,

If we do the work, they won't get it and they won't remember it. The articles go deep in explaining how fluency supports—and is supported by—comprehension. When they read it [the articles], they get a better understanding of that connection.

The formal research knowledge also may have provided legitimacy for key points

and ideas raised by the IFL in the ILP. For example, the IFL's focus on fluency was

supported by findings from the National Reading Panel that stated fluency is one of the

five key areas of reading instruction and a quote from Allington (2003) stating,

"Achieving fluency is recognized as an important aspect of proficient reading, but it

remains a neglected goal of reading instruction".   The fellows reported that they

anticipated that the legitimacy afforded by these well known authors would increase

participants' willingness to attend to and think critically about ideas related to fluency.

Disrupting Prior Cognitive Frames

Sensemaking theory suggests that principals would tend to simplify and translate

complex, new ideas into simpler and more familiar forms and therefore appropriate these

ideas in unproductive ways. The IFL attempted to mitigate this problem by explicitly

challenging existing cognitive structures—particularly worldviews related to whether and

how students learn. More specifically, the IFL fellows explicitly challenged the

worldview that intelligence is an innate ability by providing evidence to the contrary and

supporting principals in making sense of that evidence.

For example, the first ILP session was focused on the first two inquiry questions:

(1) What is the relationship between equity and intelligence, and (2) What is the

connection between equity and the push for Academic Rigor in a Thinking Curriculum?

This session focused on the idea that the American educational system has been

historically organized around a belief that student achievement is a function of students'

innate abilities. In one of its presentation slides, the IFL said,

Leaders need to tackle these long-held beliefs through a study of effort-based

intelligence. This foundational work will better equip us as both deepen our

knowledge of the Principle of Learning—Academic Rigor in a Thinking

Curriculum and seek to embed rigor in all our classrooms.

The IFL asserted that even though individuals and organizations might consciously

believe that all students can learn through effort (i.e., an incremental view of

intelligence), common practices in schools often perpetuate tacitly held beliefs that some

students cannot learn (i.e., an entity view of intelligence). The IFL demonstrated this by

having participants examining video transcripts for examples of practices that promote

incremental and entity views of intelligence. Through this exercise, I observed that the

principals sitting at my table realized that some common practices in schools continue to

promote entity views of intelligence—thereby challenging their beliefs and

understandings regarding whether and how their school was sufficiently supporting all

students in learning at high levels. This activity reportedly helped these principals to

realize that their schools' current practices needed to change.

Modeling

My conceptual framework suggested that the IFL could improve sensemaking

outcomes by modeling how to apply the ILP ideas in practice. The IFL fellows provided

modeling for two of the eight ideas, AT and PBPD. In the process of doing so, the

fellows sometimes incorporated "metacognitive" strategies into their modeling by

pointing out to participants that they were modeling application of an idea and by making

their thinking explicit as they carried out that application. As part of the PBPD module,

for example, participants read and discussed an article by Ball and Cohen (1999) titled

"Developing Practice, Developing Practitioners: Toward a Practice-Based Theory of Professional Education". This article calls for development and maintenance of professional learning communities that support and cultivate substantial professional discourse. In a metacognitive move, the IFL fellows told participants that they were attempting to model how to create these kinds of communities in the way they designed and delivered the ILP modules. As one fellow announced to the ILP participants,

> Just because we [the IFL fellows and ILP participants] are sitting in this room together doesn't mean we are a community of learners. We are trying to build that. So we are going to be talking about norms. This is something you can do with your staff to build communities of learners in your schools.

As this fellow mentions, the IFL fellows engaged the ILP participants in a process of establishing norms for professional conversations. In doing so, they were modeling a norm-setting activity that the principals could replicate with their school staff as a means of creating professional community among their faculty—that is, they were demonstrating how to apply the idea of PBPD.

The IFL fellows also modeled PBPD by showing participants a video tape of a facilitator leading a PD session and asked the observers to pay attention to the rules that governed the conversation, the nature of the language being used, and the role of the facilitator in the conversation. The fellows then led a whole-group discussion of the video in which participants identified particular "moves" the facilitator made that modeled supporting and cultivating professional discourse. In doing so, the IFL fellows not only provided a model, they made the modeling explicit.

Opportunities to Practice and Receive Feedback

My data yielded little evidence that the IFL fellows provided opportunities within the ILP for principals to practice applying ILP ideas to authentic activities. For example, the IFL might have asked principals to prepare a PD activity for their teachers that embodied the principles of PBPD. Then they could have asked principals to share these plans with the IFL or with one another and created structured processes to critique and provide feedback on the plans. These kinds of activities were not part of the ILP. As I discuss at the end of this chapter, socio-cultural learning theory suggests that failure to provide this type of support may have been a particularly important omission.

The IFL did however attempt to provide opportunities for principals to practice ideas outside of the ILP sessions by assigning them homework assignments. I observed, however, that in the majority of sessions, the IFL fellows abandoned agenda time set aside to discuss homework because very few principals completed these assignments and there was very little practice for which to provide feedback.

My data did reveal one example of application and feedback that I describe in more detail in the next section. In this example, the IFL asked participants to apply principles of AT to their discussion of an unrelated article and then provided an opportunity for them to reflect on and critique this application of a reform idea. This instance of using an application and feedback strategy only occurred once and for a limited amount of time (i.e., about an hour).

Extent of Supports for Sensemaking were Associated with Principal Responses

As my conceptual framework suggested, I found that principals' responses to ILP ideas were stronger when the IFL module had included more forms of assistance to

support their sensemaking of that idea than when they provided less forms of assistance. As Table 7 illustrates, principals: consistently responded weakly to ideas that received a limited range of types of support from the IFL; inconsistently responded to ideas that received moderate support; and consistently responded strongly to the one idea that received extensive supports.

Table 7.

Responses Associated with Extent of Supports Provided

Type of Response	Extent of Supports
Consistently weak • Cognitive apprenticeship • Distributed leadership	Limited (2 forms of assistance)
Varied • Theme • Making connections to standards • Fluency • Effort-based intelligence • Practice-based PD	Moderate (3 to 5 forms of assistance)
Consistently strong • Accountable Talk	Extensive (6 forms of assistance)

In general, I found that the extent of supports provided was associated with consistently weak and consistently strong responses. However, when the extent of support provided was moderate, my data linked other factors to principals' responses—such as principal background, local school context, and district context. I describe these other explanations in the following chapter. In this section, I provide detailed examples of how the extent of supports seemed to influence responses to the three ideas at the high and low ends of the supports spectrum: cognitive apprenticeship (CA), distributed leadership (DL), and Accountable Talk (AT).

Cognitive Apprenticeship: A Case of Limited Supports and Weak Responses

The module for CA included the smallest range of supports.   These supports

consisted of the IFL sharing a research article, allowing time for participants to discuss

the article quickly and analyze a video, and the IFL fellows summarizing the main points

of the article via PowerPoint slides.

I did not code this module for providing opportunities for rich dialogue because

the there was no evidence that the IFL encouraged this type of dialogue. Also, since

many of the participants reportedly had not read the article, I observed that the

conversations were mostly limited to participants asking and responding to each other's

clarification questions. For example, as I walked around to the groups, I heard

participants asking each other, "what pages do we need to read?" I also witnessed a

couple of groups in which one participant who read the article was summarizing the

article for other group members who had not read the article. Unlike discussions that

occurred during other modules, I did not witness any evidence of participants trying to

negotiate the meaning of CA concepts and how they related to participants' local

situations—nor did I witness the IFL fellows attempting to encourage these kinds of

conversations.

The module did include a task in which participants examined a video of

classroom practice for evidence of CA concepts, but the task did not engage principals in

interpreting how to link the idea to local standards, curriculum, or practices. After the

session was over, one of the fellows informally told me she thought the module on CA

felt "rushed" because she was farther behind in the agenda than she had hoped to be. She

said that she had not anticipated that the participants would not have read the reading

before the session and upon reflection, she wished that she had provided them with more time to read and "absorb" the article.

Given the "rushed" nature of this module, I was not surprised to find that seven of the 10 principals who attended this session did not recall the idea. After reviewing the article and other materials from the session, six of these principals voluntarily admitted that they had not finished reading the article and said they had difficulty following the fellow's summary of the article. In the words of one principal, "I felt like I was just following along". This description fit with my observations, during which I noticed at least two other principals commenting to each other that they felt confused. As a result, principals reported that they lacked a solid understanding of CA and did not know how they were supposed to use it.

Distributed Leadership: A Case of Limited Supports and Weak Responses

The supports for sensemaking of DL were similarly limited in that only two forms of assistance were provided, opportunities for rich dialogue and formal research knowledge. I coded this module as having opportunities for rich conversation because the IFL explicitly reminded participants of the norms of professional conversations and encouraged them to use AT as they discussed the leadership article. The IFL also allotted time for participants to read the article during the session. Unlike the case of CA, where limited reading time seemed associated with limited rich dialogue, I witnessed several more examples of participants engaging in substantive conversation about the concept of DL. The following exchange represents one example of rich dialogue,

Principal A: So, in your words, what does distributed leadership mean?

Principal B: I think it has to do with who is in charge. It might be one person in

charge, but there might be several people in charge.

Principal C: I heard you say "in charge of", but leadership has to do more with

what's going on in the school as opposed to who is in charge.

Principal D: I disagree a bit with [Principal C] because I think they [the authors

of the article] are talking about it in terms of how to evaluate leadership. To

evaluate leadership, you don't just look at one person.

This exchange illustrates how participants' dialogue was focused on negotiating meaning

of the reform idea during this module.

I did not find any evidence of the IFL fellows providing other forms of assistance,

such as analysis activities, disruption of prior cognitive frames, modeling, or

opportunities for application and feedback. Given that the supports for sensemaking

were limited for this idea, I was not surprised to find that ten principals appropriated this

idea with simplified understandings. Although previous research suggests that

sensemaking can be supported by social opportunities for sensemaking, my findings

suggest that these opportunities—including forms of conversation that reflect rich

dialogue—may be insufficient in supporting interpretations that reflect conceptual

understanding.

Accountable Talk: A Case of Extensive Supports and Strong Responses

During this module, I observed fellows giving participants time to read an e-book

that the IFL had written on AT. The fellows also showed a video of a teacher engaging

students in using AT. The IFL asked participants to work in groups to identify evidence

of students using AT and "teacher moves" that supported and encouraged AT. Prior to

starting this task, the IFL fellows reviewed norms for collaborative study and also provided copies of the student text being discussed in the video and transcripts of the conversation. Participants were also given copies of the Open Court appendix on classroom discussion and the Maryland state standards, and the whole group discussed whether and how AT fit with the standards and curriculum. At the end of the module, the IFL asked participants to respond to the following reflection question, "If someone asked you to describe what a teacher should do to promote AT among students to assist their comprehension of a text, what would you say?" The group had an extended conversation about whether and how they should use this session with their teachers. Finally, they were given a homework assignment to examine AT during a classroom observation.

As the above examples illustrate, the AT module provided a greater range of supports than any other module. It was also the only module that provided an opportunity for participants to practice applying the idea and to receive feedback on their application. More specifically, the IFL asked a subset of principals to engage in a conversation about another article while the rest of the participants observed the conversation and focused on how their colleagues used AT moves to further each other's understanding of the article. Several principals pointed to this activity as particularly meaningful and useful in helping them to understand AT. One principal made an analogy to learning how to shot a free throw in basketball,

> It's like basketball. You can analyze all the video you want and look at whether the guy is flipping his wrist at the end of the throw. But if you get in there and try it for yourself—you get a whole other feel. It makes more sense. Then it also

helps cause you got people there telling you whether you flipped your wrist or not.

This principal and at least three others reported that the added activity of practicing AT and receiving feedback prompted their understanding and appreciation for the idea above and beyond other supports—such as analyzing video—that were provided to them during the module. All 14 principals directly attributed the IFL module—and the supports it provided—with helping them to understand the value of AT and decide that it was important to use in classroom observations and teacher professional development.

Interestingly, the article that the participants were asked to discuss in the fishbowl conversation was the DL article. Several principals—at least 5 of the 14 that attended this session—reported vividly remembering this activity as they recounted its importance to their understanding of AT, but they did not remember that the article they discussed was about DL until I reminded them. This example suggests that some forms of assistance may be more powerful than others. The same activity was designed to provide formal research knowledge support for DL and opportunities for application and feedback on AT. Given that principals consistently attributed the activity as furthering their understanding of AT but did not remember that the activity was associated with DL may suggest that application and feedback is a more powerful form of assistance than formal research knowledge.

This notion that application and feedback is a particularly important form of support fits with Vygotsky's perspective (as described by McVee, Dunsmore & Gavelek, 2005). Vygotsky argues that learning arises out of an iterative process during which groups discuss new ideas, individuals apply the ideas to their local situation, groups

provide the individual with feedback on that application, and the learning is

institutionalized into the practice of the learner and others. Vygotsky's representation of

learning might explain why a full range of supports for sensemaking—that provide

opportunities for application and feedback—can be particularly useful in supporting

sensemaking. That is, principals may have been less likely to appropriate the idea of DL,

for example, because the IFL's supports for their sensemaking only included reading a

research article on the topic and engaging in rich dialogue about that article. These

supports would have assisted the principals in engaging in Vygotsky's first stage of

learning—in which learners appropriated the ideas through interaction with others—but

may not have assisted with later stages of the learning process. That is, the IFL did not

provide principals with opportunities to appropriate ideas to their local situation and to

collectively discuss it. This perspective suggests that the number of supports for

sensemaking may have mattered in the case of the IFL's ILP in BCPS because the

number of supports was indicative of the extent to which the supports fully guided

principals through an iterative, multi-staged learning process. Further research should

empirically examine this possibility.

Summary

In this chapter, I argued that the extent of IFL supports for sensemaking varied

across ideas and that this variation helped to explain principals' responses to the ideas.

Consistently strong responses were associated with a broader range of supports for

sensemaking while consistently weak responses were associated with limited supports for

sensemaking. When the supports were moderate, other factors—such as district context,

needs of individual schools, and principal background—appeared to mediate whether and

how principals understood and attended to particular ideas. I discuss the role of these

other factors in the following chapter.

Chapter 8: Influence of District, School, and Principal Factors on Principal Responses

My conceptual framework suggested that factors related to district context, local school context, principal background and Institute for Learning (IFL) supports would taken together influence how principals made sense of ideas from the Instructional Leadership Program (ILP). Chapter seven began to examine these relationships by describing how IFL supports were associated with principals' responses. To what extent did other factors such as district conditions, local school conditions and principals' professional background influence principals' responses to ILP ideas?

As I described in my methods chapter, I drew on my conceptual framework to craft interview protocols that probed principals and district leaders on particular district conditions, local school conditions, and aspects of principals' professional background. I analyzed these data by examining associations between the factors and principals' responses and then looked for disconfirming evidence that would contradict these associations. I also considered principals' self-explanations for their responses and triangulated these self-reports with observations and artifacts.

Based on this analysis, I begin the chapter by arguing that district conditions, local school conditions, and principals' professional background did indeed appear to be associated with sensemaking outcomes. As illustrated in Figure 4, I found that two factors related to district conditions—lack of time and resources for principal professional development (PD) and political distractions—influenced principal sensemaking indirectly by limiting the IFL supports that were provided. These factors hindered overall implementation of the Instructional Leadership Program (ILP) and

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therefore limited the IFL's provision of support for principals' sensemaking.
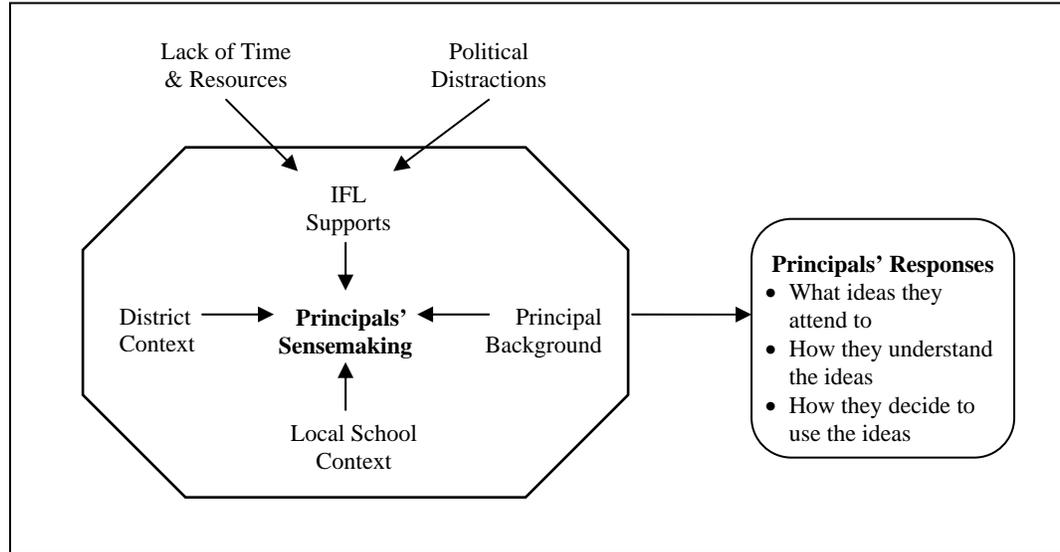

Figure 4: Factors Influencing Principals' Sensemaking and Responses

In the second part of the chapter, I argue that several other factors directly influenced principals' sensemaking—particularly when the IFL provided a moderate extent of supports. Factors related to the district conditions included conflicting priorities and messages from the central office and a missing theory of action for the ILP. Factors related to local school conditions included PD needs of faculty, leadership resources, and the reform trajectory of the school. Finally, principal professional background factors included identity and prior knowledge and experiences. Each of these sets of factors influenced the sensemaking process and principals' responses, which I have defined as what ideas they attended to, how they understood those ideas, and how they decided to use them.[18] As I described in chapter six, principals' responses existed on a continuum of weak to strong and I labeled three points along this continuum as "lack of

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[18] Per my review of sensemaking theory in chapter two, sensemaking involves not only interpreting the meaning of ideas, but also interpreting what is appropriate to attend to and use in a local situation. Therefore, I examined sensemaking outcomes that included whether or not principals attended to particular ideas and how they decided to use them in addition to the meanings that they constructed of the ideas.

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appropriation", "appropriation with simplified understandings", and "appropriation with conceptual underpinnings"—to capture the strength of principals' responses.[19]

Indirect Influences on Principals' Sensemaking: Factors that Hindered ILP
Implementation

Overall, principals' responses to ILP ideas were weaker than desired by the IFL and district leaders in part because the ILP was not fully implemented as intended by the IFL. Factors that hindered ILP implementation included limited time and resources for the ILP and the district's political context. These two factors limited the number and duration of ILP sessions as well as the number of principals who attended them and completed homework assignments. As a result, the IFL was unable to provide the full range of supports that it had intended to provide.

Limited Time and Resources

As I described in chapter five, the IFL originally intended to engage principals in 10 ILP sessions that lasted one-and-a-half days each. In the end, the IFL only provided seven day-long sessions because the district did not allocate the time and financial resources for the original plan. District leaders and IFL fellows told me in informal conversations that they had originally planned to approach the school board to allocate additional funding for the remaining three sessions but later viewed this plan as politically infeasible due to media criticisms of the district's partnership with the IFL even though this criticism was unrelated to the ILP for elementary principals.[20] The Baltimore Sun was criticizing a secondary literacy program known as "Studio", which

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[19] See chapters four and six for more details on how these codes were developed and assigned.

[20] As I mentioned in my methods chapter, I interviewed the superintendent, chief academic officer, deputy chief academic officer, and four Area Academic Officers. I do not specify which district leaders made particular reports to maintain their confidentiality.

had been developed by an IFL fellow, though not one of the fellows working in BCPS.

Even though Studio was not endorsed by IFL or part of the IFL's work, the IFL fellows

told me that the IFL's legitimacy was damaged by the media coverage because it had

associated the Studio program with the IFL. The decision to discontinue the ILP sessions

was abruptly announced to the principals by an IFL fellow during the seventh session on

March 3, 2006. As a result, the IFL did not have opportunities to revisit some of the

ideas introduced in earlier sessions, which it had intended to do according to planning

documents.

Time for the ILP sessions was also limited in that they sessions were scaled back

from one-and-a-half days to one day before the ILP began. District leaders reported in

interviews that they thought that requiring principals to be out of their school buildings a

day and a half per month would be detrimental to the school because principals would not

have enough time to carry out important roles and responsibilities. According to one

district leader, "We just couldn't see having principals out of their building that much".

Another district leader, who wasn't aware that the original plan called for a day and a half

said, "I don't think that would have worked—we would've gotten push back [from

principals] if we tried that". The IFL reported that without the extra half-day per month,

there was not time to arrange inter-visitations to principals' schools, during which time

the IFL intended for there to be more opportunities for principals to apply ILP ideas and

receive feedback.

Political Distractions

The IFL's ILP in Baltimore City Public Schools (BCPS) was greatly influenced

by a political context in which political campaigns were highlighting the district's poor

performance and politicians were attempting to institute more oversight over the district. District leaders and principals reported that these threats to BCPS's credibility and governance caused distractions that limited their ability to dedicate time and attention to the ILP.

At the time that my study began in summer 2005, BCPS was plagued with reputations of mismanagement and ineffectiveness. The local paper, the *Baltimore Sun*, regularly portrayed the system in a negative light for its problems with school violence, lead in drinking water, and failing middle schools (e.g., Neufeld, 2005; Nitkin, 2005). The district was also trying to recover from a deficit that reached $58 million in 2003 and attempting to respond to a legal ruling declaring its special education system had failed to deliver services that students were entitled to receive. Some respondents reported believing that these unfortunate circumstances were being exploited by political candidates that wanted to highlight district misfortunes as evidence of their opponent's failings. The following excerpt from a *Baltimore Sun* article—that ran on December 8, 2005 entitled "Duncan says O'Malley hasn't done enough for schools"—provides an example of how politicians were criticizing the school system as a means of criticizing their political opponent,

> Montgomery County Executive Douglas M. Duncan slammed what he called the misplaced priorities of Baltimore Mayor Martin O'Malley yesterday, saying the mayor has not done enough to improve the city's schools. "I have expressed grave concerns over the mayor's lack of interest in education ... not making education a priority for the city," … Duncan and O'Malley are running for the Democratic nomination for governor in 2006. (Nitkin, 2005)

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According to another article on December 7, 2005 entitled "Schools' master plan is denied" (Neufeld, 2005), politics may have motivated the State Board of Education to reject BCPS's master plan for reform and to require the district to rewrite the 484 page plan. The article included a statement from the State Superintendent, Nancy Grasmick, who defended the board's decision and portrayed BCPS as a failing system that could not be trusted to improve without external oversight. The article also pointed out that Grasmick was a political ally of Republican Governor Robert Ehrlich, Jr. who was also seeking re-election—implying that Grasmick may have criticized the school system in an attempt to build the governor's case against his political opponent.[21]

According to interviews with top district leaders, area academic officers (AAOs), principals and IFL fellows, these political distractions meant that top district leaders and AAOs were spending a significant amount of their time responding to these political pressures and they were requiring principals to gather information so that the district could comply with information requests associated with the political oversight. In one principal's words,

> I don't think that the Central Office has control over a lot of it [the additional data requests]. We're a district that's in corrective action [a district that has failed to meet adequate yearly progress under No Child Left Behind guidelines for two years in a row], so we've got a lot of people down at the [state] Department of Education looking over our shoulder. We're a district that's in a major lawsuit, 20-year lawsuit in special education, and it's getting worse instead of better. So

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[21] Despite harsh criticisms of BCPS that were being asserted through the media, the majority of principals expressed a belief that several good people had been hired into central office positions and they sensed that BCPS was ready to pull out of its history of financial and political troubles. Almost all of the principals were particularly positive about the superintendent, Bonnie Copeland, who they viewed as a dedicated and smart leader.

we've got more people asking us for more information and more data. So a lot of it is out of our control.

The additional concerns related to political oversight also meant that they had to—in one leader's words—"choose our battles". All three top district leaders and three of the four AAOs told me in interviews that they would have liked to spend more time and resources supporting the ILP, but felt that they were not able to because the state oversight forced them to attend to other issues. For example, the AAOs were not able to attend one of the ILP sessions because they had been called into a meeting to respond to the state's rejection of the district's master plan.

All of the top district leaders and AAOs that I interviewed suggested that the state oversight caused and perpetuated problems with communication and organizational management. The oversight not only distracted their attention from managing and leading the district, it also created additional priorities that sometimes conflicted with and competed with district leaders' priorities. District leaders reportedly perceived, and my interviews with principals confirmed, that principals were confused about the district goals and priorities. In the words of one top district leader, "Since we're attending to all this other stuff, we've had a huge problem with communication, particularly in terms of why we do what we do for whom".

I also witnessed numerous occasions in which principals were not given basic information they needed to carry out their roles and responsibilities. I observed that this problem was pervasive across various district initiatives and tasks. For example, principals lacked information they needed to plan teacher professional development days and to arrange logistics for testing. I also found that this issue was particularly

problematic for the ILP. Principals often failed to receive logistical information (i.e., time, place, materials to bring) about ILP sessions. At least two of the AAOs assumed responsibility for these errors and attributed them to their lack of ability to attend to the ILP, given other pressing matters associated with state oversight and other political distractions. Principals reported that this problem was a major cause of poor attendance and homework completion because they did not have logistical information they needed to attend the sessions and complete the homework. IFL fellows, principals, and AAOs also reported that the political distractions resulted in the problems with a missing theory of action—which I describe in more detail below—that ultimately hindered principals' sensemaking of ILP ideas.

Factors that Directly Influenced Principals' Sensemaking

While some aspects of the district context indirectly influenced principals' sensemaking by hindering implementation of the ILP, other aspects directly influenced principals' appropriation of ILP ideas by affecting whether and how they attended to the ideas, understood the ideas, and decided how to use the ideas. More specifically, conflicting priorities and messages and a missing theory of action were two district conditions that influenced principals' responses and these factors tended to weaken principals responses. In addition, local school conditions—including PD needs, leadership resources, and the reform trajectory of the particular school—seemed to strengthen responses in some cases and weaken responses in other cases. Aspects of principals' professional background—including their reported identity as an instructional leader and their prior knowledge and experiences—seemed to strengthen their responses to ILP ideas.

Conflicting Priorities and Messages from Central Office Leaders

Ten of seventeen principals interviewed indicated—and observations and documents confirmed—that their lack of appropriation of ILP ideas was caused by conflicting priorities and messages from central office leaders. These principals reported they had decided not to attend to or use ILP ideas (i.e., they failed to appropriate ILP ideas) because they were forced to attend to other demands made by central office departments. These principals reported, and my observations of five principals confirmed, that principals received conflicting information and priorities from various departments within the district office—such as parent affairs, special education, and human resources. In interviews, principals often described these departments as silos that did not coordinate with one another or the regional offices. For example, I observed evidence (such as copies of central office emails to principals) that required principals to attend a parent information session on the same evening that they were required to attend another district mandated meeting.

Also, as the district responded to pressing concerns related to court cases or recommendations from oversight committees—principals were often slammed with last-minute requests for information or mandates to attend particular meetings associated with these concerns. An example of these information requests occurred while I was observing a principal who was planning to conduct classroom observations with two teachers that focused on the idea of AT. She received a priority flagged email requesting her to submit the number of teachers that had attended a particular training related to one of the district's grants. Apparently, the district was required to submit a progress report to the funding agency and needed to collect this information by noon that day in order to

meet their deadline. The principal abandoned the plan to conduct the classroom observation so that she could instead locate the requested information. The principal ultimately decided not to conduct the classroom observations at all and instead planned to discuss the idea of AT with teachers during the next grade level team meeting. In other words, messages from district leaders about other priorities influenced whether this principal attended to an ILP and her decision regarding how to use the idea. I considered this example to be evidence that district context influenced sensemaking—rather than considering it to be evidence that district factors served as a general barrier to implementation—because the principal later told me in an informal conversation that she didn't think the activity would have gone well anyway. Her value for the activity had reportedly decreased and she therefore decided not to attend to this idea in the near future.

Given that principals routinely received demands from multiple individuals within the central and regional offices—such that it was nearly impossible for them to satisfy all of the requests—I witnessed principals constantly struggling with how to prioritize their time. One principal told me during an informal conversation that he felt as if he had 15 or 20 different bosses that were directing him in 15 to 20 different directions, so he had to guess which boss was least likely to fire him.

Poor communication and lack of coordination among district departments not only limited principals' autonomy over their own time, it also limited their control of teacher PD time—thereby influencing whether and how principals decided to use ILP ideas. At least two principals told me that they may have considered ILP ideas to be more important if they had more time to address them. When I asked whether he thought

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a particular idea was useful, one of these principals responded,

> You know, I think that I would consider all of the ideas useful if they [central
> office leaders] didn't keep [interrupting our teacher PD time with other priorities].
> But it's like, when you know you can't get to something, you tell yourself that's
> ok—it wasn't important anyway.

This principal was referring to the fact that a state judge had recently given the state control of special education and state officials had mandated that all principals review special education guidelines with teachers during the month of March because some schools were not complying with the law. This decision pre-empted other kinds of PD that principals had planned to conduct with teachers on the March 31st PD day. Five principals told me that they had planned to use IFL ideas with their staff but ultimately decided not to use them because special education guidelines had taken priority.

Missing Theory of Action

The general problem of poor communication within BCPS manifested itself in a particular problem: principals did not understand the theory of action behind the ILP. That is, they did not understand how their participation in the ILP was intended to help them improve teaching and learning in their schools. This issue was raised by 12 of the 14 principals I interviewed in fall 2005. For example, one frustrated principal said during an interview, "Where are we going with this? What's the rollout? I don't have the big picture." This principal and others wanted to know what they were expected to do once they returned to their school buildings. In the words of another principal, "Principals need to be knowledgeable about where the district is taking us and leading us, so that we can lead our schools and stay on-track for student achievement, and the master plan

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objectives." Principals reported that they wanted to know whether they were expected to share the ILP content with their staff. If not, they wanted to know exactly how district leaders expected principals' involvement to influence their practice in ways that could influence student achievement. I witnessed the IFL staff telling district leaders that they should be responsible for creating and articulating a theory of action for the ILP work and I witnessed district leaders agreeing to do so, but there was no evidence the district leaders actually attempted to do this.

Principals reported that this lack of a theory of action made it difficult for them to know what to pay attention to and how to decide to use the ideas from the ILP. Eleven of fourteen principals interviewed in fall 2005 reported that their responses to ILP ideas were being negatively influenced because they were having difficulty making sense of how the ILP was intended to further school and district goals. For example, one principal attributed her lack of appropriation of ILP ideas this lack of understanding,

> I wasn't really clear about what this was all about and what [district leaders]
> hoped to accomplish … they should have clearly said this is what it is, and this is
> why it's important, and this is why the district is [partnering with the IFL].

Consistent with sensemaking theory, principals' descriptions of this problem portrayed the lack of a theory of action as a cognitive barrier to their ability to understand ILP ideas, as opposed to a problem with resources or competing priorities. For example, one principal suggested to me that if he knew the ILP was intended to provide principals with knowledge that enabled them to design PD for teachers that was organized around literacy research and reflected the tenants of PBPD, this explicit expectation would have helped him to make meaning of the ideas addressed in the ILP. This principal was asking

for what theory calls a "cognitive structure" that would have helped him to know what to focus on.

I witnessed several instances of principals groping for this kind of explanation. In the words of one principal, "At first, I thought we were supposed to teach this to our teachers. But now they say we aren't supposed to [teach it to teachers] … I thought I understood before—now I don't get it." This principal had a particular theory of action in mind—a train-the-trainers approach—that provided an organizing framework (or cognitive structure) that helped her to decide what information to focus on and how to think about using it. However district leaders and IFL fellows later told her not to use this framework. Top district leaders reported that they told IFL fellows to focus on developing principals' knowledge and not to specify how the principals should use the knowledge, in part because they were not sure it was appropriate to make prescriptions regarding use. As a result, the fellows reported that they purposefully avoided suggesting a train-the-trainers framework. In fact, I observed the IFL fellows and one top district leader make announcements during various ILP sessions explicitly indicating that principals were not expected to replicate the ILP modules with their staff. One fellow told me,

> If they [district leaders] want them [principals] to train the teachers, they need to tell us that. If they want principals to do that, we need to support them. Right now, they're not being supported and we know [from past experience] that it won't work [unless we support them].

Several interviewees—including principals, AAOs, and IFL fellows—suggested that principals would have attended to the ILP and the ideas it addressed if they

understood the theory of action for the ILP work. Meanwhile, the IFL fellows reported that they did not provide this direction because they believed that district leaders should take responsibility for setting and enforcing expectations. The fellows reported that they did not have the authority or legitimacy to articulate a theory of action, given that principals had many other responsibilities and priorities. For example, one fellow made the following comment during a formal interview,

> I don't think that we [the IFL fellows] are setting the expectation that you must do X, Y or Z. I really strongly believe that's the responsibility of the system leaders, but it is definitely not our responsibility. We'll give assignments. They'll have assignments to practice things, but that doesn't mean anything if they don't care to do it, and the system leaders don't state their expectations.

Both fellows said their efforts would be ineffective if they told principals to redesign teacher PD so that it was practice-based and focused on the literacy research covered in the ILP because they did not have the authority to direct principals to act in this way, particularly given that the district was mandating that principals to use PD time in other ways. This rationale was the basis for the IFL's request that AAOs start attending the ILP.

Meanwhile, my observations and interviews with district leaders revealed that they did not have—or were having difficulty expressing—a clear vision of how the IFL work would further their goals. When I specifically prompted the three top district leaders to articulate how they expected the ILP to further district goals, they responded by saying that they believed the ILP would assist principals in becoming stronger instructional leaders which would in turn help them to improve instruction and student

achievement in their schools. However, when I prompted them to describe specific examples of what principals might or should be doing differently as a result of the ILP, they had difficulty providing this level of specificity. Two said they would have to confer with the IFL before being able to answer my question. After additional prompting, the third top-leader said she expected principals to be more knowledgeable about rigorous instruction in literacy and therefore she expected principals to be reviewing these best practices with teachers during PD and classroom observations.   This expectation, however, was not explicitly communicated to the principals.

The four AAOs that supervised the principals reported their own confusion regarding the theory of action. These four supervisors were participating in a separate set of IFL sessions for central office staff. Yet, one AAO said she did not understand how the district's partnership with the IFL was intended to help the district and three other AAOs gave differing and vague descriptions of the goal(s) of the work with the IFL. When I prompted the first AAO about her understanding of the goal or purpose in partnering with the IFL, she answered, "I don't have a real good understanding of that [the purpose of partnering with the IFL] … I go to the meetings, and I just honestly don't [understand the purpose]. Maybe I'm missing something." A second AAO said the purpose was to provide an overarching framework for all the district's initiatives. A third AAO said the work with the IFL was intended to help the district shift to an effort-oriented system. The fourth AAO said the ILP was supposed to help principals get "smarter" about instruction. Despite my repetitive prompting, none of these AAOs specified particular changes they hoped I would observe as I conducted observations of principals day-to-day practices.

The IFL fellows, top district leaders and two of the AAOs also expressed a reluctance to specify exactly how principals should use ILP ideas because of their situated view of instructional leadership. That is, they suggested that the principals would know best how to use the ILP ideas given their local circumstances. Given that they reportedly believed that particular uses might be more or less appropriate in particular situations, they did not want to provide explicit guidelines of how ILP ideas should be used in all schools. Therefore, they named "principal learning" as an appropriate goal of the ILP.

Principals however told me that despite their desire to learn, they wanted to the learning to have a defined purpose related to changes in their practice. In their words, "learning for learning's sake" was not a compelling reason for them to spend a day out of their building each month. This was one of several factors that led to poor principal attendance and incomplete homework assignments. One principal, who said she viewed herself as an overachiever, used an analogy of auditing a class to explain her less than perfect attendance and attention to homework assignments, "You know—it's like when you audit a class. You're interested. You want to learn. But, if one session doesn't look interesting, why bother going?" This analogy of auditing a class seemed to fit with another principal's comment, "Why should we do homework? It's not like we get [course] credit." In fact, one principal asked the district to arrange for the principals to receive credit from a local university for the ILP, but this recommendation was not acted upon during the timeframe of my study. These comments suggest that even though the IFL fellows intended to have principals practice ILP ideas in the context of authentic activities via the homework assignments—as I described in chapter five—principals did

not perceive the homework assignments as enhancing ongoing activities in their schools. For example, interview comments from at least six principals suggested that they had not attended to fluency during classroom observations (which they were conducting on an ongoing basis) because they did not think this homework assignment would add practical value to the classroom observation. In other words, principals had interpreted that this ILP idea was not relevant to their local goals and situation, which explains why they did not attend to or decide to use the idea—even as part of an explicit homework assignment.

Interestingly, principals' perceptions of the value of the sessions improved over time. By my second round of interviews, almost all of the principals reported wanting to see the sessions continued the following year. The explanation for this shift was not immediately clear from my data. Perhaps after being exposed to several different ideas, they were more likely to have experienced a session that they could easily connect to a need in their school, which would have enabled them to create their own theory of how the ILP would help them to improve teaching and learning in their schools.

Professional Development Needs

Prior to the start of the 2005-06 school year, each school in BCPS had been required to choose a year-long PD focus based on the school's needs, which were often determined by test score results. For example, schools with low literacy scores typically chose to focus their PD plans on literacy. Four principals indicated that they viewed the ILP as aligned with their schools' PD focus and that this alignment strengthened their response to ILP ideas. Meanwhile, six principals reported that they viewed the ILP as not aligned with their school's PD focus and ILP focus, which hindered their responses. Responses were weak among principals whose school PD was focused on math or new

teachers.

Principals in schools that had chosen a literacy focus were more likely to draw on IFL ideas when they made school-based decisions about PD than principals in schools that had chosen a math focus. According to principals' interview responses (which were often confirmed by copies of their PD plans) 4 of 6 principals from schools that had chosen a literacy focus decided to use IFL ideas in PD. Meanwhile only 1 of 4 principals from schools that had chosen a math focus had interpreted the ILP ideas to be relevant to his PD focus and therefore decided to draw on IFL ideas. Although this principal was able to conceptualize how to tailor the AT session to mathematics, three principals of schools that chose to focus on math conceptually struggled with how the ILP ideas related to their PD focus. For example, when I asked one of these principals whether she had decided to incorporate IFL ideas into teacher PD, she explained,

> No. I would like to—don't get me wrong. It's just that we've already planned
> out the year. We're focused on math … we got to get those math scores up.
> We're already behind [in implementing the PD plan] because the district pulls
> teachers for other things [on PD days]. I just can't divert us right now. Maybe
> we can look at that stuff [the IFL ideas] next year.

Although the IFL fellows indicated to me in interviews that they thought several ILP ideas could have been utilized in ways that promoted math achievement, this quote suggests that this principal did not draw the same conclusions.

Three principals that had a significant number of new teachers also reported deciding not to use IFL ideas because they interpreted the ILP ideas to be irrelevant to their schools' needs. These principals reported that they felt they had to spend valuable

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PD time on classroom management and curriculum basics during the current school year, but intended to delve into IFL ideas in later years once the faculty was more experienced and the ILP ideas would therefore be more relevant. One principal was allowing her staff to use PD time for planning time because the vast majority of her faculty members were either mothers of young children or attending graduate school in the evenings. She reported deciding that the PD time would be better spent for her school if she used it to prevent teacher burnout and turnover rather than to address a particular PD topic. No matter what schools' PD needs were, this aspect of a principal's local situation seemed to influence the extent to which they appropriated ideas with conceptual underpinnings because it influenced whether and how principals understood the usefulness of IFL ideas and made decisions regarding how to respond to them. Since schools needs varied, so did principals' responses.

Leadership Staffing Resources

Some principals had more staff—such as assistant principals and coaches—that could assist with leadership responsibilities, and the availability of these staff affected how principals interpreted the relevance of ILP ideas to their local school context. At least four principals did not have these leadership staff either because of low student enrollment, absences or vacant positions.[22] As a result, these four principals often found themselves having to cover a broader range of responsibilities—which enabled two principals in appropriating IFL ideas and hindered the other two principals in appropriating IFL ideas.

I found that the extent and nature of leadership staffing resources helped to

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[22] BCPS allocates staff positions to schools based upon the size of the school. Therefore, BCPS did not budget assistant principals and other leadership positions to schools with small enrollments.

explain why two principals appropriated ILP ideas with conceptual underpinnings. The first principal interpreted ILP ideas as relevant to her day-to-day responsibilities because the availability of leadership resources in her building allowed her to focus her role on instructional matters. I observed that this principal was able to focus on building community among her teachers and leading them in job-embedded professional development because other school leaders attended to non-instructional tasks such as discipline and lunch room duty. Meanwhile, another principal suggested that she was enabled to appropriate IFL ideas because she did not have other school-based leaders in her school. Since she was solely in charge of teacher PD and regularly interacted with teachers regarding instructional issues, she was able to draw on IFL ideas in formal and informal ways. Since her school had a small number of teachers, she was reportedly able to observe teachers and talk to them about their instruction everyday, during which time she reportedly encouraged teachers to attend to some of the ILP ideas—such as encouraging teachers to reinforce fluency in their daily lessons.

I found that the extent and nature of leadership resources helped to explain why four principals failed to appropriate ILP ideas. At least three of these principals told me that they did not interpret ILP ideas as relevant to their day-to-day responsibilities because instructional leadership activities were primarily carried out by other leaders in their schools. For example, the school-based coaches were delegated the authority and responsibility of overseeing school-based PD. While the IFL fellows indicated in the ILP sessions that they expected principals to encourage coaches to draw on ILP ideas in designing and delivering PD, these principals reported that they did not want to diminish the coaches' leadership role by telling them how to do their job.

As these examples illustrate, leadership responsibilities were often distributed across multiple individuals within a school and schools varied in *how* they distributed leadership depending on the needs and resources of the individual school. Therefore, the availability of leadership resources sometimes served to promote use of ILP ideas and served to hinder use of ILP ideas in other cases.

Reform Trajectory

Finally, the reform trajectory reportedly influenced how principals appropriated ILP ideas by influencing their interpretations of their schools' readiness for IFL ideas. Three principals reported that their schools' were in the beginning stages of learning how to participate in the districts' reforms, and their placement on this reform trajectory weakened their responses and four principals reported it strengthened their responses. The first three principals were new to their schools and reported in interviews that they interpreted ILP ideas to be irrelevant to their schools' reform efforts this school year because they were focusing their first year on structures and routines to ensure safety and basic operations. They reported believing that these pieces needed to be in place before they could address what they perceived to be more—in one's words—"sophisticated" reform efforts, such as building professional learning communities and aligning curriculum. For example, one principal described how her PD focus was influenced by the fact that it was her first year serving as a principal in her current school,

> This year … I focused on school climate because … research says you have to improve school climate first. I spent a lot of [staff development] time on behavior management and classroom management.

> This principal also said that she was in the process of replacing several teachers

and she planned to build teacher teams and professional community in the following year when she anticipated having the "right" teachers in place.

Meanwhile, at least four other principals who had been in their buildings for three or more years described how they had similarly decided to focus on basic management issues in the first year of their leadership and then decided to begin addressing instructional improvement in later years. After I observed a principal lead her teachers in observing each other, this principal said to me,

> See—now that I've got the other stuff [discipline and management structures] in place, I can get them to focus on the real work. But it still takes time. I want them to feel comfortable—I want them to value it [observing each other]. Once that happens, I'll push them to go deeper.

This principal, who was sharing some of the ILP ideas with her teachers, said she probably would not be sharing them if it was the first year of her principalship in the same school. These examples suggest that for at least some schools, the reform trajectory affected the extent of appropriation because it influenced whether and how principals interpreted the relevance of ILP ideas to their reform efforts and therefore influenced how they decided to attend to and use the ideas. In general, the reform trajectory tended to weaken principals' responses when the school was at the beginning of the trajectory and it tended to strength principals' responses when the school was farther along in its reform trajectory.

Professional Identity

All 14 of the principals whom I interviewed in the first round of interviews reported viewing themselves as "instructional leaders" and as "learners", and when they

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did appropriate ILP ideas with conceptual underpinnings—they attributed their responses to their professional identity as an instructional leader. For example, when I asked one principal to explain why she had decided to use the idea of PBPD, she responded,

> I'm the instructional leader. That means that I have to create learning opportunities for my teachers. And they [teachers] need to see me participating as a learner too … Using artifacts of practice help us to do that.

In my analysis of principals' responses, I found principals were more likely to interpret ILP ideas as relevant and useful when they reportedly perceived alignment between the ideas and what they thought they ought to be doing, given their identities as instructional leaders and learners.

Prior Knowledge and Experiences

My conceptual framework predicted that principals would appropriate ideas with conceptual underpinnings when the ideas reinforced prior understandings and experiences. My findings generally reinforced this proposition, although I did find two exceptions. I found that prior knowledge and experiences regarding the ideas addressed in the ILP were useful in explaining responses for ten principals: they explained strong responses for eight principals and weak responses for two principals.

Five of the first eight principals had been part of an initiative in BCPS known as Achievement First. As part of this initiative, the principals studied the instructional leadership model being utilized in Community District #2 in New York City. Since the ILP ideas were closely aligned with District #2 models—in part because the Learning Research and Development Center's study of District #2 had influenced the IFL's work—I was not surprised to find that the five principals involved with Achievement

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First responded positively to the ILP ideas. Each of the five principals reported using the IFL ideas with their staff, often in ways that I coded as reflecting the conceptual underpinnings. Interestingly, two of these principals—who were aware that some of the ILP colleagues were grumbling about having to participate in the ILP—believed that their prior experience with Achievement First was the key factor responsible for the different responses. In the words of one,

If they [colleagues who grumbled about the ILP] had just been a part of it [Achievement First], they would understand. If they had the opportunity to go to New York like we did, I think they would appreciate it [the ILP] more.

This principal and others thought their colleagues would have a greater appreciation and understanding of how the ILP might help them improve instruction if they had the opportunity to see the classrooms in New York City. The observations reportedly provided these principals with a visualization of how the ILP ideas in action could lead to the improvements in instruction and student achievement that they desired for their own schools. In sensemaking terms, these experiences created cognitive structures that enabled the principals who went to New York City to make sense of the ILP ideas and how they fit with their local situation. Interestingly, these particular principals were also more likely to have their own theory of action for the IFL work in BCPS. When I compared principals' responses with their prior experiences, I found that principals who had been a part of Achievement First were more likely to appropriate ILP ideas with conceptual underpinnings than principals who did not have these prior experiences.

Meanwhile, prior reform experiences helped to explain why another principal

failed to appropriate ILP ideas. This principal had interpreted the ILP ideas as irrelevant to her schools' needs because she reportedly viewed them as detracting from another reform effort.[23]

> Look, it's not that I don't think the IFL stuff is important. It is. There's just not enough time in the day to deal with everything that's important. Right now, we're working on this [reform effort] because I was involved in this [reform effort] and I believe in it.

This quote indicates that the principal had interpreted the ILP ideas as not being aligned with her prior knowledge and experiences regarding what was needed to improve her school, which is why she decided not to attend to and use the ideas.

Six principals had experiences as literacy coaches and reported that they considered themselves to be very knowledgeable about literacy ideas while other principals reported that the ideas were very new to them. Interestingly, literacy expertise mediated principal responses in different ways. For example, four self-proclaimed experts said their expertise meant that they were more apt to attend to and use the literacy ideas because in the words of one, "literacy is my thing". On the other hand, two principals said that their prior literacy knowledge made them more inclined to disregard ILP ideas about literacy because they already knew the material that was being covered. This finding contrasted with theory's prediction that principals would be more likely to attend to familiar ideas.

Several other measures of principals' prior knowledge did *not* seem to be associated with how they appropriated IFL ideas. For example, I collected data regarding principals' years of experience, former PD experiences (including degree programs as

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[23] I do not name the reform effort to maintain this principal's anonymity.

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well as other PD programs), prior teaching assignments (such as subjects and grade levels

taught), and other career experiences (such as non-education related positions or district-

level positions). None of the principals reported that these characteristics influenced their

responses to ILP ideas and my analysis revealed that none of these factors was associated

with principals' responses. For example, I examined whether principals who had more or

less years of experience tended to respond in particular ways, but I did not detect a

pattern when I conducted this analysis.

<p align="center">*Multiple Factors Combined to Explain Responses*</p>

Principals' descriptions of how and why they responded to particular ideas in

particular ways rarely included a single factor explanation. Instead, principals typically

confirmed the explanatory power of my conceptual framework by describing how the

multiple factors in that framework interacted to influence outcomes. For example, one

principal provided the following multi-factor explanation for why she had decided to

attend to and use PBPD practices,

> My school is focused on math this year, but once I started attending the IFL I said
>
> "You know, this is what we need to focus on" … [the ILP] got us looking in-
>
> depth at what's going on [during teaching and learning], not just looking at the
>
> surface … and I think that's what was so powerful about what we saw in District
>
> 2 … I think that's what we need to do in our schools. So we [school leaders]
>
> planned to use it [ILP materials] with the teachers. We were going to watch a
>
> video clip and look at core issues [an IFL tool] and then have them talk about
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> what they saw in that particular lesson as it related to the questions that were there
>
> [in the IFL tool] … but then we got that special education mandate [requiring that

<p align="center">170</p>

PD time be spent on special education requirements]. So we did that [during the designated PD day] … but I wouldn't let it go … I said "this is too important. We gotta find a way to do this" … so [the coach] and I got together and found a way to do that work during [time set aside for grade level planning].

This principal cited several factors that influenced her decision to appropriate PBPD. Even though her school's previously defined PD needs and the district's mandates might have led her to interpret the relevance of ILP ideas to her schools' context in ways that weakened her response, she ultimately decided to attend to the idea of PBPD because she conceived it as important and relevant to her school's goals and needs. She cited her prior experience visiting New York City Community District #2 and the supports that were provided during the ILP as helping her to understand the importance of this idea. These multifaceted explanations of responses were common in my data.

These findings suggest that sensemaking outcomes depended on how multiple factors played out in situated contexts—thereby explaining why principals responded differently to different ideas. Why, then, did I observe consistent responses to particular ideas? One possible explanation is that some factors were more influential than other factors and therefore consistently influenced responses in a particular direction. For example, the extensive supports provided for AT may have been sufficiently powerful enough to "trump" other relevant factors, therefore causing principals to consistently appropriate this idea with conceptual underpinnings regardless of other factors that may have been at play. Meanwhile, when supports for sensemaking were not as extensive (i.e., when they were moderate or limited), the influence of this factor weakened such that

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other factors became more influential. To the extent that this explanation is accurate, it

suggests that policy makers and reformers can improve sensemaking outcomes by pro-

actively providing extensive supports for sensemaking. I elaborate on these implications

and others in chapter nine.

Chapter 9: Summary, Recommendations and Next Steps

Improving instructional leadership is increasingly becoming a pressing problem of policy and practice. Research has documented the important role that principals' instructional leadership can play in improving teaching and learning, particularly in low-performing schools. However, literature on instructional leadership and principal professional development provides little guidance to policy makers regarding how to assist principals in developing the knowledge, skills and practices they need to engage in instructional leadership. My study addresses this problem by examining whether particular forms of assistance provided during professional development can support principals in appropriating instructional leadership ideas in ways that reflect conceptual underpinnings of the ideas. The Institute for Learning (IFL)'s Instructional Leadership Program (ILP) in Baltimore City Public Schools (BCPS) provided a fruitful case to examine the relationship between features of professional development and principals' appropriation of instructional leadership ideas because the IFL's ILP drew on concepts from socio-cultural learning theory to pro-actively support principals' sensemaking about instructional leadership ideas.

BCPS was a promising site for this study because it was a low-performing school district challenged by past mismanagement and current state oversight—which is precisely the type of district where policy makers hope to improve student achievement via efforts to improve instructional leadership. However, these conditions meant that BCPS was also the type of district that policy implementation research suggests would be fraught with policy implementation challenges. My study confirms that these and other local conditions did indeed hinder implementation of the ILP and principals' responses to

ILP ideas. However, my study also found that principals appropriated most of the ILP

ideas. In many cases, they did so with simplified understandings but in some instances,

they did so with conceptual underpinnings. In this chapter, I first elaborate and

summarize findings from this study. Next I discuss contributions and offer implications

for policy makers, professional development providers and researchers. Finally, I discuss

the next steps I plan to take to further this line of research.

Summary

I found that the IFL intended to support BCPS principals in making sense of

particular ideas about instruction and conditions that enable teachers to improve their

instruction. The IFL also intended to assist principals in determining how to draw on this

knowledge to lead instructional improvement in their schools in ways that were

appropriate to the particular conditions in their schools. These intentions reflected the

IFL's situated view of instructional leadership, which emphasized that instructional

leadership can and should be enacted in different ways depending on the situation as well

as the IFL's view that principals need support in addressing this challenge.

I found that the IFL did in fact provide several forms of assistance during the ILP

that socio-cultural learning theory suggested would support their sensemaking. These

supports included analysis activities, formal research knowledge, opportunities for rich

dialogue, disruption of prior cognitive frames, modeling, and opportunities for

application and feedback. The IFL, however, provided more types of support for some

ILP ideas than others. It provided extensive supports for the idea of Accountable Talk

(AT); moderate supports for the ideas of practice-based professional development

(PBPD), effort-based intelligence, making connections to standards, and theme; and

limited supports for the ideas of distributed leadership (DL) and cognitive apprenticeship (CA). The IFL also provided some supports more often than others. It regularly provided opportunities for rich dialogue, analysis activities, formal research knowledge, and disruption of prior cognitive frames. However, the IFL only provided modeling supports for two ideas and application and feedback support for one idea.

Individual principals responded strongly to some ideas and weakly to others. Each principal appropriated at least one idea with conceptual underpinnings but appropriated other ideas with simplified understandings or failed to appropriate them at all. Across principals, responses tended to be consistently strong to the idea of AT—the idea for which the IFL provided extensive supports for sensemaking—and consistently weak to the ideas of DL and CA—the ideas for which the IFL provided limited supports.

In general, I found that the extent of supports provided was useful in explaining principals' responses to ideas when the IFL provided either extensive or limited supports. However, when the IFL provided a moderate amount of supports for sensemaking, principals' responses were more varied and my data pointed to other explanations for principals' responses—such as district conditions, local school conditions, and principals' professional background.

The extent to which the IFL actually supported principals' sensemaking was h by conditions in BCPS—such as limited time and resources and political distractions—that hindered overall implementation of the ILP. These conditions indirectly affected principals' sensemaking because they resulted in a shorter and less intense ILP than the IFL intended and reportedly caused less than desirable attendance and homework completion on the part of principals. Conflicting priorities and messages and a missing

theory of action of the ILP seemed to directly weaken how principals made sense of ILP ideas. These conditions made it difficult for principals to understand how ILP ideas related to district and school goals and, in some cases, led principals to decide that ILP ideas were not important to attend to. That is, these factors seemed to limit principals' ability to make sense of the ideas and how they related to their situation.

Schools' professional development needs, leadership resources, and reform trajectories were associated with strong responses in some cases and weak responses in other cases. This pattern appeared to emerge because these particular school conditions represented dimensions on which the local situation varied across schools, and principals tended to make sense of ILP ideas in ways that fit with these various situations. For example, principals were more likely to appropriate ideas with conceptual underpinnings if their school professional development needs were related to literacy because the ILP focused on how ideas furthered literacy improvement, which made it easier for principals to understand how the ideas fit with their situation than if their school professional development needs were related to math. Principals in schools focusing their professional development on literacy therefore seemed to be more apt to decide to use the ILP ideas. Finally—similar to previous sensemaking research—I found that principals tended to respond strongly to ILP ideas when their professional identity and prior knowledge of and experiences with ILP ideas fit with and reinforced the ideas.

Contributions and Implications

This study makes several important contributions that are likely to be useful to policy and research. First, this study makes a contribution to literature on instructional leadership by framing the challenge of improving instructional leadership as a problem of

supporting principals' sensemaking. Although previous research has suggested that

instructional leadership can be enabled generally by professional development and

district supports, this study elaborates specific types of professional development and

district conditions that matter and why these factors may be so important to improving

instructional leadership. By framing my study around sensemaking, my study suggests

that the district conditions and features of professional development are important

because they influence how principals make sense of instructional leadership ideas and

whether and how to use these ideas to their local situation. This sensemaking process is

particularly important because instructional leadership is situated, meaning that each

principal needs to determine how instructional leadership ideas relate to their specific

situation. Without supports for their sensemaking, principals may be less likely to

appropriate instructional leadership ideas because they do not understand the conceptual

underpinnings of the ideas and ultimately decide not to attend to or use the ideas. On the

other hand, principals may be more likely to appropriate the ideas with conceptual

underpinnings when their sensemaking is supported with a broad range of supports.

These insights have important implications for policy makers and reformers who

want to improve instructional leadership and researchers who study such efforts. My

study suggests that policy makers and reformers should consider intentionally supporting

principals' sensemaking of instructional leadership ideas as a primary strategy for

improving instructional leadership. In this way, my study suggests that policy makers

should not simply introduce principals to instructional leadership ideas and then hold

them accountable for implementing them. Without a broad range of supports for their

sensemaking, principals may make sense of instructional leadership ideas in ways that

only reflect simplified understandings and therefore appropriate them in unintended ways despite their best intensions. Therefore, policy makers and reformers should not only provide principals with professional development, but also ensure that those professional development opportunities provide a broad range of supports for principals' sensemaking.

District leaders may want to consider partnering with external assistance providers, such as the IFL, to provide these supports. District staff may not have capacity to design professional development that incorporates supports for sensemaking because this type of professional development may take more time and knowledge to design and deliver than traditional stand-and-deliver modes of professional development. Outsourcing professional development to external assistance providers might be a useful strategy for building district capacity to provide professional development that supports sensemaking. The IFL may be particularly well suited to provide this assistance to districts because its is affiliated with learning theorists at the Learning Research and Development Center within the University of Pittsburgh and its staff is therefore familiar with concepts from socio-cultural learning theory and how to draw on these concepts to create professional development opportunities that support sensemaking.

Researchers who study efforts to improve instructional leadership should consider attending to the role that sensemaking plays in these efforts. By attending to how principals' make sense of instructional leadership ideas, these studies might be able to unpack and elaborate on whether and how factors such as district conditions and the nature of professional development influence the outcomes of such efforts. In doing so, their studies might yield important lessons regarding how to improve these efforts.

This study also makes a contribution by elaborating specific features of professional development that seem important to supporting principals' sensemaking. These findings are likely to be particularly useful to policy makers and reformers who are interested in designing professional development experiences for principals that enable them to improve instructional leadership. My study suggests these individuals should consider proving professional development that includes formal research knowledge, rich dialogue, analysis activities, disruption of prior cognitive frames, modeling, and opportunities for applications and feedback. Furthermore, my study suggests that professional development providers should consider providing multiple forms of support for each idea they intend for principals to appropriate because minimal supports (i.e., two types of support) for sensemaking may be insufficient for improving sensemaking outcomes.

Professional development providers and district leaders should also consider assisting principals in determining how much variation in implementation is acceptable. In several cases, BCPS principals appropriated ideas with simplified understandings because they did not see how the ideas related to their situation or thought that they were already implementing the idea. Therefore, the IFL should consider providing principals with examples of appropriate variation to assist principals in determining how to adapt instructional leadership ideas to their local situation in ways that reflect conceptual underpinnings of the ideas. For example, the IFL might provide examples of how particular ideas could be appropriated differently depending upon the reform trajectory of the school or other local conditions that would require adapting the idea. Given that principals in my study reported that the opportunity to apply an idea to an authentic task

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and to receive immediate feedback on that application was a particularly helpful in this regard, professional development providers might want to consider providing application and feedback support in particular.

Researchers who want to examine whether and how particular professional development opportunities assist principals in improving instructional leadership should consider the extent to which the professional development incorporates particular features that support principals' sensemaking. Concepts from socio-cultural learning theory may be particular relevant and useful in identifying and tracking features of professional development that support sensemaking. By attending to these features, future research may be able to provide further elaboration on the types of assistance that enable instructional leadership.

Finally, my study makes a contribution by providing empirical evidence regarding the impact of the IFL's ILP in BCPS and the district and school conditions that enabled and hindered this effort. Policy makers and professional development providers who want to implement similar efforts to improve instructional leadership should consider addressing the factors that hindered the ILP in BCPS. First, they should consider ensuring sufficient time and resources to fully implement the professional development program. Second, if possible, they should consider helping principals to negotiate political distractions that take time and attention away from the effort. Although BCPS leaders may have had little control over the political distractions stemming from state oversight of their district, principals and district leaders reportedly thought district leaders could do a better job of buffering them from onerous meetings and information requests associated with the state oversight that distracted them from attending the ILP and the

reform ideas it promoted.

Third, district leaders should consider minimizing conflicting priorities and messages from the district that might prevent principals from appropriating the instructional leadership ideas. For example, they could ask various central office departments to coordinate their communication with principals so that principals do not receive conflicting messages regarding how to allocate their time and attention and so that principals understand how the instructional leadership program should fit within the district's broader set of priorities. Finally, district leaders should consider articulating a theory of action for the professional development program that enables principals to make sense of how instructional leadership ideas are intended to further district and school goals. If district leaders attend to the factors that hindered the ILP in BCPS, they may be able to improve implementation of the ILP in their districts.

Researchers who study efforts to improve instructional leadership should examine the extent to which the findings presented here hold true for other efforts that are implemented in different times and places. That is, they should examine whether other efforts similarly yield mixed responses to instructional leadership ideas or whether other efforts are more or less successful in assisting principals in appropriating instructional leadership ideas with conceptual underpinnings. Researchers should also examine the extent to which particular types of supports for sensemaking and other factors examined by this study help to explain sensemaking outcomes or whether these outcomes are better explained by other factors.

Limitations

While this study makes several important contributions, it also has several

limitations. First, this was a qualitative study that was designed to examine the extent to which concepts from learning theory could help to elaborate the features of principal professional development that matter to whether and how principals understand and use ideas they are exposed to during professional development. This study was not designed to evaluate the IFL's ILP in ways that findings from this study could be generalized to the IFL's ILPs in other districts—or to other efforts that aim to improve instructional leadership.

I purposefully chose to conduct this type of study because my professional background was in evaluation research and I wanted to use my dissertation experience as an opportunity to use theory to explore and understand an important policy problem. My goal was to utilize cognitive theory to illuminate and explain aspects of the policy implementation process that I would not have attended to if I were conducting a simple program evaluation of the IFL's ILP. I found this approach useful because it yielded potential explanations for variation in principals' responses to instructional leadership ideas, which I had also observed in other studies of the IFL's ILP (see for example Marsh et al., 2005). For example, this study revealed that differences in principals' responses to reform ideas can be explained in part by their professional background and their school's reform trajectory. My prior research did not examine these factors and its findings therefore did not provide the insights that this dissertation provides regarding why principals' responses varied.

However—by choosing to use one theoretical framework (i.e., cognitive theory)—I attended to particular aspects of my case and did not examine other aspects of my case that may have informed answers to my research questions. Future research

might consider using multiple theoretical perspectives to examine alternative explanations. For example, a political perspective might highlight issues related to power and agenda setting that influence whether and how principals respond to ILP ideas.

Since the study was designed to explore the utility of particular theoretical concepts rather than make generalizable assessments of the IFL's ILP, the findings from this study should not be used to predict how principals would respond to the IFL's ILP in another time and place. That is, the single case study design of my research does not allow me to inform policy makers who might want to know the probable impact of the IFL ILP on instructional leadership. Future research should examine the IFL's ILP in multiple contexts and with a larger number of principals.

My study is also limited in that the findings regarding whether and how principals appropriated ideas were largely based upon interview data. As I discussed in my methodology chapter, I used several strategies to improve the validity and reliability of this data—including triangulating it with artifacts of principals' practice and observations of five of the principals. If I had, however, conducted ongoing observations of all the principals, these data might have revealed forms of appropriation that principals' did not report through talk.

Another limitation of my study is that it did not examine changes in how principals appropriated ILP ideas over time nor did it compare appropriation of ILP ideas by principals who participated in the ILP with appropriation by principals who did not participate in the ILP. These limitations restricted my ability to definitively attribute principals' appropriation of ILP to their experiences in the ILP. Instead, I used respondent reports and patterns in my data to draw conclusions regarding the influence of

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the ILP. For example, I concluded that the more extensive supports provided for AT

enabled stronger responses from principals because I observed in my data that the extent

of support was associated with how principals responded. I also supported this

conclusion with principals' self-reports that the IFL's ILP influenced their responses in

this way and triangulated these self-reports with observations of principals whom I

observed changing their practice after exposure to the ILP's module on AT. Future

research could strengthen attributions of the ILP's impact if it examined how principals

understood and decided to use ILP ideas before participating in the ILP and then re-

examined their responses after participating in the ILP. It would also be important for

such research to compare these changes in principal responses to changes in the

responses of principals that did not attend the ILP.

Future research might also examine how principals' responses change over time.

My research was limited in that data collection reflected only one year of the IFL-BCPS

partnership. Given that appropriation of reform ideas may not be immediate and can

occur over time, it is possible that I would have observed different responses to ILP ideas

if I continued my data collection for at least another year. Future research should

consider examining the extent to which principals change how they appropriate ILP ideas

in years subsequent to the ILP training.

Next Steps

Personally, I am interested in continuing to examine whether professional

development that consistently provides extensive supports for policy implementers'

sensemaking can lead to stronger and more consistent appropriation of reform ideas. To

this end, I am currently working with a curriculum developer to create a new professional

development model that incorporates extensive supports for sensemaking and we are planning to test the impact of this model in comparison to the curriculum developer's more traditional professional development model. More specifically, we are developing a coach-based professional development model that is designed to provide formal research knowledge, opportunities for rich dialogue, analysis activities, modeling, and opportunities for policy implementers to apply reform ideas in their local situation and receive feedback on that application. Once the model is developed, we are planning an efficacy trial of this professional development model that will randomly assign teachers to receive traditional or coach-based professional development. We will collect baseline data on teachers' appropriation of reform ideas embedded in the curriculum—such as collaborative learning and student-centered teaching—and continue to track their appropriation over two years.

The design of such a study would attend to several of the limitations of my dissertation by allowing me to attribute differences in how teachers respond to reform ideas to the professional development that they received and to generalize these findings to a broader population by controlling for other factors that might explain the outcomes.

This study—which is still in planning stages—is an example of how I hope to build on my dissertation research in ways that capitalize on what I have learned about cognitive theory and its relationship to policy implementation. This study is also an example of how I might draw on theoretical research in a way that fits with my career in applied research. That is, I hope to draw on theory to inform ongoing development of an intervention and test use of that theory in an iterative process of research and development. In doing so, I hope that I my research will also continue to contribute to

the development of theory—and interpretative perspectives of policy implementation.

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