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Role Enactment and Types of Feedback: The Influence of Leadership Content Knowledge on Instructional Leadership Efforts

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Abstract

Instructional leadership is a primary task of school leaders, but this work may be complicated when leaders and teachers do not share content area or grade level expertise. Work around leadership content knowledge (LCK) acknowledges that school leaders cannot know everything about teaching in the content areas, but suggests leaders can work to bridge this divide. Still, little is known about how leaders' LCK intersects with their efforts to support improvements in teaching and learning. The purpose of this study was to explore ways in which LCK facilitates or, in its absence, hinders instructional leadership efforts. Thirty-one teachers and school leaders were interviewed about experiences receiving or providing instructional feedback. Analyses revealed factors that teachers perceived as foundational to instructional leadership efforts. Further, depending on their LCK, school leaders enacted a range of roles and provided different types of feedback.

Keywords

instructional supervision; instructional leadership; pedagogical content knowledge; leadership content knowledge; school leadership

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Introduction

School leaders contribute to instructional improvement directly (e.g., providing useful feedback related to pedagogy, content, and standards) and indirectly (e.g., sustaining a healthy and supportive culture of learning) (Glickman et al., 2014; Hitt & Tucker, 2016; Leithwood et al., 2008; Louis, Leithwood et al., 2010). Effective school leaders² facilitate teachers' professional growth (Backor & Gordon, 2015; Burkhauser, 2017). They negotiate policies and funding in efforts to ensure appropriate staffing and resources (Burkhauser, 2017). They design schedules that provide time for collaborative inquiry (Schildkamp & Poortman, 2018). They implement, support, and sustain a culture conducive to learning (Louis, Dretzke, et al., 2010). School leaders apply an equity lens to the corpus of their work and approaches to ensure that each child is afforded opportunity-to-learn in ways that open, rather than close, doors on future opportunities (Datnow & Park, 2018; Theoharis & Brooks, 2012). One of the primary ways school leaders influence quality teaching and student achievement is to function as instructional leaders.

Instructional leadership implies a primary focus on classroom practice (as opposed to managerial tasks) and on engaging with teachers in ways that promote and support improved teaching (Hallinger, 2005; Murphy et al., 2016). This work with teachers includes providing feedback on curriculum alignment, planning, instruction, and assessment, in addition to promoting reflective practice and supporting continued professional learning (e.g., Glickman et al., 2014; Mette et al., 2015). Indeed, school leaders' work with instruction has been demonstrated to influence student learning (e.g., Louis, Leithwood et al., 2010; Marzano et al., 2005).

Preparation programs and standards for educational leaders have trended toward emphasizing the school leader's role in supporting instruction for decades now (see Backor & Gordon, 2015; Neumerski, 2012). The most recent iteration is represented in the *2015 Professional Standards for Educational Leaders* (PSEL), (National Policy Board for Educational Administration [NPBEA], 2015). The PSEL addresses instructional leadership by asserting that principals are responsible for engaging with teachers in collaborative, evidence-based inquiry to improve classroom practice through "actionable feedback about instruction and other professional practice" (p. 14). Though considered critical by policymakers, practitioners, university faculty working with preparation programs, and researchers (e.g., Backor & Gordon, 2015), instructional leadership is no easy task.

Today's school leaders are expected to be informed, organized, and maintain focus on instructional improvement and classroom practice. Yet, as Louis, Leithwood et al. (2010) note, "specific leadership practices required to establish and maintain [a focus on classroom practice] are poorly defined" (p. 11). They explain:

The main underlying assumption [of instructional leadership] is that instruction will improve if leaders provide detailed feedback to teachers, including suggestions for change. It follows that leaders must have the time, the knowledge, and the consultative

² Though we acknowledge and value the work of a range of persons who enact leadership related to instruction in schools (including teacher-leaders, coaches, data analysts, and instructional specialists), the focus of this particular study is on the ways in which those in formal administrative roles (typically principals and associate/assistant principals) engage in instructional leadership.

skills needed to provide teachers – in all the relevant grade levels and subject areas – with valid, useful advice about their instructional practices. While these assumptions have an attractive ring to them, they rest on shaky ground, at best; the evidence to date suggests that few principals have made the time and demonstrated the ability to provide high-quality instructional feedback to teachers. (p. 11)

Efforts to develop and engage as instructional leaders are complicated by issues of logistics, the tensions of supervision and evaluation, and knowledge and skills limitations. Simply in terms of the school year calendar and workday, making time for acts of instructional leadership is difficult (Backor & Gordon, 2015; Carraway & Young, 2015; May & Supovitz, 2011). Depending on the campus in question, a few school leaders and associated specialists may be tasked with supervising and/or evaluating a broad span of teachers, limiting time for observation, planning, and reflective dialogue. Involving other personnel – such as department heads and instructional coaches – does not fully solve the problem of time, as school leaders are faced with a multitude of ‘competing goods’ tasks (Shoho & Barnett, 2010).

Beyond limitations of time, what happens *within* the time shared by the instructional leader-teacher dyad matters. Tensions between supervision and evaluation challenge the work of instructional leadership. When the same person is both supervisor and evaluator, or even when both roles are distributed within a single leadership team, the trust needed to facilitate professional growth can be eroded when teachers perceive job security is at risk (Hazi, 1994; Mette et al., 2017). To get to the kinds of in-depth, sometimes difficult dialogues needed to effect change, the leader-teacher dyad necessitates a level of professional trust (Wahlstrom & Louis, 2008), and instructional leaders must navigate the supervision-evaluation tension as they work to establish this foundation.

Even when trust is established, the kinds of work done within the dyad must be of a type likely to catalyze changes in pedagogy. In the presence of time limitations, prioritizing the kinds of leadership acts that matter most becomes a critical skill. As Grissom et al. (2013) note, “An obvious challenge for a concept as broad as *leadership functions that support teaching and learning* is distilling which behaviors count as instructional leadership and which do not” (p. 433). In their longitudinal study of 100 urban principals, Grissom et al. (2013) determined that practices commonly assumed to contribute to instructional improvements (like informal classroom walkthroughs) do not always yield assumed positive outcomes, but that more in-depth instructional work (e.g., coaching) was predictive of student achievement gains. In other words, not all actions that appear instructionally-related are of equal value.

Finally, the work of instructional leadership is complicated by limitations of knowledge and skills. Engaging with teachers in dialogue around issues of pedagogy; wrestling with what is being taught, when, and how; and excavating assumptions around how learning is measured are at the core of what it means to be an instructional leader (e.g., Brazer & Bauer, 2013; Louis, Leithwood et al., 2010; May & Supovitz, 2011). Facilitating instructionally-focused conversations, then, requires not only a modicum of coaching skills (e.g., Carraway & Young, 2015; Desimone & Pak, 2017; Knight, 2009; Neumerski, 2012) but also familiarity with instructional strategies that are applicable across multiple content areas and grade levels (e.g., Hattie, 2012; Marzano, 2009; Marzano et al., 2011).

In line with Stein and Nelson (2003), we assert that a third element is essential in seeding and strengthening instructional leadership efforts: leadership content knowledge (LCK). Without a baseline understanding of what good practice looks and sounds like in a particular content area and/or grade level, school leaders may fail to notice the presence or magnitude of instructional problems or be ill-equipped to support the continued development of exemplary teachers. Gaps in LCK hinder leaders from engaging in the kinds of supervisory acts that promote teacher growth.

Although LCK is not a new concept, few studies have examined the role LCK plays in school leaders' efforts to function as instructional leaders. We know little about how instructional leadership efforts rely on or reflect LCK, or how teachers respond to the perceived LCK (or lack of LCK) among leaders. Therefore, the purpose of this study was to explore the ways in which leadership content knowledge (LCK) facilitates or – in its absence, hinders – instructional leadership. The study was guided by two questions:

- 1) How do teachers characterize the instructional support they receive from school leaders?
- 2) How do school leaders characterize their efforts to support teachers who work in grade levels or content areas familiar and unfamiliar to the leader?

Theoretical Framework

In considering the role of the school leader in supporting and sustaining equitable and effective instructional practices, we draw on work related to LCK as described by Stein and Nelson (2003). In doing so, we begin from a fundamental assumption that an important and appropriate dimension of school leaders' work involves meaningful engagement in issues of curriculum, instruction, and assessment. Such an assumption aligns not only with national standards for school leaders (NPBEA, 2015), but also work related to school leadership responsibilities more broadly (Brazer & Bauer, 2013; Darling-Hammond et al., 2010; Hallinger & Murphy, 1985; Wahlstrom & Louis, 2008; Leithwood et al., 2010).

LCK builds on Shulman's (1986, 1987) concept of *pedagogical content knowledge* (PCK). PCK "goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge *for teaching*" and includes, "for the most regularly taught topics in one's subject area, the most useful forms of representation of those ideas" as well as "an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons" (Shulman, 1986, p. 9).

The construct of PCK suggests that focusing only on general instructional practices is insufficient for supporting robust instructional leadership. Certainly, school leaders cannot be expected to know everything about every content area, particularly in comprehensive secondary schools (e.g., Steele et al., 2015). To bridge what leaders *in the ideal* would know about content area instruction, in order to be well-positioned to support and sustain teacher growth, and what school leaders *can reasonably be expected* to know, Stein and Nelson (2003) proposed the

concept of LCK, or “that knowledge of academic subjects that is used by administrators when they function as instructional leaders” (2003, p. 423). Rather than expecting school leaders to have comprehensive and encyclopedic knowledge of content and pedagogy, they suggest:

All administrators have solid mastery of at least one subject (and the learning and teaching of it) and that they develop expertise in other subjects by *postholing*, that is, conducting in-depth explorations of an important but bounded slice of the subject, how it is learned, and how it is taught. (p. 423)

Brazer and Bauer (2013) assert that postholing does not go far *enough*: They suggest that leaders develop deeper knowledge in the content areas as such knowledge affects how they understand the work of and subsequently engage with teachers. They further argue that LCK should incorporate more depth and breadth in various content areas so that leaders are “conversant in several content areas” (p. 662). Still, LCK is a reasonable starting point for exploring attributes of instructional dialogues shared by the school leader-teacher dyad.

Leaders who develop and apply LCK may do so in harmony with other strategic approaches to instructional leadership. Some leaders adopt a distributed leadership approach to draw on needed expertise that inheres in a broader network of professionals (Spillane et al., 2003). Such an approach does not mean that the leader disengages from instructional dialogue, but positions the school leader as an active and engaged partner with the broader leadership team, sometimes providing input, sometimes coaching, and sometimes participating as a co-learner (e.g., Burch & Spillane, 2003; Spillane et al., 2003; Tuytens & Devos, 2017), all the while building content-specific knowledge and understanding. In contexts where fiscal and personnel resources are constrained, the onus is on leaders to develop and subsequently draw on LCK in efforts to support instructionally-focused dialogues to support teacher development.

Leaders may elect to focus time and energy on broader pedagogical strategies, particularly when tasked with supervising, evaluating, and otherwise supporting teachers in less familiar (or unfamiliar) content areas (Lochmiller & Acker-Hocevar, 2016). This focus may include strategies that have demonstrated applicability across content areas, like “making thinking visible” (Hattie, 2012); formative assessment (William, 2018); differentiation (Tomlinson, 2014), active and engaged learning (Marzano & Pickering, 2011); or “understanding by design” and backwards planning (Wiggins & McTighe, 2005).

The framework for the present study does not negate that broader collaborative and pedagogical strategies can be constructive; however, these practices are not mutually exclusive with LCK. LCK is a critical support that enables leaders to engage with teachers in rich instructional dialogue that would likely be diminished if leaders lacked LCK, or failed to draw upon LCK in acts of supervision. Leaders’ efforts to develop LCK provide an enhanced lens for interpreting and discussing what leaders observe in classrooms.

Methods

The purpose of the present study was to examine how LCK, or lack thereof, facilitates or hinders the enactment of responsibilities associated with the role of an instructional leader. In order to

understand teachers' perceptions of the support they receive from school leaders and school leaders' characterizations of their efforts to support teachers in areas of content and grade level match and mismatch (i.e., instructional mis/match), we used a phenomenological approach (Saldaña, 2011).

Participants

In response to the guiding questions, we interviewed 31 individuals, using purposeful and stratified sampling. Starting with professional networks and employing snowball sampling (Merriam & Tisdell, 2016), we identified 15 school leaders (principals and assistant principals) and 16 teachers; both groups included at least five persons from the elementary, middle, and high school levels, respectively. Additionally, school leader and teacher participants had a range of content area (e.g., mathematics, science, English language arts) and grade level (e.g., elementary, middle, high school) expertise.

Among participants, 38% of teachers and 47% of school leaders obtained their initial teaching credentials via an alternative-certification process (as opposed to a traditional university-based preparation program). Teacher participants ranged in experience from 3 to 32 years; school leader participants ranged in experience in administrative roles from 2 to 20 years. Of the 16 teachers, only 10 reported receiving feedback from a school leader in a context of instructional match at some point in their careers. In contrast, 15 of the 16 teachers reported evaluative interactions with school leaders in situations of instructional mismatch. Although 12 of the 15 school leaders described supervising teachers with whom they shared content and/or grade level expertise, 14 of the 15 described regular engagement with teachers in areas of instructional mismatch. See Tables 1 and 2 for more details on teacher and school leader participants.

Procedure

Interviews were guided by semi-structured protocols (Merriam & Tisdell, 2016), specific to either teachers or school leaders. Interview questions and prompts focused on the nature of feedback received or provided by the participant within formal or informal supervision or evaluation processes and probed for examples of feedback in instances of content area/grade level match and/or mismatch between school leader and teacher. Sample queries for teacher participants included:

- What kind of feedback do you receive when you are evaluated by someone who shares your content area (or grade level) expertise? What about when that person does not share your content area or grade level expertise?
- What do you wish your evaluator and/or supervisor understood about instruction in your content area (or grade level)?

Table 1
Teacher Participants

Name	Route to Certification ³	Teaching Assignment	Experience (Yrs.)	Focus of Undergraduate Degree	Highest Degree Earned
<i>Elementary</i>					
Tracy	UBP	First Grade	14	Elementary Education	Undergraduate
Raquelle	UBP	First Grade	17	Elementary Education	Master's in Moderate Special Needs
Reina	Alt	Primary Dual Language	11	Interdisciplinary Studies	Master's in Reading Education
Patrice	UBP	Fourth Grade	5	Interdisciplinary Studies	Undergraduate
Manuel	UBP	Primary Dual Language	16	Elementary Education	Undergraduate
<i>Middle</i>					
Ty	Alt	Science and Social Studies	10	Aviation and Business Administration	Undergraduate
Elle	UBP	ELAR	11	English	Master's in Educational Administration
Marissa	UBP	Algebra (Physics and Calculus in High School)	32	Biology	Master's in Curriculum and Instruction
Monica	Alt	ELAR	3	Anthropology	Master's in Educational Leadership
Sara	Alt	Special Education	9	Child Psychology	Master's in Educational Leadership
<i>High</i>					
Victoria	Alt	Physics	5	Health Science	Undergraduate
Ben	UBP	Social Studies	7	History	Master's in Educational Administration
Simone	UBP	French	10	French	Undergraduate
Milo	UBP	Mathematics	3	Mathematics and Government	Undergraduate
Stephanie	UBP	Mathematics	7	Mathematics	Master's in Mathematics Education
Laura	Alt	English	5	Human Development and Family Studies	Master's in Educational Leadership

³ Traditional, university-based preparation (UBP) or Alternative certification program (Alt)

Table 2
School Leader Participants

Name	Route to Teaching Certification	Prior Teaching Assignment	Focus of Undergraduate Degree	Teaching Experience (Yrs.)	Leadership Experience (Yrs.)	Highest Degree Earned
<i>Elementary</i>						
Vanya	UBP	Elementary	Elementary Education	6	20	Master's in Educational Administration
Paulette	Alt	Elementary Special Education	General Studies emphasis in Special Education	14	3	Master's in Special Education ⁴
Karen	UBP	High School Biology and Chemistry	Curriculum & Instruction (Science)	7	17	Master's in Counseling & Guidance and Administrative Leadership
Darren	Alt	Elementary	Telecommunications	5	9	Master's in Educational Leadership
Kara	UBP	Primary	Speech Communication	18	6	Master's in Educational Leadership
<i>Middle</i>						
Jade	UBP	Middle School ELA	Middle School ELA	7	3	Master's in Educational Leadership
Danelle ⁵	UBP	Middle School PE and Science	Exercise and Sport Science and Biology Minor	11	12	Master's in Educational Leadership
Chip	Alt	Secondary ELA and Social Studies	History	4	2	Master's in Educational Leadership
Joel	UBP	High School Social Studies	History	5	15	Master's in Educational Administration
Mateo	UBP	Secondary Mathematics	Mathematics	7	13	Master's in both Curriculum Design and Educational Leadership
<i>High</i>						
Isaiah	Alt	High School Mathematics	Pre-med Mathematics	5	4	Master's in Educational Leadership
Jaylen	Alt	Secondary Science	Biology	4	6	Master's in Physical Science Education ⁴
Beatriz	UBP	High School Mathematics	Kinesiology and Physical Education	6	3	Master's in Educational Leadership and Policy Studies
David	Alt	High School Mathematics	Philosophy and Mathematics	10	3	Master's in Educational Leadership
Rafe	Alt	Middle School PE and Social Studies	Computer Information Systems	13	2	Master's in Educational Leadership

⁴ With administrator certification

⁵ Danelle also worked five years as an elementary school assistant principal and principal

Sample queries for school leader participants included:

- What are the challenges associated with supervising and/or evaluating teachers out of your content area? What do you do to address these challenges?
- In what ways does the kind of feedback you provide teachers who share your content area differ from the feedback you provide teachers out of your content area?

Interviews of participants lasted from 30 to 60 minutes each. To establish a level of consistency in implementing the interview protocol, the two researchers collaboratively conducted the initial interview. Each of the remaining 30 participants was interviewed once by one of the researchers. Interviews were audio-recorded, transcribed, and subsequently loaded into Dedoose qualitative software to facilitate analysis.

Data Analysis

Analyses were conducted in line with the process suggested by Miles, Huberman, and Saldaña (2013). First cycle coding, conducted collaboratively by both researchers for six of the interviews (three teachers and three leaders, one at each grade band), allowed for the emergence of numerous potential codes and categories. With code saturation achieved, codes were collapsed and more precisely defined in preparation for second cycle coding. For example, the code *Leader as boundary spanner* was merged with *Broker of professional learning*. Codes were refined and organized into broader thematic categories, and a second cycle of analysis applying these codes was implemented for all interviews. Each transcript was collaboratively coded by both authors. See Table 3 for a selection of codes pertinent to the findings reported herein.

Findings

Despite the different working contexts and variety of professional backgrounds (e.g., experience, content expertise, grade level expertise, preparation programs), analysis of interview data enabled us to draw conclusions about how instructional leadership unfolds and intersects with LCK. In the following, we provide analysis of data specific to: (1) the factors teachers described as foundational to instructional leadership efforts and (2) approaches and efforts of school leaders related to supporting improved instruction.

Teacher Needs

With respect to our first guiding question, interview data suggested that effective instructional leadership needed to be undergirded by a constellation of factors perceived as contributing to positive teacher-leader relationships and to teacher professional growth. Regardless of the context of match or mismatch, these factors functioned as precursors to establishing the foundation needed for teachers and leaders to engage in robust dialogues aimed at instructional improvement.

Table 3
Selected Categories and Codes

Category	Codes
Teacher Needs	Non-PCK related PCK-related Timely feedback Empathy/understanding Presence
Role of School Leader	Cheerleader Broker of professional learning Co-learner Coach Monitor
Type of Feedback	Atmospheric Absence Crossover practices One-way PCK-focused
Context of Instructional Leadership	Teacher-instructional leader match Teacher-instructional leader mismatch

Establishing constructive teacher-leader relationships. Twelve of the 16 teachers indicated that effective instructional leadership required *presence*. “I wanted people to see what I was doing,” said Simone, a French teacher. Teachers further articulated a desire for school leaders to be in classrooms more frequently and for larger blocks of time. Middle school special education teacher Sara explained:

Right now we get observed once a year, and I don't think that is really reflective of the teaching or learning process. I mean you get to come in my room one time and see what I'm doing in that one instance. So you don't know what I did before, what I'm doing after ... even the walk-throughs are few and far between.

Elementary teacher Tracy shared being described by a former principal as an exemplar teacher; however, “he had never been in my classroom and he didn't hire me ... He thought I was a fabulous teacher but he had never once been in my classroom.” Teachers who wanted leader presence talked about how increased engagement in classrooms would allow leaders to better understand the context of instruction.

Beyond presence, nine teachers talked about desiring *empathy and understanding* from school leaders, related to the complexity and demands of different classrooms. “Remember what it was like when you were a teacher,” advised Patrice, an elementary school teacher. “Remember how there is never enough time – there's never enough. ... When you lose that mentality, you think it's all possible, except it's not.” Empathy and understanding facilitated how general instructional feedback was received. Raquelle, a first-grade teacher, talked about receiving walkthrough feedback from a school leader:

[It was] quick, on a post-it note, and [said], “I noticed your students don't write as much as the other first grade students,” and that was it. I was like, “There’s nothing... You just made me feel terrible, and you didn't help me in any way.” So I’m thinking she could have easily said, “Let’s go observe another class,” or “Let’s look at your student work. I would like you to get them to write more. How can we do that?” I feel like there are ten other ways she could have gotten me to get my students to write more.

Such understanding was also critical in establishing the kind of trust needed for feedback dialogues more specifically aimed at content and grade level related issues. For example, related to grade level, Laura (a high school English teacher), said, “When it comes to ninth graders, [leaders need to] understand that they are still searching for their identity. So, there are behaviors and things that may come across as, you know, not good for classroom management, but it’s age appropriate.” Teachers asserted that instructional feedback was more useful when it involved not only generalized empathy (“know what our jobs are really like”) but also understanding about the nuances of particular content or grade level appropriate practices.

Contributing to teacher professional growth. Six teacher participants regularly talked about the ways in which they wanted school leaders to provide *timely feedback*. Teachers wanted more regular feedback, but they also wanted feedback in closer proximity to the observation/walkthrough. Milo, a high school mathematics teacher, explained, “Like when I'm doing something wrong, I wish [the feedback] was just-in-time. It was like, ‘Oh, I see that you're doing this this way. How about we modify it like this?’ and if it can't be just-in-time, I wish it was at least some more thorough conversation.” Raquelle, a first grade teacher, described receiving feedback at the end of the school year, and indicated that the information would have been more useful had it been received at a point in time where she could have made instructional adjustments.

The same number of teachers described welcoming *non-PCK related* feedback when it fostered professional growth by adding instructional strategies to teachers’ repertoires. Ben, a high school social studies teacher, talked about wanting, “a specific tip or a specific strategy that you could try with a class to get them more engaged and get them to understand the process, to get them moving around more.” Physics teacher Victoria suggested that, in particular, early career teachers might need feedback “about building relationships ... how to talk to students ... especially those that have different cultures or different backgrounds.” Others mentioned desiring feedback/supports that crossed content areas, such as establishing classroom norms and routines, building relationships with students, and enacting culturally responsive practices.

Eleven teachers talked about valuing *PCK-related* feedback. “I wish [school leaders] knew best practices for the different content areas,” Patrice (an elementary teacher) said. Such knowledge was seen as being able to seed productive conversations and avoid misunderstandings. For example, Victoria, a high school physics teacher, described how a lack of such knowledge impeded an instructional feedback session with her supervisor:

A lot of our content concepts build upon each other, and doing things out of order can cause a lot of misconceptions for students. ... for example, [teaching] Newton’s laws before teaching motion and kinematics – that’s not something that our kids are going to

be able to grasp and make connections with. So, that's one thing, understanding the sequence. And in that same way, understanding how we introduce topics. I do a lot of inquiry based [lessons]. I remember having an observation during that first part [of the learning sequence.]. My evaluator was asking my students questions, like, 'Why does it do that?' and they were like, 'I don't know.' And they weren't supposed to know yet – they have not gotten to that place.

Despite describing the value of instructional feedback that was rich in pedagogical content knowledge, teachers also noted that they rarely received this kind of feedback from school leaders. "The biggest problem that we have is that our administrator has never really taught in a content area – and it is not reflected in [feedback]," Stephanie, a high school mathematics teacher, reported.

Approaches and Efforts of School Leaders

The approaches and efforts of school leaders related to instruction fell under two main categories: the role(s) enacted by school leaders and the type of feedback school leaders provided to teachers. Five school leader roles that emerged from analysis of the data were monitor, cheerleader, broker, co-learner, and coach. Types of feedback ranged from absence to one-way, atmospheric, crossover, and PCK-focused. Mediating factors in the variety of approaches and efforts were school leaders' LCK and the context of instructional match or mismatch between teacher and leader.

Role of school leader. One role of school leaders was *monitor*, as described by 12 of the 31 participants. For instance, Paulette, an elementary school assistant principal, shared: "On my campus, we have a new curriculum this year. And, so the district has asked us to go and just to make sure that they're using the curriculum, to make sure there's alignment there." This role was evident when the work of supervising teachers was reduced to completing a checklist of expected behaviors. Beatriz, a high school assistant principal, explained her district's focus for observations included three components: posting and alignment of learning goals, student engagement, and formative assessment. Teacher Ben similarly described the focus of his school leaders' observations: "So, in a formal evaluation, you'll have a handful of walk-throughs – basically kind of at-a-glance things. They'll just walk in the door for about five minutes. They'll look at your boards. They'll see how the kids are engaged."

Marissa, a middle school mathematics and science teacher, offered what she thought contributed to school leaders' tendency to lean heavily into the role of monitor:

It's an administrator who feels really insecure in their ability to do the job, and that means that there's an awful lot of cross-checking and monitoring ... It would be like helicopter parenting except that it's an administrator doing it to teachers. That constant overshadowing and hovering.

In fact, nine school leader participants did talk about feeling insecure or less confident in their abilities as instructional leaders in situations of mismatch. Some also described a tension enacting the role of monitor. High school assistant principal David explained:

On one level, I fight the compliance. There are things on the campus, initiatives on the campus that we need to comply with – posting an objective. Well, with fine arts, they do these long-term projects, and trying to get a narrow focus for even two days, three days at a time is resisted. So, you're fighting this battle about compliance that underneath it, there's a deeper pedagogy conversation.

Some school leaders acted as monitor in efforts to follow district mandates, others relied on this role due to discomfort related to mismatch, and yet others attempted to manage the inherent tension between supervision for compliance and supervision for teacher growth.

Six school leaders considered an aspect of their role as an instructional leader was to provide positive reinforcement to teachers, or serve as a *cheerleader*. Vanya, an elementary principal, explained, "I believe it's really our charge or our duty; we really have to provide them with some feedback. Even if it's just a casual conversation, 'Hey, I enjoyed being in your room. The kids were really engaged.'" Seven teachers described their leaders' role as cheerleader, and several teachers expressed their appreciation for the acknowledgment of their work. However, teachers also said that cheerleading alone was ultimately insufficient to support their development. Milo, a high school mathematics teacher, explained that most school leaders:

Come in and they say, "Oh, 15 out of 15 engaged. Good job. Great question!" ... It's all pluses and no deltas ... But if I make it a point to go have a conversation after and say, "Hey, during this moment, what did you think of the way I did this?" then I'll get something out of it. But that doesn't tend to happen very often.

Sometimes school leaders attributed the nature of their role to teacher-leader mismatch. For example, Kara, an elementary principal with lower-elementary expertise, describes her role when she interacts with upper elementary teachers:

I don't want to say that my upper grade conferences aren't productive. ... But a lot of times, I'm just there to validate. "Oh, I think you're thinking on the right track. Keep going with that thought. Let's see if we can get some more ideas going." So, the conferences are different, of course, from primary to the upper grades, but I feel like they are still purposeful and meaningful.

In situations of match, some administrators who had LCK and were potentially capable of supporting teacher growth also solely provided positive reinforcement. Ben, a high school social studies teacher, described his school leader: "Able, yes. Happen, no. He's got the knowledge. ... but unless there is a specific problem, [he doesn't] say much. It's pretty much just 'Good job.'"

Eight teachers and 13 school leaders described the school leader as a *broker* of professional learning. Many of these comments were specific to situations of teacher-leader mismatch. For example, Rafe, a high school principal, succinctly stated: "If I can't get it to you, I'm going to find it for you." Mateo, a middle school principal, explained how he used other resources when he did not have the content area expertise:

When I get to the point where I think [teachers] don't know the content ..., then I'll get someone to come in to see if they know because I can't address the content. That's because I don't know it. I can tell that there's something not right. I just can't identify it.

School leaders also served as a broker of professional learning by providing teachers with classroom materials (e.g., graphing calculators), funding professional development opportunities, fostering mentor-mentee relationships, and organizing peer observations. For example, Vanya, an elementary principal, supported a novice teacher by pairing her with an instructional coach: "I have a teacher with no experience this year ... So, we do have instructional coaches that can also come, and so the instructional coach – that is her mentor." Some teachers, like high school science teacher Victoria, appreciated these learning opportunities: "When I first started my administrator actually had me observe the other physics teacher, a veteran teacher at that school. Observing her was helpful." Others found these opportunities less helpful. Raquelle, an elementary school teacher, shared that her principal responded negatively to some instructional strategies, and suggested she observe another teacher. However, Raquelle noted that the recommended teacher also used the criticized strategy. "I was confused because [the principal] just told me to observe [a specific teacher], but [the principal doesn't] want me doing what she's doing. She should have done a little research before she picked who I should observe." School leaders' level of LCK influenced whether they were able to broker effectively.

School leaders sometimes enacted a *co-learner* role according to comments made by two teacher participants and 13 school leader participants. Describing his work in the area of match, high school assistant principal David articulated:

I do think that my expertise in math enriches those conversations because I can move to a collaborative level at times and bring in new information or spur ideas, but not constantly. The best conversations are the ones where I have expertise, but I'm not flooding the conversation with that expertise; I'm just participating.

Adopting the position of co-learner equipped with LCK allowed David to honor the professionalism of teachers and engage in a mutually beneficial discussion around instruction. In a case of mismatch, Kara, an elementary principal with a primary literacy background, explained how she learned alongside her upper elementary teachers:

It's tricky because you can't really support them in the content area, but fortunately for us, we have the district personnel that can come. So, when ... I'm conferencing with them, and if they're saying, "Well, I'm really having a hard teaching this concept," the first thing I say is, "Well, let's get the district specialist out here, and they can help us to work together. Then they'll help us come up with some lesson ideas, and then I can help you in how to deliver those ideas."

In other situations, school leaders collaborated with teachers through systematic structures, such as professional learning communities, team planning, and focused walkthroughs. For example, Karen, an elementary school leader, actively participated in the planning with her teachers: "I do a lot of planning with the teams and digging into the curriculum and the standards and the specificity, and so then seeing that in the classroom." Marissa, a middle school mathematics and

science teacher, elaborated: “Our principal is standing right there interacting with us as we're having that conversation and chiming in on it and listening to it. So, [staff development] is continuous and ongoing. So, the pre-conference lasts all year until you get observed.” The role of school leader as a co-learner seemed to be a viable pathway for leaders aiming to build LCK.

Six teacher participants and 11 school leader participants described engaging in instructional conversations reflective of the role of *coach*. David talked about his understanding of the coach role in part as “finding where they're at, what they need, which way we can grow.” Chip, a middle school assistant principal, expanded on this to include reflection: “The way that we [support teacher growth] is to really help them reflect on their own practice. ... I think that really helps with self-reflection for them and then also for me.” Some leaders provided details on how they enacted the role of coach, like Beatriz, a high school assistant principal:

I think one of my biggest things is providing feedback in a way that allows for the teacher to think through how they would [engage in planning and instruction]. So, usually when I give feedback, I'm very much a question person, like, “Have you thought of this?” or “What would help this?” I don't ever tell them, like, “You need to be doing...” ... I'm very much just questions and having the teachers come up with solutions that would best fit.

The coaching strategies utilized by Beatriz were content neutral. Other leaders were able to integrate content-specific strategies into their coaching. For instance, Milo discussed his perspective on coaching experiences in the case of teacher-leader match:

That person who shared my content area was extraordinary.... He had the unique ability to watch me teach, make suggestions, and be able to show me how it's supposed to look, which I don't believe that other administrators are always able to do. Then once he showed me, he would stay there and to watch me implement it, and then he would debrief with me after I implemented, and then he would offer me – it was a bit of a cycle.... It did make me grow. He was so concerned with my professional development.

Coaching approaches were thus enhanced when the leader was able to draw upon LCK.

Type of feedback. The type of feedback school leaders provided to teachers varied with respect to substance. At one end of the spectrum, eight teachers described supervision and/or evaluation processes in which they experienced an *absence* of feedback. For example, Simone, a high school French teacher, reported at times: “I just didn't get feedback of any kind.” Similarly, David, a high school assistant principal, reflected on his time as a teacher: “My first several years in the classroom oddly had very little adult feedback. I went for weeks without having an adult speak to me in any meaningful way.” This absence of feedback occurred with teacher-leader mismatch (“Never heard a word because nobody ever had a clue about the content” [reported Marissa, a middle school science and mathematics teacher]) as well as match (“Limited to none” [from Ben, a high school social studies teacher]).

Sometimes school leaders provided *one-way* feedback, or feedback without the expectation of further discussion, especially for informal observations such as walk-throughs. Although only

two school leaders described such practices, 10 teachers reported receiving one-way feedback. School leaders viewed such practices as efficient:

I love the walk-throughs and providing that feedback to teachers. ... It's immediate. ... I put [feedback] immediately into [a computer program]. So, then I click to save and then I click to let teacher view and then I walk out the door. (Danelle, a middle school principal)

The school leaders sometimes offered the opportunity for follow-up dialogue, as described by Mateo, a middle school principal: "So then I just ask them to sign [feedback form] and turn it in to me and set up a meeting if they want to discuss it and talk about it." However, some teachers, like Ben, a high school social studies teacher, got the impression that the offer was not genuine:

You just get it in an email, and 95% of the times it just says "Observed" and "Proficient," and they don't have any concerns. The email says, "If you want a conference, you can have one." But, informally, you get the idea that they're not interested in a conference.

School leaders' practices sometimes resulted in mixed messages and varying perceptions about whether deeper dialogues about instruction were desired.

The focus of leaders' feedback to teachers was often *atmospheric*. Specifically, eight school leaders and 13 teachers reported feedback focused on aspects of classroom climate. Elementary teacher Patrice described feedback as "not really being as attuned to the actual instruction, but more like the climate, the culture, the feel of the room." Atmospheric feedback generally centered on classroom organization and student behavior:

There's a lot of neutral feedback. That's probably what we get most of all. It's positive as far as "the classroom's under control," but other than that, it's all very neutral. "Kids are doing what they're supposed to be doing. Kids are engaged." I mean, we get that a lot. It's like, "Okay that's great." But, we don't get feedback as far as the teaching. (Stephanie, a high school mathematics teacher)

Marissa, a middle school mathematics and science teacher, echoed this focus: "[My administrator] really was more looking at student engagement, and ... had no idea really whether I was teaching the content correctly or not." Teachers' comments suggested reliance on atmospheric feedback was due to school leaders' inability to speak to deeper issues of content-related pedagogy. In contrast, some school leaders believed that content familiarity was not necessary to provide teachers with feedback. For example, Danelle, a middle school principal, explained, "You come to realize – I believe, anyway – that good instruction is good instruction." Still, of 18 instances of the co-occurrence of codes *Atmospheric* and *Context of Instructional Leadership*, only two were nested in contexts of instructional match; 16 were in conjunction with descriptions of instructional mismatch.

School leader feedback sometimes attended to general instructional, or *crossover*, practices, such as formative assessment, differentiation, student collaboration, instructional approaches, and teacher questioning, as described by 11 school leaders and 12 teachers. Leaders acknowledged that if they could not provide content-focused feedback, they could address how instruction is

delivered in more general terms. Mateo, a middle school principal, explained how his approach to supporting teachers was grounded in the assumption that certain instructional strategies apply across the content areas:

And so, within any content you teach, there are certain teacher moves or teacher strategies or certain techniques you can use to help enrich the conversation or to provide teachers an opportunity to talk about where they're at that point, and those are universal across the curriculum. So, I try to focus more on the methodology of instruction than on the content.

Raquelle appreciated this type of feedback: "So, where someone's coming and watching a lesson and then they suggest [an assessment] tool I could use on a daily basis ... something I can really incorporate into my teaching is really helpful." Other teachers specifically talked about the value of feedback related to technology integration, questioning strategies, and instructional tools. However, some teachers acknowledged limitations of feedback related to crossover practices:

[School leaders] tend to focus on ... questioning, but just in general. Just like, "Is your question higher order?" but not, "Does your question actually match what's being taught?" ... They tend to focus on the fundamentals of teaching versus actually what is being taught, which ... makes it difficult. (Milo, a high school mathematics teacher)

When *Crossover practices* was coded in conjunction with *Context of Instructional Leadership* (25 instances), 21 were in situations of instructional mismatch and only four were in contexts of instructional match.

Eight teachers and nine school leaders discussed *PCK-focused* feedback, or feedback that addressed the intersection of pedagogical practices and content. Victoria, a high school physics teacher, described receiving "feedback about the actual content and the actual pedagogy," which she noted was "most helpful." However, teachers reported that PCK-focused feedback most frequently came from persons other than school leaders (e.g., instructional specialists and department chairs). For example, Milo, a high school mathematics teacher, explained: "[My learning network specialist] engaged us in a conversation of how do you build a child's understanding of functions, which is so much more meaningful than did I do a 'thumbs-up' seven minutes ago?" Teachers suggested a difference in the type of feedback they received in situations of teacher-leader match: "There's a lot more specifics given about the curricular aspect in an evaluation by somebody who really does know the [content]" (Marissa, a middle school mathematics and science teacher).

School leaders concurred that the nature of their feedback varied depending on their content area or grade level expertise. For instance, Kara, an elementary principal, explained:

With the primary, I'm definitely much more knowledgeable, and our conversations do cover a lot of the content. We do instructional team meetings for every grade level, and I'm much more vocal in the primary grades than I am in the upper grades. So, our conversations during those post-conferences can be more in depth with the primary just because I can touch on both the instructional strategies and the content area.

Similarly, Isaiah, a high school assistant principal and former mathematics teacher, described how his feedback was enriched when he was able to draw on his content area expertise:

For someone outside of my content, I can only check to see if the question aligns with the learning goal. But, for someone in math, not only could I check to see if it aligns with the learning goal, I could check to see how rigorous or how complex the question is. I can even help find some complex questions for them. So, I go beyond just looking for the alignment to provide the support of, “Okay, here’s the question that you can actually ask to assess that specific learning goal.”

Twenty comments evidenced the co-occurrence of the codes *PCK-focused* and *Context of Instructional leadership*. Of these, 17 were related to contexts of instructional match, and only three were reported in conjunction with instructional mismatch.

Discussion and Implications

At the heart of instructional leadership is the relationship between leaders, teachers, and learning in the classroom. To be an effective instructional leader, one must be able to have substantive dialogue about instruction and teacher growth. Unlike teachers who should develop PCK or comprehensive knowledge at the intersection of subject matter and pedagogy, school leaders should build their LCK or a “bounded slice” of PCK through postholing across the subject areas (Stein & Nelson, 2003). Considering the findings of our study through the lens of LCK, we argue for reframing the role of the school leader in instruction. To improve instructional leadership efforts, leaders should: (1) embrace a spectrum of mutually reinforcing roles; (2) craft personal learning plans that support the intentional building of LCK over time; (3) balance efforts to provide both efficient and high-quality feedback to teachers; and (4) enhance the potential of distributed leadership.

Instructional Leadership: Embracing A Spectrum of Roles

A focus on instruction is a key factor in school improvement efforts (Glickman et al., 2014; Hallinger, 2005; Hitt & Tucker, 2016), and how the leader navigates multiple responsibilities related to instruction (e.g., interviewing/hiring, curriculum selection/implementation, and teacher supervision and evaluation) contributes to a sense of instructional coherence. Our findings suggest leaders engage in multiple roles within their instructional leadership efforts, and that there are times when each of the five (non-mutually-exclusive) roles (*monitor*, *cheerleader*, *broker*, *co-learner*, and *coach*) do, in fact, meet teacher needs. However, some leaders in our study described supervisory acts that were rooted in only a few of the roles (i.e., *monitor* and *cheerleader*) and the degree to which leaders moved in and out of the roles seemed to stem, in part, from whether the leader felt knowledgeable and confident in the content area being supervised. Inability to move fluidly in and out of the roles (or combine roles) to anticipate and address teacher needs limits leaders’ potential for effecting instructional improvement through rich feedback cycles.

Drawing on these findings, we think one path toward supporting leader development would be for school leaders to be cognizant of when they are enacting various roles, when they are inadvertently working from a restricted spectrum of roles, and what knowledge and skills they may need to develop in order to expand their repertoire. For example, leaders could review feedback provided to teachers (via email, walkthrough forms, scripted observations, or anecdotal notes from debriefs) and analyze calendaring (i.e., time dedicated to co-learning in PLCs or other professional learning opportunities) to explore and reflect on the roles enacted. Such work could inform professional growth plans for school leaders specific to acts of instructional supervision; making the work transparent can also align with calls for school leaders to be “lead learners” who model reflective, in-depth learning for those around them (Fullan, 2018; Thessin, 2019). Further, this is work that can be undertaken in a context of practice, and thus integrated into preparation efforts (e.g., Brazer & Bauer, 2013) in the context of principal supervisor-principal dyads (e.g., Honig & Rainey, 2019), or within broader district-led efforts to support principal-focused professional learning networks (Honig & Rainey, 2014).

Intentionality and LCK: A Pathway to Enhanced Instructional Leadership

Instructional leadership is critical, though exceedingly difficult. As far back as 1967, Bridges asserted, “On the one hand, the principal has been exhorted to exert instructional leadership, while on the other hand, he has been told flatly that such a role is beyond his or any other human being’s capacity” (p. 136). This “nobody can do it all” language persists, and may spur leaders to ascribe to a false dichotomy (e.g., Brazer & Bauer, 2013). On one side of this dichotomy is the concept of the *superhero leader* – the leader who has in-depth knowledge of content and pedagogy across all areas taught at a campus. This, of course, is unrealistic. Yet focusing on the perceived impossibility of the task allows leaders to shed responsibility for building any degree of LCK. As Brazer and Bauer (2013) suggest, however, this negation of responsibility leaves leaders underprepared to meet the needs of the spectrum of teachers on their campuses. For instance, leaders, who acknowledged degrees of discomfort with particular content areas, leaned into the philosophy of “good teaching is good teaching” (akin to the findings of Lochmiller, 2019) and often talked about providing feedback related to atmospheric and crossover practices in contexts of instructional mismatch. Such findings align well with other recent studies that suggest that instructional mismatch creates substantial challenges to leaders’ ability to provide useful feedback to secondary mathematics and science teachers (Lochmiller & Acker-Hocevar, 2016; Rigby et al., 2017).

The role of instructional leader warrants acknowledgment of the leader’s responsibility to purposefully and intentionally develop LCK across content areas. To be clear, our position is not that crossover practices – or even feedback about atmospheric aspects of the classroom – are not useful in supporting improved instruction. Rather, leaders who are able to intentionally build LCK such that they can make sense of what they observe in classrooms in more nuanced ways will be better positioned to support instructional improvement (Quebec Fuentes & Jimerson, 2019). Building LCK over time (for example, choosing one focal content area per year) opens access to a fuller array of supervisory roles and enables leaders to move in and out of the roles to provide PCK-focused feedback to meet teachers’ needs.

Balancing Efficiency and Effectiveness of Instructional Leadership

Teachers in our study talked about desiring timely feedback, and leaders (typically as they enacted monitor and/or cheerleader roles) shared that they used data systems, emails, and/or post-it notes to leave quick (albeit frequently *one-way*) feedback for teachers as they conducted walkthrough visits. However efficient these systems may seem, teacher comments suggested these quick, one-way efforts were adequate for offering encouragement, but often insufficient for providing the kinds of feedback that spur reflection and promote growth and changes in practice.

We think leaders would be well-served by considering three factors in attempts to balance the sometimes dueling aims of efficiency and effectiveness when it comes to providing instructional feedback. One factor involves *efficiency routines*. Leaders need to be intentional about the routines and systems (including calendaring routines) they use to ensure time is dedicated to closing the loop on observation cycles vis-a-vis debriefing and extending conversations post-walkthrough (Goldring et al., 2019; Lochmiller & Mancinelli, 2019).

A second factor is attending to building *constructive and trusting relationships* with teachers (e.g., Lochmiller, 2019; Wahlstrom & Louis, 2008). Such relationships have to be nurtured and sustained in word and deed, over time, so that teachers know they can embrace a degree of risk in the classroom. Risk might include trying new strategies for instruction, but could also include the ability to ask questions and offer differing perspectives. When leaders and teachers can attain a level of constructive vulnerability with one another, dialogues around instruction and problem-solving may be more fruitful (Tschannen-Moran, 2009, 2014)

A third, and related, factor involves leaders' work to establish and build *instructional credibility*. Lochmiller (2019) notes that trust functions as a prerequisite for effective instructionally-focused dialogues, but also points out that it is not a sufficient proxy for effectiveness. In reviewing the literature around instructional supervision and contextual factors, he concluded that leaders frequently assume teachers afford credibility because they have good relationships with their leaders. Instead, he notes, teachers can judge leaders credible as leaders *in general* while still making a determination that particular leaders are not credible sources of guidance related to particular areas of instruction.

Together, research around these factors (efficiency routines, the development of trusting relationships, and the building of instructional credibility) suggests that even "efficient" leaders who work to build strong relationships with teachers, but who do not make efforts to build LCK, miss out on opportunities to add value to their supervisory acts and to build credibility with the teachers they supervise. Instructional leaders should therefore build on instructional strengths, but also acknowledge limitations of instructional expertise and engage in subsequent intentional and public efforts to deepen learning – over time – across content areas. Such actions, as they involve transparency and willingness to engage with teachers as co-learner, have the potential to further strengthen relationships while contributing to perceived credibility around instruction.

Informed Distributed Leadership

As previously discussed, our findings revealed that when school leaders work in areas of instructional mismatch, they often fall back on the roles of cheerleader and monitor. Similarly, the types of feedback provided to teachers in these situations are often limited to atmospheric and crossover practices. However, leaders who acknowledged instructional limitations also talked about efforts to mitigate instructional mismatch by enacting a role of broker of professional learning. In this role, leaders connected teachers with resources (human and material) to address areas in need of further development. By stepping into the role of broker, leaders embraced the idea of distributed leadership (Spillane et al., 2003). However, to broker effectively, leaders must have a modicum of LCK. In other words, leaders need knowledge about instruction to be able to ascertain whether the resources to which they refer teachers match up well with their needs and reflect effective practices in a particular content area.

Additionally, distributed leadership does not mean that school leaders relinquish their responsibilities to work with teachers in efforts to enhance instruction (Jimerson & Quebec Fuentes, in press; Portin, et al., 2013). Instead, distributed leadership is a collaborative endeavor between those in formal leadership positions and other school leaders, such as instructional coaches (Spillane et al., 2003) and teacher-leaders (e.g., Gordon, 2019; Mangin, 2007; Portin et al., 2013). In line with this perspective, one way for leaders to enhance their LCK is to assume the dual roles of broker of professional learning and co-learner. As a co-learner, leaders learn from instructional specialists, teacher-leaders, or other supports alongside teachers. By merging these roles, school leaders maintain involvement in working with teachers while at the same time actively building their LCK, creating a virtuous cycle (Senge, 2006) that supports ever-increasing efficacy as an instructional leader.

Conclusion

Instructional leadership is positioned as central to effecting changes in classroom practice, but our study suggests that approaches not informed by LCK are not likely to affect meaningful changes in practice. Research to this point has stressed the importance of instructional leadership, but has only recently begun to explore the particular behaviors that leaders should embrace in order to function as effective instructional leaders. For example, Goldring et al. (2019) examine how leaders structure time to make room for instructionally-focused work. Our study suggests more work is needed on two additional levels. First, once time is allocated to instructionally-focused work, leaders need to be cognizant of and reflective about the range of roles they are inhabiting in their work with teachers and how these roles shape the type of feedback they are providing. Second, leaders need to consider how their LCK (or lack thereof) enables or constrains their ability to enact the full range of roles to meet teachers' respective needs.

The present study moves beyond established research by identifying a range of specific roles and types of feedback provided by instructional leaders. More research is needed to examine the impact of the various roles and types of feedback on teacher growth and student achievement. For example, we do not currently know how or to what degree leaders who work from a broader enactment of the roles (i.e., not limited to only *monitor* and/or *cheerleader*) influence changes in

teaching practice. Further research is also needed on effective pathways to building LCK (e.g., in preparation programs, within professional learning networks or personal learning plans, through structured professional development) and the impact of increased LCK on the quality of teacher-leader engagement. Research that examines the nuances of how school leaders build the knowledge and skills needed to enact meaningful instructional leadership is critical to moving the field of leadership preparation and development forward.

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