CONNECTING CENTRAL OFFICE COHERENCE TO PRINCIPAL CAPACITY DEVELOPMENT

by

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(Under the Direction of Sally J. Zepeda)

ABSTRACT

This action research case examined how central office curriculum coordinators, functioning as a learning organization, designed coherent systems of support to develop principals' instructional leadership capacity within a large, suburban school district.

Grounded in coherence and organizational learning theories, the study employed three iterative action research cycles focused on key drivers of coherence: building focus and coordination, cultivating assistive relationships, and changing behavior at scale.

Qualitative data were collected through multiple methods, including observing principal/coordinator pairs, partnership artifacts, pre/post-study interviews, participant questionnaires, and coordinator logs.

The findings revealed that central office leaders foster coherence with principals by establishing collaborative structures that promote shared understanding, data-driven decision-making, and mutual responsibility for instructional improvement. Further, the study identified the continuous evaluation of evidence, principal-centric support systems, and an ongoing pursuit of coherence as characteristics of a learning organization.

Curriculum coordinators, who are mid-level central office instructional leaders, were found to be critical in promoting coherence and alignment between district and school leaders, directly impacting the effectiveness of principals' instructional leadership. The study has implications for central office practice, highlighting the need for collaborative structures, continuous improvement efforts, and future research and policy focused on supporting coherent central office leadership.

Keywords: Assistive relationships, Central office leadership, Coherence,
Continuous improvement, District office effectiveness, Educational leadership,
Instructional leadership, Organizational learning, Principal development, Principal leadership capacity, School district leadership, Sociocultural learning

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DEDICATION

This dissertation honors the educators—from cabinet to classroom—whose collective efforts inspire and ensure the success of every student.

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I am eternally grateful to my parents, Sid and Ramona Lee, for their unwavering love and support. You instilled in me a deep value for education and the confidence to pursue any dream, even as a brown-haired little girl with presidential aspirations.

I extend my heartfelt gratitude to my incredible colleagues and friends. Your unwavering support, encouragement, and camaraderie were invaluable throughout this process. You actively stepped up to help me keep everything afloat, always with smiles on your faces. I am incredibly fortunate to work with educators who are deeply committed to continually serving students, teachers, and leaders well.

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CHAPTER 1

INTRODUCTION

With only a few exceptions, the literature from the early 2000s primarily detailed the *inability* of school district central offices to provide impactful support to schools, describing fragmented organizations which operate in silos and fail to provide coherent support or a collective vision for teaching and learning (Honig et al., 2010; Lanoue & Zepeda, 2018; Moore Johnson et al., 2015; Zepeda et al., 2021). From the findings on ineffective practices, one could hypothesize positive actions as the opposite of negative ones, such as working collaboratively across central office divisions and communicating a clear vision for instruction. However, limited empirical evidence exists to positively correlate central office practices to improved teaching and learning in schools (Cobb et al., 2018; Honig, 2012; Honig et al., 2010; Zepeda et al., 2021). Educational researchers have largely failed to articulate what central office leaders need to *know and do* to impact teaching and learning collectively.

Augustine et al.'s (2009) study was one exception that linked principals' jobembedded professional learning provided by central office leaders to principals' increased engagement in instructional leadership; however, the findings did not articulate the specific central office work practices that contributed to principals' increased engagement. Honig (2008) suggested that district effectiveness studies fail to "penetrate deeply into central offices to address what those who work within midsized to large district central offices do day-to-day that might support [teaching and learning] outcomes" (p. 629). Understanding the nature of peoples' work *inside* the central office can be a first step to engaging in the school district's development of systemwide learning processes (Bransford & Vye, 2008).

Educational researchers who have since studied the effectiveness of central office instructional leadership have focused heavily on the positions of the school superintendent and, more recently, that of the principal supervisor (Honig, 2008; Honig et al., 2010; Lanoue & Zepeda, 2018; Moore Johnson et al., 2015). However, such research fails to articulate what mid-level central office leaders might contribute to collective teaching and learning improvement efforts (Honig, 2008). Many researchers have overlooked the contributions of other district administrators altogether, "significantly masking the various people, units, work practices, and other conditions within...central offices that may matter to districtwide teaching and learning improvements" (Honig et al., 2010, p. 6).

Educational research has identified developing instructional leadership across an organization as a high-leverage practice for improved teaching and learning (Honig, 2012; Leithwood et al., 2019, 2020; Scott et al., 2020; Seashore Louis et al., 2010; Zepeda et al., 2021). Instructional leadership represents a set of instructionally focused work practices that principals integrate into their daily work through sustained central office support (Honig, 2012). Improving the quality and coherence of job-embedded professional development and targeted support that principals receive from central office leaders has emerged as a lever for improving instructional leadership at scale (Honig, 2012, 2013; Honig & Rainey, 2015; Rogers, 2022; Zepeda & Lanoue, 2017). Zepeda et al. (2021) suggested that central office leaders can position schools for success "when *all*

central office leaders understand the complexities of [school] transformation and clearly articulate a framework of what students should know and be able to do" (p. 227, emphasis in the original).

School leaders and teachers are dependent on productive, collaborative partnerships with the central office, which "coherently focus on specific needs, provide the right resources, [and] attend to the professional learning needs of teachers and principals" (Zepeda et al., 2021, p. 136). Thus, to support principals in their school improvement efforts, central office leaders must understand the conditions that prime school leaders for success, articulate a clear vision for teaching and learning, provide coherent support and resources, and align the efforts of all central office divisions (Lanoue & Zepeda, 2018; Zepeda et al., 2021).

School principals functioning as instructional leaders often lead teams of teachers or "bring in outside coaches to engage in such work" (Honig, 2012, p. 736). In the Focus County School District (FCSD, a pseudonym), Teaching and Learning Division curriculum coordinators were the "outside coaches" and content experts who engaged most regularly to support the work of instructional improvement in schools. These midlevel district instructional leaders were positioned to provide professional learning and direct support to an expansive range of principals, school-level leaders, instructional coaches, lead teachers, and teams of teachers. Considering the potential for curriculum coordinators to increase the district's collective instructional leadership capacity, strategically developing coordinators' abilities to build assistive partnerships with school leaders in cohesive and coherent ways became paramount.

Statement of the Problem

The problem of practice in the Focus County School District (FCSD) was that curriculum coordinators worked within silos of content and pedagogical expertise to support job-embedded professional development for teachers, but they did not provide coherent support to build principals' instructional leadership capacity. As a result, school leaders reported receiving fragmented information about improvement initiatives, often resulting in mistrust, miscommunication, and misalignment of efforts. Moreover, principals felt overloaded by the competing initiatives originating from the central office each year.

By focusing primarily on supporting teachers to improve classroom instructional practices, FCSD curriculum coordinators overlooked the importance of partnering with principals to collaboratively identify areas of support for teaching and learning improvement, and they sidestepped building the collective leadership capacity necessary to create and sustain change efforts across a large, suburban school district. Honig et al. (2010) found:

School district central office administrators can exercise essential leadership, in partnership with school leaders, to build capacity throughout public educational systems for teaching and learning improvement [but] such leadership requires new capacity, work practices, and relationships throughout central offices. (p. 8)

This study sought to develop the capacity of curriculum coordinators in the FCSD

Teaching and Learning Division to collectively design evidence-based, coherent systems and practices that build principals' capacity to support teaching and learning improvement.

Overview of the Research Site Context

Focus County is a primarily residential suburb with limited industry and employment opportunities. Close to 80% of its working citizens commute elsewhere for employment. At the time of the study, FCSD was one of the 15 largest school districts in the state for student enrollment. During the 2023-2024 school year, FCSD served nearly 32,000 K-12 students in 34 schools and the FCSD Virtual Academy. Approximately 2,000 certified teachers, 34 school principals, and 210 central office staff were allotted to support all schools, students, and district operations.

The district was also one of the state's fastest-growing, large school districts, increasing student enrollment by three percent in 2022-2023 compared to a state average of one-half percent for other large districts (Governor's Office of Student Achievement, 2023). Racially, the student enrollment comprised 48.6% White, 31.5% Black, 12.6% Hispanic, 6% Multi-racial, and 1% Asian/Pacific Islander (Governor's Office of Student Achievement, 2023). The socioeconomic status of families indicated that 46.1% of students received Free/Reduced-Price Lunch (FRL), and 20.6% of families were identified as economically disadvantaged through direct certification (Governor's Office of Student Achievement, 2023). Students with Disabilities (SWD) comprised 14.8% of the student population, and 13% were English Learners (EL).

According to state funding definitions, the Focus County School District was classified as a low-wealth school district. Despite its low wealth status, FCSD committed more financial resources to instruction than statewide averages while keeping central office expenditures to half that of the average school district (Focus County School District, 2024). Although the district demonstrated an ongoing commitment to

prioritizing resources for student learning, district finances could not support a significant expansion of Teaching and Learning Division staff to provide a more robust system of support for teachers and school leaders (Focus County School District, 2024).

During fiscal year 2023, only 2% of allotments (91) were designated for instructional improvement and coaching, and 1% (41) were designated for central office instructional support. As the rapidly growing student enrollment filled classrooms, adding and onboarding new teachers, school leaders, and support staff presented a constant challenge for a comparatively small number of central office leaders. As such, engaging school leaders in the collective work of instructional improvement was critical to developing organizational capacity and ensuring an equitable education for every student in every school.

The FCSD Teaching and Learning Division included 12 content-specific curriculum coordinators to support the instructional development of all school leaders and teachers across the district. Curriculum coordinators are mid-level district instructional leaders who provide support, guidance, professional development, and coaching to school administrators, instructional coaches, and teachers. Curriculum coordinators develop and execute district-level teaching and learning improvement plans for their areas of expertise with the support of lower-ranking central office staff.

However, they hold no evaluative authority over school or central office personnel.

Before being promoted to the central office, half of the coordinators served in formal school leadership positions, but the remaining coordinators served only as classroom teachers. None of the coordinators served as school principals.

Varied background knowledge and leadership experiences impacted curriculum coordinators' confidence and willingness to engage with school leaders and challenging teacher groups. To leverage the impact of the curriculum coordinators on continuous school and district improvement efforts, they first needed to develop new skills and professional capacities to become more inclusive of principals and collaboratively build instructional leadership capacity across all levels of the organization (Honig et al., 2010). In addition to individual and professional growth, the coordinators also needed to build collaboration, connectivity, and coherence to function as an evidence-based learning organization that supported the individual improvement of each school, the collective work of the Teaching and Learning Division, and the strategic work of the school district (Zepeda et al., 2021).

This study used the action research process to develop a system of support and interventions co-developed by the researcher, the Action Research Design Team (ARDT), and the Action Research Implementation Team (ARIT). The ARDT included the researcher and chief academic officer, a curriculum coordinator, two principal supervisors, a director, and a middle school principal. The supports and interventions developed were based on current research and participants' perceived needs. The provision of professional learning, as directed by supervisors and experienced curriculum coordinators, was a way to promote agency and increase a shared voice in the professional learning process within the FCSD Teaching and Learning Division.

Purpose of the Study

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching

and learning improvement. The curriculum coordinators' and supervisors' perspectives guided the study as they collaboratively designed coherent systems and structures to develop principals' instructional leadership capacity.

The researcher approached the study with some overall questions: What central office systems and processes foster coherence and support curriculum coordinators in developing the instructional leadership capacity of principals? What lessons can be learned using the action research process to develop coherent systems designed to build principals' instructional leadership capacity?

Research Questions

To address the purpose of this study, the following research questions guided this inquiry:

- 1. How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district?
- 2. How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district?
- 3. How does the Action Research Design Team articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?

Because this qualitative case study examined the coherent systems and processes that support central office leaders in building principals' capacity to drive teaching and learning improvement within the context of the Focus County School District, the researcher used specific terms to define key concepts. The following section discusses the key terms specifically related to the action research study. While these terms are used in a large body of research, this section described the terms related to this study in the Focus County School District.

Definition of Terms

For the purposes of this study, the following key terms are defined:

- <u>Assistive Relationships</u> the reciprocal relationships between central office personnel and school leaders designed to build trust and shared accountability by engaging in the joint work of improvement and removing barriers to improving academic achievement.
- <u>Curriculum Coordinators</u> mid-level central office personnel without evaluative responsibility over school leaders who are charged with building instructional capacity, instructional coaching, professional development, and instructional improvement in one or more academic disciplines or areas.
- <u>Coherence</u> the integration and alignment of individual and collective efforts and abilities to build shared meaning, capacity, and commitment to action (Fullan & Quinn, 2016).
- <u>Learning Organization</u> a dynamic organization that uses evidence and data from various experiences and sources, including assistive relationships with school

leaders, to inform and improve central office decision-making related to continuous improvement and the development of principals.

School District Central Office – the local governing body of a U.S. public school system typically led by an appointed school superintendent and elected school board officials. In addition to business and administrative functions, central office administrators employ personnel to support district and school teaching and learning improvement efforts.

This study examined the systems and processes supporting central office leaders in building principals' capacity to improve teaching and learning in the Focus County School District. The researcher identified a theoretical framework to operationalize and combine the theories of organizational learning and coherence. The following section includes the theoretical framework in Figure 1.1 and discusses the key terms relevant to the framework.

Theoretical Framework

Aside from principal supervisors and superintendents, many central office leaders and their work practices are underrepresented in research about central office effectiveness (Honig, 2008; Honig et al., 2010; Moore Johnson et al., 2015; Zepeda et al., 2021). To address this gap in the research, educational scholars have suggested that school district central offices operate as learning organizations or learning systems (Honig, 2008; Honig et al., 2010; Zepeda et al., 2021).

Viewing central office work through organizational and sociocultural learning theory "highlights how central office administrators might use evidence from various experiences, including their school assistance relationships, to inform district operations"

(Honig, 2008, p. 631). Within the context of this study, curriculum coordinators used evidence found in academic data sets, classroom observations, and interactions with school leaders to inform their planning and support.

By considering various school-specific evidence, coordinators could refine their approaches to provide nuanced support for each principal's vision and meet the specific professional learning needs of each school's teachers, grade levels, and academic departments. Using evidence from the assistive relationships with principals and other sources became a form of reciprocal communication where the stakeholder voices closest to the work in schools continuously informed the central office systems designed to support the work.

Although organizational learning cycles supported the refinement of central office assistance for school leaders, organizational learning fell short of identifying practical structures to ensure that central office support remains coherently aligned with district strategic priorities and school improvement initiatives. In daily operations within the division, competing initiatives, siloed thinking, external pressures, and personal agendas were barriers to communication, collaboration, resource alignment, and capacity building.

As a result, school leaders reported receiving fragmented information and were confused by incongruent initiatives originating from the FCSD Teaching and Learning Division. Since central office coherence was notably absent from the FCSD Teaching and Learning Division's daily work practices, the theory of coherence also helped to guide the study as curriculum coordinators worked together to explore the central office systems of support needed to build principals' instructional leadership capacity.

Substantial educational research and reform efforts support the importance of coherence between the central office and schools (Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Honig & Hatch, 2004; Lanoue & Zepeda, 2018; Moore Johnson et al., 2015; Westover, 2020; Zepeda et al., 2021). Organizational coherence can be achieved when organizational processes and educational practices connect and align work (Elmore et al., 2014).

Honig and Hatch (2004) described coherence as a dynamic process, beyond objective academic program alignments, that central office leaders can use to understand "schools' goals and strategies and [to incorporate] that information to guide their provision of supports" (p. 27). Cobb et al. (2018) contended that "a primary goal of district instructional leadership should be to support the development of coherent instructional systems at the school level, thereby building school-level capacity for instructional improvement" (p. 193, emphasis in the original).

Adding to these definitions, Zepeda et al. (2021) asserted, "Coherence serves an interpersonal purpose—a way for people to make sense of their work and the work of others and its relationship to the system" (p. 25). Within the FCSD Teaching and Learning Division, the absence of ongoing, inner-departmental collaboration inhibited the development of coherent school support. Curriculum coordinators were content and pedagogical experts deeply committed to serving teachers to improve academic performance. However, without interpersonal and organizational coherence within the division, the coordinators were siloed by subject. They did not understand how their work fits into a connected, comprehensive support system for school leaders.

Various coherence frameworks have been developed to help school districts clarify the complex work of providing impactful support and building organizational capacity for instructional improvement. The essence of each framework focuses on "strengthening coherence among actions at the district, school, and classroom level" (Childress et al., 2011, p. 1).

Fullan and Quinn (2016) developed an action framework identifying four essential drivers for coherent system reform: focusing direction, cultivating collaborative cultures, deepening learning, and securing accountability. In 2003, the Harvard University Public Educational Leadership Project (PELP) designed the *PELP Coherence Framework* to assist central office leaders with achieving coherence by:

- 1) Connecting the instructional core with a districtwide strategy for improvement
- 2) Highlighting district elements that can support or hinder effective implementation
- 3) Identifying interdependencies among district elements
- 4) Recognizing forces in the environment that have an impact on the implementation of strategy. (Childress et al., 2011, p. 2)

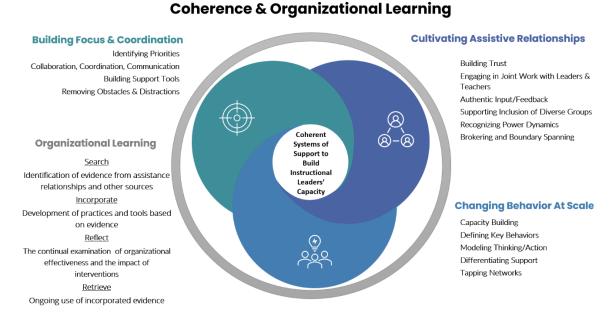
Similarly, Education First and the Council of Chief State School Officers (n.d.) identified four guiding themes within a coherence framework: "build and focus coordination, cultivate trusting relationships, change behaviors at scale, and think and work in equitable ways" (p. 3).

Figure 1.1 synthesizes the shared features of these three coherence frameworks to identify central office coherence's overlapping and interrelated drivers. Additionally, the synthesized coherence framework was infused and overlaid with elements from Honig's

(2008) conceptual framework, "District Central Office as Learning Organizations," and Zepeda's (2019) "Process of Action Research" to firmly position the action research study within the theories of coherence and organizational learning.

Figure 1.1

Theoretical Framework for Coherence and Organizational Learning



Note. Adapted from the Education First and the Council of Chief State School Officers (n.d.) Coherence Framework; Honig (2008) District Central Offices as Learning Organizations; and Zepeda (2019) Process of Action Research.

The framework identified three powerful drivers of coherence: building focus and coordination, cultivating assistive relationships, and changing behavior at scale.

Building Focus and Coordination

To achieve system coherence, central office leaders must collaborate to build focus and coordination around a shared instructional vision and identify a few high-leverage priorities to focus district improvement work. Collaboration, coordination, and

communication with school leaders around identified priorities assist central office leaders in understanding each school's context in relation to the targeted improvements. By coordinating with principals, central office leaders can better understand the principal's school improvement vision, identify school-specific needs, develop tools, secure resources, and remove barriers so that school leaders can lead and sustain instructional improvement.

Cultivating Assistive Relationships

Over time, collaborative actions and joint work develop a foundation of trust to cultivate assistive relationships between school and district personnel and open lines of reciprocal communication. Trusting relationships between school and district leaders are characterized by candid, authentic feedback cycles and shared responsibility for improvement. Principals and central office leaders are cognizant of the power dynamics at play within the partnership and work to include diverse perspectives. At times, central office leaders may also negotiate on behalf of principals to broker solutions with other leaders within their department or other central office divisions.

Changing Behavior at Scale

Lastly, changing behaviors at scale involves building capacity in principals to scale and sustain instructional improvement efforts. Support for principals is differentiated according to the leader's needs, specific staff needs, and student performance outcomes. Central office leaders can drive this work by clearly identifying key instructional leadership behaviors and modeling instructional leadership actions and decision-making.

Collectively, these concepts build a theoretical framework to assist central office leaders in designing coherent support systems that build principals' instructional leadership capacity for sustainable, continuous improvement.

Logic Model

A logic model was necessary to frame the study and guide the cycles of action research and embedded interventions. The logic model adapted for this study, Search-Incorporate-Reflect-Retrieve (SIRR), denotes the iterative action research cycles central office personnel engage in to move the district toward organizational coherence and develop principal leadership capacity. The logic model also framed the study's scope of action.

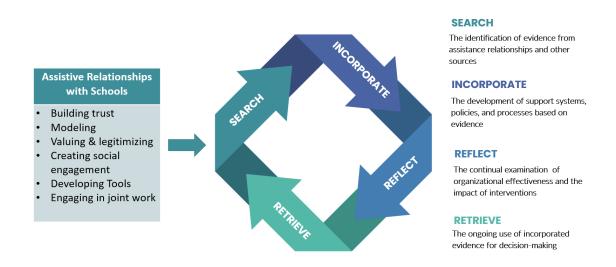
A learning organization seeks evidence through dynamic improvement cycles rather than fixed, linear processes (Knapp, 2008). Honig (2008) developed a conceptual framework, "District Offices as Learning Organizations," depicted in Figure 1.2, to demonstrate the process of central office leaders working as a learning organization through assistive relationships with principals. By synthesizing ideas from sociocultural and organizational learning theories, Honig (2008) explored the strands of learning theory most often used in educational research to surface central office leaders' roles in systematic teaching and learning improvement. Within assistive relationships, Honig (2008) suggested that central office leaders work in cycles to search, incorporate, and retrieve evidence for decision-making; however, the Action Research Design Team (ARDT) engaged in an additional component, reflection.

Reflection is central to the action research process and can be a form of jobembedded learning for research participants (Zepeda, 2019). The process of reflection encourages educational leaders to examine the effectiveness of interventions and to integrate new knowledge into practice. Integrated knowledge is encoded and available for retrieval as evidence for future decision-making, resulting in increased organizational knowledge and collective learning (Glanz, 2014; Jeffs & Smith, 1999; Zepeda, 2019). The Search-Incorporate-Reflect-Retrieve (SIRR) Cycle of Organizational Learning is represented in Figure 1.2.

Figure 1.2

Logic Model for Study

The SIRR Cycle for Organizational Learning



Note. Adapted from Honig (2008) District Central Offices as Learning Organizations and Zepeda (2019) Process of Action Research.

Central office actions become more coherent and empower school-level decisionmaking when leaders search for information about a school's improvement goals and instructional strategies and support the principal in maintaining current processes or making course corrections (Honig & Hatch, 2004).

Search

School and district leaders collaboratively searching for a variety of evidence in the context of a specific school community helps district leaders differentiate support through focused professional learning connected to the school's most pressing needs (Honig, 2008; Leithwood et al., 2019; Zepeda et al., 2021). A search for evidence could include reviewing school demographic changes, formative and summative assessment results, staff and principal perceptions, instructional observations, and operational data.

School leaders enrich the search for evidence by layering in contextual knowledge, such as the effectiveness of team collaboration, the design of the master schedule, or individual teacher preparedness. Searching for school-specific evidence is critical to determining a clear focus on the problem in context and narrowing the scope of district support.

Incorporate

Organizational learning presumes some form of "active collective inquiry by organizational members" through which collected evidence is interpreted and practical "sense-making" occurs (Knapp, 2008, p. 526). During incorporation, school and district leaders launch trials, develop tools, and design joint work to support their collaborative focus. As more evidence is revealed from the partnership, coordinators continuously incorporate that new evidence to adjust and refine school support. The incorporation phase is iterative and evolves as the coordinator becomes more embedded in a specific school's work and with a particular principal's instructional leadership strengths.

Reflect

The reflection phase of the organizational learning cycle examines collected data from assistive relationships with principals, considers the extent to which objectives were met, considers information from feedback cycles, and informs evidence-based decisions for additional cycles (Honig, 2008, 2012; Zepeda, 2019). Coordinators and principals continuously reflect, individually and collectively, to examine an intervention's effectiveness and identify areas for improvement. This reflective process fosters a learning culture between coordinators and principals and promotes collaboration and shared problem-solving.

Retrieve

As central office leaders receive new evidence, they interpret and "make sense of it" to determine if organizational policy or practices need to be adjusted to better support schools. During retrieval, coordinators integrate the new learning and adjust objectives, hypotheses, interventions, and strategies. Knapp (2008) referred to this organizational learning process as "organizational embedding, encoding, and memory" through which meaning is ascribed and even "transformed into a repertoire of routines, practices, or guidance for action" (p. 526, emphasis in original).

Operationalized and encoded evidence can be retrieved to guide subsequent decisions about the shared work with schools (Honig & Hatch, 2004). The retrieval process ensures that lessons learned are applied to future initiatives and contribute to the organization's continuous improvement, central office support, and principals' instructional leadership.

The Action Research Design Team (ARDT) and the Action Research
Implementation Team (ARIT) used the SIRR Cycle of Organizational Learning to apply
interventions and study the outcomes of the drivers of the Coherence and Organizational
Learning Framework. Thus, combining the SIRR Cycle of Organizational Learning and
the Coherence and Organizational Learning Framework became the study's Theory of
Change.

Theory of Change

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. Aligning the purpose of the study and the overarching research questions, the theory of change was situated in the Coherence and Organizational Learning Framework by building focus and coordination, cultivating assistive relationships, and changing behavior at scale to build principals' capacity to initiate and sustain teaching and learning improvement. Additionally, the logic model guided the Action Research Design Team and curriculum coordinators to Search-Incorporate-Reflect-Retrieve (SIRR) as evidence was collected from assistance relationships principals and other sources.

The process of achieving coherence and organizational learning began with the Action Research Design Team (ARDT) identifying the specific context and realities of fragmentation in the FCSD Teaching and Learning Divisions' support for building principals' instructional leadership capacity. Using the three drivers of coherence (e.g., building focus and coordination, cultivating assistive relationships, and changing behavior at scale), the ARDT helped to identify systems, policies, and processes

contributing to fragmentation and to hypothesize objectives and targets to address them.

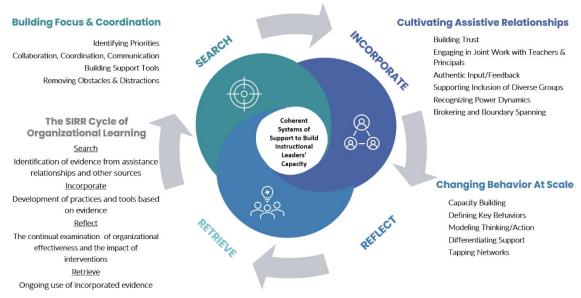
The ARDT used the findings to plan interventions and increase the coordinators' coherent support for principals and schools.

The Action Research Design Team (ARDT) and the Action Research
Implementation Team (ARIT) reflected on the effectiveness of the interventions
following each cycle to determine how to proceed. As demonstrated in Figure 1.3, each
action research cycle drove the three drivers of coherence and the organizational learning
process. The study sought to identify which interventions contributed to increased central
office coherence and improved support for building principals' instructional leadership
capacity.

Figure 1.3

Theory of Change





Note. Adapted from the Education First and the Council of Chief State School Officers (n.d.) Coherence Framework; Honig (2008) District Central Offices as Learning Organizations; and Zepeda (2019) Process of Action Research.

Overview of the Methodology

The purpose of action research in the educational context is to improve an organization from the inside out by "bringing together action and reflection, theory and practice, in pursuit of practical solutions to issues of pressing concern" (Coghlan, 2019, p. 5). As study participants implemented the SIRR (Search-Incorporate-Reflect-Retrieve) Cycle, they formed practical knowledge that aimed to develop theories and interventions to address organizational coherence and organizational learning.

For this study, the primary researcher and the Action Research Design Team

(ARDT) were colleagues within the Focus County School District. ARDT participants

used relevant scholarly literature to identify the three drivers of central office coherence and develop coherent systems of support to build principals' instructional leadership capacity districtwide.

Action Research

The purpose of action research in the educational context is to improve an organization by collectively pursuing practical solutions to organizational challenges by connecting action, reflection, theory, and practice (Coghlan, 2019). Practitioner-researchers are uniquely positioned to engage colleagues with existing relationships, foundational trust, shared organizational knowledge, and mutual dilemmas. As action research teams act in iterative cycles, the evidence collected informs applied knowledge to support the development of theories and interventions to address the organization's needs (Coghlan, 2019). In the context of this study, the researcher and the Action Research Design Team (ARDT) studied the literature surrounding processes and systems related to coherence and organizational learning. From the literature, a framework was developed to identify a process central office coordinators can employ to build the instructional leadership capacity of principals.

Glantz (2014) explained, "When educational leaders are trained in sound research methodology, decisions are made more intelligently and equitably" (p. 11). Qualitative action research was an appropriate methodology for this study because it provided a scientific process for collaborative problem-solving and professional learning among a team of experienced, highly motivated central office and school leaders.

Following the COVID-19 pandemic, the FSCD Teaching and Learning Division recognized an unprecedented influx of new teachers, many from non-traditional

certification programs, and a high turnover in school leadership. As the district's context changed and the workforce's stability was impacted, a new approach to district improvement was needed. Twelve curriculum coordinators could no longer attempt to train and coach over 2,000 teachers in 34 schools. Through the action research process, curriculum coordinators problem-solved to identify new ways to build coherence and the district's collective capacity for instructional leadership.

Curriculum coordinators strengthened their understanding of cohesive central office leadership and support by reviewing scholarly literature and participating in action research cycles in collaboration with the Action Research Design Team. One of the advantages of action research over traditional research is that practitioners are equal participants in the research process, as opposed to the process being "imposed upon educators by another individual or team of researchers" (Mertler, 2021, p. 1). The action research process in this study sought to empower and build the agency of mid-level central office professionals entrenched in daily school improvement work in a scientific process for approaching complex problems of practice without simple or apparent solutions (Mertler, 2021).

The Action Research Design Team (ARDT) and the Action Research Implementation Team (ARIT) engaged in "a collaborative, cyclical process of constructing a change situation or a problem, planning, gathering data, taking action and then fact-finding about the results of that action in order to plan and take further action" (Coghlan, 2019, p. 58). Action research was an effective methodology because the participants reflected on the impacts of central office fragmentation, collectively

examined drivers of coherence, and collaborated in cycles to develop systems and processes to support central office coherence.

Knapp (2017) explained that not all knowledge to approach research problems is grounded in literature; instead, "craft knowledge accumulated by those who are immersed in the problem area" brings direction to the action research design process (p. 28). The assistive relationships between school and district leaders capitalized on the craft knowledge of leaders closest to the work. Evidence derived from the relationships was incorporated into district support, improving trust and organizational intelligence. Such tight coupling between the district-level and school-level leaders allowed the study to have "more meaningful decision-making at the grassroots level" (Glantz, 2014, p. 101). This combination of knowledge from the literature and the experience of the Action Research Design Team and curriculum coordinators was leveraged to explore the work of central office support for schools and overall district improvement.

Qualitative research has been characterized by the examination of the "how" and "why" questions (Glantz, 2014, p. 80). The Action Research Design Team anchored their "why" around three core beliefs. First, they acknowledged that central office instructional leaders focused on coherence played a crucial role in transforming district support to develop instructional leadership capacity districtwide. Secondly, they were confident that principals equipped as effective instructional leaders could multiply districtwide teaching and learning improvement efforts and positively impact student achievement. Lastly, they understood the connections between their work and the organization's collective work in improving the educational experience and equitable outcomes for all students. The action research cycles of improvement supplied the "how."

Coghlan (2019) described the action research process as a cycle of constructing, planning, acting, and reviewing. Similarly, the Action Research Design Team (ARDT) worked in organizational learning cycles to Search, Incorporate, Reflect, and Retrieve (SIRR). The ARDT searched and synthesized evidence from the literature and identified connections to gaps in current leadership practices. The Action Research Implementation Team (ARIT) incorporated the new learning into the work between school and district leaders and collectively reflected on the effects of each intervention cycle. Coordinators reflected on the success of each intervention and applied the new understandings to inform the next intervention cycle with principals.

Data Collection

Throughout the study, the Action Research Design Team (ARDT) worked to build a model of coherent processes and practices district instructional leaders could employ to build the instructional capacity of principals in a large, suburban school district. The methodology implemented through this action research included multiple forms of qualitative data collection through semi-structured pre and post-interviews, observations, questionnaires, field notes, participant logs, and focus group engagement. The researcher interviewed three district-level curriculum coordinators and four principals with various backgrounds and experience levels within the Focus County School District. The qualitative data collected were examined through an inductive process to identify overall data patterns and themes to inform intervention and improvement efforts.

Interventions

The primary interventions of this study were based on the Education First and the Council of Chief State School Officers (n.d.) *Coherence Framework*, Honig's (2008)

District Central Offices as Learning Organizations, and Zepeda's (2019) Process of Action Research as portrayed in Figure 1.4. Building focus and coordination, cultivating assistive relationships, and changing behavior at scale provided concrete interventions for each research cycle. Interventions aimed to increase the central office's capacity to work as a dynamic, evidence-based learning organization with coherent systems, policies, and processes to develop the instructional leadership capacity of principals.

Figure 1.4

Coherence and Organizational Learning Intervention Cycle



Note. Adapted from the Education First and the Council of Chief State School Officers (n.d.) Coherence Framework; Honig (2008) District Central Offices as Learning Organizations; and Zepeda (2019) Process of Action Research.

Building Focus and Coordination

To achieve coherence, principals, and coordinators must first build focus and coordination around a shared instructional vision and identify a limited number of high-leverage priorities to focus the work of improvement. Collaboration, coordination, and communication with principals around key priorities assist central office leaders in identifying needs, developing tools, and removing barriers so that school leaders are equipped to lead instructional improvement.

During Action Research Cycle 1, principals and curriculum coordinators worked in pairs to collaboratively identify focused priorities specific to the school context.

Curriculum coordinators assisted principals in searching for and evaluating evidence in academic data, observational data, and school improvement processes. Principal and coordinator pairs defined a problem of practice and brainstormed the joint work needed to realize the targeted teaching and learning improvement.

Cultivating Assistive Relationships

A foundation of trust is essential to cultivate assistive relationships between school and district personnel. Assistive relationships open lines of reciprocal communication and engagement in the joint work of improvement. In contrast to hierarchical organizational structures, assistive relationships mitigate power dynamics between central office and school leaders who work shoulder-to-shoulder on problems of practice. Within these trusting relationships, school leaders feel safe to give their authentic input and feedback on improvement initiatives without fear of negative consequences.

To develop such relationships, central office leaders must be sensitive to positional power dynamics and intentionally cultivate trust by responding authentically and transparently to school feedback. Principals must also be aware of their positional power as they relate to curriculum coordinators who hold no positional authority over them despite being content experts. Mid-level leaders like curriculum coordinators can experience insecurity and intimidation collaborating with principals. School and central office leaders must remain cognizant of power dynamics and intentionally offset those dynamics with high levels of trust and open communication.

Additionally, central office leaders may serve as "brokers" and "boundary spanners" as they negotiate within and across divisions to remove obstacles impeding the

improvement efforts of schools. Central office leaders have more opportunities to network with other district officials and raise awareness of the challenges principals experience. Additionally, coordinators often network with one another to expand an instructional focus across disciplines, such as disciplinary literacy and language-rich classroom environments.

During Action Research Cycle 2, principals and coordinators began to plan the joint work of teaching and learning improvement focused on the identified priority from Cycle 1. Through the collaborative planning process, principals and the coordinators assumed shared responsibility and accountability for the success of the improvement initiative. Principals and coordinator pairs took collective action and first steps toward addressing the principals' identified priority. Additionally, coordinators secured district resources, designed tools to support the work, and designed professional learning to enhance the principal's ability to improve teaching and learning.

Changing Behavior at Scale

Changing behaviors at scale involves building capacity in teachers and leaders across all levels, respecting teachers' and principals' front-line knowledge, and providing differentiated support for principals' growth. Defining key instructional leadership behaviors and how they manifest in daily practice provides a shared lexicon between the central office and principals so that expectations can be clearly defined and supported. Leveraging networking opportunities between principal groups also becomes paramount to spreading frontline knowledge to meet the needs of various backgrounds and experience levels.

During Action Research Cycle 3, principals and coordinators reflected on the school's priorities and the collaborative plan to address school needs. Evidence of success from the planning and implementation was analyzed to design systems and processes that could be scaled. Sometimes, collaborative pairs shared their processes across principal networks to influence and scale the successful practices districtwide. Likewise, coordinators communicated evidence of successful and unsuccessful practices to their district-level colleagues in ways that increased organizational knowledge and effectiveness.

Significance of the Study

The ineffectiveness of fragmented school district central offices has been well-documented throughout educational research and scholarly literature (Honig et al., 2010; Lanoue & Zepeda, 2018; Moore Johnson et al., 2015; Zepeda et al., 2021). A growing body of empirical evidence exists to positively correlate central office actions to improved school-level teaching and learning (Anderson & Young, 2018; Cobb et al., 2018; Honig, 2012; Honig et al., 2010; Leithwood et al., 2019; Leithwood & Azah, 2017; Zepeda et al., 2021). However, empirical evidence detailing effective central office leadership actions has focused heavily on the positions of the school superintendent and the principal supervisor and has failed to articulate the evidence-based contributions of other central office administrators tasked with districtwide teaching and learning improvements (Honig, 2008; Honig et al., 2010; Moore Johnson et al., 2015). Honig and Rainey (2015) recommended that "researchers help districts strengthen their understanding—and in the process to strengthen the larger knowledge base—of the ways in which central office work practices matter to student outcomes" (p. 15).

Using the theories of coherence and organizational learning as the guiding framework, this study sought to increase the understanding of specific actions central office leaders can take to function collectively as a coherent, evidence-based learning organization able to develop the instructional leadership capacity of principals, thereby impacting the teaching and learning at scale. School leaders and teachers are dependent on productive, collaborative partnerships with the central office, which "coherently focus on specific needs, provide the right resources, [and] attend to the professional learning needs of teachers and principals" (Zepeda et al., 2021, p. 136). Thus, the Action Research Design Team (ARDT) and the Action Research Implementation Team (ARIT) worked together in improvement cycles to build focus and coordination, cultivate assistive relationships, and change instructional leadership behaviors at scale.

This study examined the coherent systems and processes supporting central office leaders in building principals' capacity to drive teaching and learning improvement in a large, suburban school district. Additionally, this study sought to contribute to the literature surrounding central office coherence and organizational learning in an educational setting. Finally, this action research combined the Search, Incorporate, Reflect, and Retrieve (SIRR) Cycle of Organizational Learning and the three drivers of coherence (building focus and coordination, cultivating assistive relationships, and changing behavior at scale) into a conceptual framework that provides unique insights into the process of developing systems of coherent central office support to cultivate the instructional leadership capacity of principals.

Organization of the Dissertation

Chapter 1 provides an overview of this dissertation and presents an overview of the research questions, the problem of practice, and the methods for the study. Chapter 2 includes a review of the related literature for the study, focusing on the characteristics of district effectiveness, central office coherence, and the central office as a learning organization. Chapter 3 details the research design and methodology of this work.

Chapter 4 describes the case and its context. Chapter 5 details the findings of each action research cycle related to this study's research questions. Chapter 6 provides a summary of significant findings and provides implications for the research for practitioners, researchers, and policy.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Only within the last three decades has educational research emerged describing school district central office practices with the collective potential to support districtwide improvement and develop principals' leadership capacity. Fullan and Quinn (2016) argued that "the solution [to districtwide improvement] requires the individual and collective ability to build shared meaning, capacity, and commitment to action" (p. 1). Given a clear focus from district leadership and opportunities for job-embedded professional development, central office personnel from across divisions can understand their roles in supporting and building the capacity of principals in coherent ways.

As with school-level leaders, district-level leaders play vital roles in supporting teaching and learning in schools (Zepeda et al., 2017). In a six-year study, Seashore Louis et al. (2010) determined that higher levels of collective efficacy across school and district-level leaders were linked to higher levels of student achievement. Educational research has identified central office and school leaders' instructional leadership capacity, also known as leadership for learning, as a high-leverage factor in improving teaching and learning at scale (Honig, 2012; Scott et al., 2020; Zepeda et al., 2017; Zepeda et al., 2021).

In 2021, Zepeda et al. asserted that a clear, cohesive direction for district improvement supported by all divisions of the central office "accesses the expertise of multiple divisions within the system" (pp. 72-73). Central office leaders who collectively

commit to a shared vision can develop cohesive central office structures and processes to support principals' capacity development. However, to truly achieve organizational coherence, district and school leaders must share accountability for student outcomes and function as a learning organization that continuously searches for evidence of improvement, incorporates feedback from schools, reflectively adjusts central office support, and retrieves organizational learning to inform future decision making (Fullan & Quinn, 2016; Honig, 2008).

The core challenges for central office leadership focusing on teaching and learning are establishing a shared instructional vision and developing the instructional leadership capacity of personnel across divisions and levels (Zepeda et al., 2021). A powerful first step in transformation involves all central office leaders drawing meaningful connections between their daily work and identified student learning outcomes, no matter their official role, title, or division within the school district.

Honig and Rainey (2020a) emphasized that improvement efforts should not stop at improving principal leadership. Instead, improvement efforts extend to the entire central office. This reinforces the importance of developing instructional leadership capacity at every level "while also transforming other parts of the central office to ensure principals' growth as equity-focused instructional leaders and, ultimately, provid[ing] an equitable and excellent education for each and every student" (Honig & Rainey, 2020a, p. 57).

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching

and learning improvement. To address the purpose of this study, the following research questions guided this inquiry:

- 1. How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district?
- 2. How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district?
- 3. How does the Action Research Design Team articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?

This chapter explores the significant writings and research areas that influenced the conceptualization of the present study.

A review of the related literature on school district central office effectiveness, the theory of coherence, and organizational and sociocultural learning theories was conducted and divided into three sections. The first section provides research findings on the characteristics of district effectiveness and illuminates the evidence-based practices that impact student achievement. The second section explores the theory of coherence and its relevance as a primary lever for central office effectiveness. Lastly, the third

section explores organizational and sociocultural learning theories and how school district central offices can function as dynamic, evidence-based learning organizations.

District Effectiveness Characteristics

Central office leadership matters and can positively affect teaching, learning, and student achievement (Waters & Marzano, 2006). The work of the central office to support teaching and learning is complex, with ever-evolving standards, assessments, and pedagogies (Moore Johnson et al., 2015; Zepeda et al., 2017). Despite the complexity of the work, Childress et al. (2007) claimed that school districts "are uniquely positioned to ensure equity and increase the capacity of all schools – not just some" (p. 1). School districts have the core responsibility to educate all children by developing and leading systems that are responsive to the contextual needs of their communities and set a clear vision for student success (Zepeda et al., 2021).

Rorrer et al. (2008) defined an effective school district as an "organized collective constituted by the superintendent, the board, the central office-level administration, and principals, who collectively serve as a network and critical link to uniting the district and the schools in ways to both develop and implement solutions to identified problems" (p. 311). Developing schools, systems, and instruction to meet the needs of all children involves redesigning how schools and central offices collaborate and a shared commitment to continuous improvement (Honig & Rainey, 2015; Lanoue & Zepeda, 2018). Effective central office leaders tenaciously align districtwide systems, policies, and processes to equip principals to face the ongoing challenges of modern education.

Waters and Marzano's (2006) meta-analysis of studies conducted since 1970 across 1,210 school districts confirmed that district office leaders can positively impact

student achievement. More recently, educational leadership scholars have worked to identify the characteristics of high-performing school districts and to define practices central office leaders can employ to positively influence student achievement (Anderson & Young, 2018; Blazer & Schueler, 2022; Honig, 2008; Honig & Rainey, 2015; Leithwood et al., 2019; Leithwood & Azah, 2017; Rorrer et al., 2008; Zepeda et al., 2017; Zepeda et al., 2021).

District effectiveness studies seek to detail "district practices and structures that matter for school performance and student achievement" (Anderson & Young, 2018, p. 2). A growing body of empirical research has aimed to identify the characteristics of high-performing school districts and articulate how some improve student learning in meaningful ways (Anderson & Young, 2018; Leithwood, 2010; Leithwood et al., 2019; Trujillo, 2013). In a 2019 large-scale, quantitative study, Leithwood et al. tested the effects of nine district effectiveness characteristics that significantly contributed to student achievement. Qualitative research and scholarly literature align with this empirical study's quantitative findings, providing practitioners with actionable strategies by describing central office conditions that positively impact student achievement (Leithwood et al., 2019).

Leithwood et al. (2019) identified nine independent variables, referred to as district effectiveness characteristics, which contributed to student achievement and provided a framework for guiding the work of district improvement: shared mission, vision, and goals for students; coherent instructional programs and guidance; the use of evidence from multiple sources; high-quality professional development; comprehensive professional leadership development; coherent district alignment; district governance and

elected leadership; organizational improvement processes; and relationships. Seven of the nine district characteristics showed strong evidence of impact on student achievement and were further reinforced by "examples of specific, original evidence supporting the value of each characteristic" (Leithwood et al., 2019, p. 521).

Shared Mission, Vision, and Goals for Students

A school district central office's shared mission, vision, and goals for students is a critical component of central office effectiveness (Leithwood et al., 2019). Shared goal setting ensures stakeholder engagement in district strategic planning, a shared sense of organizational direction, and high expectations for the outcomes of all students. Zepeda et al. (2021) asserted that an effective system "begins with the vision, mission, beliefs, and strategic plan that serve as a blueprint for all of the work in the district, especially change and transformation" (p. 32).

District leaders can positively affect student achievement "when they collaboratively develop and monitor progress toward achieving goals around teaching and learning, and when they provide common frameworks for improvement" (Zepeda et al., 2017, p. 238). Anderson and Young's (2018) examination of district effectiveness findings further defined the focus of central office change:

Effective districts establish an instructional and curricular focus and develop a widely shared set of beliefs and a vision about student achievement, including goals for high expectations and closing achievement gaps. An effective district's vision focuses on continuous improvement with a strategic plan for meeting goals. (p. 87)

Effective district leadership engages school leaders in intentional, strategic planning, monitors progress, and partners with principals to meet student achievement goals collectively.

Waters and Marzano (2006) coined the term "defined autonomy" to articulate the roles of school and district leaders in improving student outcomes (p. 13). Within defined autonomy, district leaders set clear, non-negotiable goals for learning and instruction, thereby "defining" the parameters and focusing on improvement. School leaders exercise autonomy within the defined parameters and share the responsibility and authority to determine how to accomplish the goals of their specific school community. Regardless of the methodologies employed, the shared sense of organizational direction, mission, vision, and beliefs, combined with continuous improvement efforts and strategic planning, move districts toward coherent instructional guidance for improvement and equitable outcomes for all students across schools.

Coherent Instructional Programs and Guidance

Coherent instructional guidance includes articulated curriculum standards, instructional frameworks, and instructional practices (Leithwood et al., 2019). Anderson and Young (2018) emphasized using evidence-based approaches to curriculum and instruction, including establishing student-focused performance standards, using shared, districtwide curriculum, and pervasive instructional approaches. Coherent instructional guidance significantly impacts organizational improvement when applied districtwide with fidelity. To achieve fidelity in implementation, successful school-level and district-level leaders must monitor and support improvement efforts to ensure consistency and the alignment of all elements within the instructional core.

Use of Evidence from Multiple Sources

An effective school district's strategic planning is not a one-time event. Instead, effective districts continually gather and use systematic evidence to inform decisions, monitor progress, make course corrections, and tailor support for school leaders (Leithwood et al., 2019; Leithwood & Azah, 2017; Honig, 2012; Honig & Hatch, 2004; Zepeda et al., 2021). Honig (2012) described the consistent use of evidence as the "management of information" to assess the reality of "what is" (p. 22). The joint work and assistive relationships between the central office and principals are based on reciprocal partnerships of trust, and organizational evidence is continuously examined in iterative improvement cycles (Honig, 2012).

Extending beyond the monitoring of compliance, "the central office provides resources, disseminates research on best practices, interprets data, and assists schools to use the information [or evidence] wisely" (Zepeda et al., 2021, p. 73). Continually examining a wide variety of data and evidence helps both central office and school leaders deepen and contextualize their collective understandings of problems of practice. Examining evidence in the context of a specific school community also helps to differentiate support by "focus[ing] on professional learning on site, connected to the school's most pressing needs" (Zepeda et al., 2021, p. 73). Thus, the continual process of examining and incorporating evidence in context undergirds the organizational learning efforts of school and district staff.

Collective Learning and Professional Development

Two of the characteristics of effective districts address "the individual and collective learning of staff" (Leithwood et al., 2019, p. 521). High-quality professional development (PD) for all members is sustained over time, job-embedded, and aligned with a coherent vision. PD is collaboratively and contextually designed and occurs within collaborative peer structures and trusting relationships between school and central office leaders (Leithwood et al., 2019; Zepeda et al., 2021). Anchored in adult learning theory, PD employs active learning strategies, is tied to relevant problems of practice, and is coherent with other district learning activities.

Honig (2013) described highly effective central offices as "performance-focused organizations that provide high-quality services to support school results" (p. 4).

Productive, trusting relationships are essential horizontally between senior central office leaders, vertically through school and district partnerships, and globally across the school district community at large (Anderson & Young, 2018; Leithwood et al., 2019; Zepeda et al., 2021). Honig (2013) emphasized the importance of learning-focused partnerships between school and district leaders to support collective professional learning opportunities. The combination of high organizational trust plus a responsive, supportive central office can result in a high-performance central office, ultimately leading to increased student academic outcomes (Zepeda et al., 2017).

Strategic Leadership Development

Additionally, Leithwood et al. (2019) concluded that "professional leadership development across high-performing districts...[was] guided by comprehensive policies and programs for recruiting, pre-appointment professional development, selection,

appointment, post-appointment learning opportunities, evaluation, and succession planning" (pp. 521-522). In addition to shorter-term strategies:

...the enactment of these [leadership development] policies [was] among the strongest levers available to districts for improving the quality of school-level leadership over time. The best available evidence about successful leadership shapes these policies and programs. (Leithwood et al., 2019, p. 522)

Strategic leadership planning develops leadership capacity at all organizational levels and aligns school and district-level leaders' efforts to improve achievement. Through leadership development programs, instructional leadership becomes an understood organizational expectation. Anderson and Young (2018) found that effective districts "invest in instructional leadership" and "expect strong instructional leadership from the superintendent, district staff, and building leaders" (p. 87).

Coherent District Alignment

In their large-scale, quantitative research study, Leithwood et al. (2019) identified the central office's coherent alignment as the effectiveness characteristic "most strongly represented among the district characteristics in their database" (p. 521). Central office coherence across leadership expectations, goals, strategies, resources, partnerships, and professional learning is critical for organizational effectiveness and equitable student outcomes.

A school district's collective organizational learning and capacity for performance is undergirded by the coherent "alignment of budgets, personnel policies/procedures, and uses of time with district mission, vision, and goals" (Leithwood et al., 2019, p. 521). Districtwide collaboration, connectivity, and coherence are the cornerstones supporting

the organizational culture and practices necessary to develop a highly effective central office (Zepeda et al., 2021).

Coherence

The theory of coherence and its constructs have been applied and examined across literature and research in the field of education and beyond. Substantial connections have been drawn between school district central office coherence and system and school improvement (Augustine et al., 2009; Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Hall, 2017; Honig & Hatch, 2004; Honig et al., 2010; Honig & Rainey, 2020a; Lanoue & Zepeda, 2018; Leithwood et al., 2019; Leithwood & Azah, 2017; Moore Johnson et al., 2015; Smith et al., 2020; Zepeda et al., 2021). Scholars have defined coherence in various ways, but each definition has similar underlying constructs. Coherence is achieved when "educator practices and organizational processes…connect and align work across the organization" (Elmore et al., 2014, p. 3).

On the surface, the theory of coherence may appear as straightforward as creating and applying administrative structures and protocols for strategic planning; however, a culture of central office coherence must deeply imbue the organization's shared understanding of the purpose and the nature of the work to be accomplished (Fullan & Quinn, 2016). School district strategic planning is critical to focusing improvement efforts on key initiatives. Still, continuous improvement efforts must be grounded in shared organizational beliefs about coherence and collective accountability. Cohesive understandings serve as the lenses through which every strategic solution and proposed initiative is introduced, considered, and adopted.

Coherence can only be reached through the sustained efforts of leaders across every level of a school district. Fullan and Quinn (2016) made the critical point that districts never fully arrive at coherence:

There [are] always new developments so that [leaders] need to be plugged into innovation and the wider knowledge area...there are always newcomers and change in leadership, and the perfect [leadership] group does not last forever (thankfully, nor does the terrible group). Coherence making in other words is a continuous process of making and remaking meaning in your own mind and in your own [district and school] culture. (pp. 2-3)

The nature of modern education is constant change, external demands, and instructional innovation; thus, the pursuit of coherence and shared organizational understanding must also persist in perpetuity (Zepeda et al., 2021).

Honig and Hatch (2004) also described the dynamic nature of coherence: "Coherence requires school and school district central office leaders to work in partnership to continually 'craft' or negotiate the fit between external demands and schools' own goals and strategies" (p. 17). Within a highly functioning learning organization, central office leaders continuously communicate in cycles with elected board members, central office leaders across divisions, and school leaders who, in turn, collaborate with the frontline educators whose jobs directly support and educate students. Thus, coherence is a continual state of striving together to educate students in equitable ways rather than a destination at which districts arrive.

Central Office Coherence for Instructional Improvement

Central office coherence plays a vital role in school success, and reciprocal partnerships between school and district leaders are foundational to the sustained improvement of teaching and learning (Fullan & Quinn, 2016; Honig et al., 2010; Moore Johnson et al., 2015; Zepeda et al., 2021). A 2010 study commissioned by the Wallace Foundation described successful central office work in five dimensions:

Specifically, central office administrators were likely to make substantial contributions to [teaching and learning] outcomes when they (1) develop learning-focused partnerships with school principals to deepen principals' instructional leadership practice, (2) provide professional learning assistance to those partnerships, (3) reorganize and reculture the rest of the central office units to support those partnerships, (4) steward overall [district] transformation processes continuously, and (5) rely on evidence of various kinds to continually refine practice. (Honig et al., 2010, p. 118)

Teaching and learning improvement happens through partnerships between the school and district-level leaders. Still, it requires the ongoing support of the entire school district to guard the work of instructional improvement and commitment to continuous organizational transformation.

Coherence across all departments and divisions in a central office involves improving the quality of organizational relationships, reculturing the central office, and aligning district resources to support teaching and learning (Zepeda et al., 2021). However, being receptive to feedback and willing to adjust districtwide policies and practices departs from historical central office roles and hierarchical power dynamics.

Creating a cohesive central office focused on building relationships of support and partnership with principals contrasts sharply with historical central office roles of administration and oversight.

Shifting the culture and dynamics between school and district leaders requires the intentional work of individuals and the transformation of the collective work of the central office (Fullan & Quinn, 2016). By restructuring the work of the central office to focus on support for teaching and learning improvement, district instructional leaders in various positions can promote a shared vision and build principals' instructional leadership capacity.

Critical shifts must occur across the organization for central office leaders to prioritize instruction and instructional leadership in schools. Leaders who espouse student achievement, teaching, and learning as the core business of the district must commit to actions and mindsets that frame everyday business, such as cabinet meetings and operational decisions, within an instructional focus. In a series of studies, the Learning Policy Institute (2020) evaluated "positive outlier districts" in California that increased student achievement regardless of race or socioeconomic status. Through that study, Scott et al. (2020) demonstrated the link between effective leadership practices, such as districtwide professional learning focused on instruction, leaders' participation in learning communities, and the use of data for decision-making, with increased student achievement.

District leaders who focus on instructional changes and see their core work "...as supporting quality instruction that [can] meet a wide range of student needs at all levels of the system, rather than merely overseeing buildings, buses, and bureaucratic

procedures" create district cultures where all students achieve at higher levels (Scott et al., 2020, p. 5). Positive outlier districts succeeded by leveraging the collective, intentional work of a coherent central office focused on teaching and learning.

Shifting a school district's culture to focus on instruction requires intentional efforts from the highest levels of leadership. Superintendents enjoy a unique positional influence over district and school leaders. The superintendent's expressed focus quickly develops into districtwide priorities within a healthy organization. Ikemoto and the George W. Bush Institute (2021) observed that within strong school districts, "the superintendent and other top leaders clearly set a vision and expectation for the central office to work in service of schools" (p. 29). Superintendents who communicate clear expectations of a central office "customer service" mindset and participate as learners with school and district leaders are able "to inform principal goal setting, to provide leaders with feedback, and to gauge progress" toward collective goals (Scott et al., 2020, p. 7).

District and school leaders who participate in observations, such as walk-throughs, instructional rounds, and collaborative inquiry visits, calibrate their understanding of high-quality instruction and demonstrate their commitment to the districtwide work of improvement (Lanoue & Zepeda, 2018; Scott et al., 2020; Zepeda & Lanoue, 2017; Zepeda et al., 2021). Central office leaders collaborate with principals to transform districtwide instructional practices and engage in ongoing, collaborative professional learning communities (Scott et al., 2020). The presence and visibility of district leaders, learning shoulder-to-shoulder with school leaders, models "being a learner while leading" and prioritizes instructional improvement (National Institute for

Excellence in Teaching, 2021, p. 8). The superintendent and executive leaders' willingness to engage in instructional improvement, set clear expectations for school support, and demonstrate a commitment to professional growth can transform central office work and the school district's organizational culture to impact student achievement (Lanoue & Zepeda, 2018).

Central Office and School Leadership Partnerships

Improving the quality and alignment of support that principals and other school leaders receive from the central office has emerged as a lever for enhancing instructional leadership and student achievement (Honig, 2012, 2013; Honig & Rainey, 2015; Rogers, 2022; Zepeda et al., 2014; Zepeda & Lanoue, 2017). Fullan and Quinn (2016) claimed that "cultivating collaborative culture is the heart of system transformation" (p. 12). Trusting relationships between the central office and school leaders are foundational to making instructional improvement a collaborative priority within a school district. Zepeda and Lanoue (2017) explained that learning to lead instructional improvement "takes time, practice, and feedback – all within a relationship of trust and respect" (p. 61). School leaders need ongoing opportunities to interact openly and authentically with central office leaders who can support their growth within trusting, supportive partnerships.

In contrast to the "command-and-control power dynamics" of central offices focused on compliance, collaborative central offices organize themselves to be responsive to school leaders and school needs, thereby demonstrating a culture of support and forging strong relationships with principals and across central office departments (Ikemoto & George W. Bush Institute, 2021). Leaders possessing soft skills, such as

relationship building, communication, and collaboration, paired with a deep understanding of instructional leadership and high-quality instruction, contribute to the success of a teaching and learning relationship across levels within an organization (Ikemoto & George W. Bush Institute, 2021). However, not all central office partnerships result in principal growth. What makes the difference is the focus and type of work happening within the partnerships (Honig, 2013).

Clear Expectations for Instructional Leadership

In addition to being a visible, active partner in school improvement efforts, leaders in a coherent central office articulate concrete expectations for instructional leadership. In a 2021 synthesis of research, the National Institute for Excellence in Teaching (NIET) concluded that specific language, shared priorities, and clear goals give "principals the ability to keep the big picture in focus amidst the daily pressures and demands of the job" (p. 10). Leaders across the organization grow when instructional leadership expectations are clear, learning targets are actionable, and criteria for success are attainable.

Coaching school leaders and providing support based on a clear understanding of expectations serves the dual purposes of supporting the leader's professional growth and serving as a model of the desired coaching relationship between leaders and teachers (National Institute for Excellence in Teaching, 2021, p. 14). Marzano and Waters (2009) go a step further by suggesting districts establish non-negotiables to guide the work of school leaders and that "[school] leaders must lead within the confines of the non-negotiable district goals for achievement and instruction and the constraints those goals place on principal leadership autonomy at the school level" (p. 89). Articulated district

goals provide clear guardrails for principals but allow for leadership autonomy within the established boundaries.

Superintendents can develop central office leaders' instructional leadership capacity and establish a shared lexicon with their executive cabinet members by discussing current research related to instructional leadership, thereby honing clarity of thought in the highest ranks of district leadership. Scott et al. (2020) described central office professional learning communities (PLCs), which "challenge members' assumptions and ensure that the [district] leadership team has a common understanding of effective instruction" and instructional leadership (p. 6). Intentional, collaborative learning communities build district leadership capacity, strengthen shared understandings, communicate a common language, establish clear instructional leadership goals, and coalesce school district support for schools.

Transforming Central Office Instructional Leadership

Transforming central offices to support high-quality teaching and learning requires the superintendent and all senior leadership to prioritize instructional leadership. Central office transformation involves developing trusting partnerships between principals and central office leaders, aligning central office supports, and committing to continuously building every leader's capacity for better performance (Honig, 2013). By building strategic leaders at every level who share an organizational vision for instructional leadership and improvement, district leaders can work together to create coherent systems to support and sustain the improvement of teaching and learning.

Coherence Frameworks

In 2008, Honig identified a gap between research findings and the practical strategies and work practices central office leaders could adopt to become coherent learning organizations that foster high-quality teaching and learning. Since then, multiple studies have developed coherence frameworks to support school district central offices in clarifying the complex work of providing support and building scalable capacity for instructional improvement. The essence of each framework focuses on "strengthening coherence among actions at the district, school, and classroom level" (Childress et al., 2011, p. 2).

By analyzing Fullan and Quinn's *Coherence Framework* (2016), the Harvard *Public Education Leadership Project (PELP) Coherence Framework* (2003), and the Education First and the Council of Chief State School Officers *Coherence Lab Framework* (n.d.), practitioners can begin to discern actionable drivers for developing central offices as coherent learning organizations.

Fullan and Quinn's Coherence Framework (2016)

Fullan and Quinn's Coherence Framework (2016) is presented as an action framework identifying four essential drivers for coherent system reform and leadership: focusing direction, cultivating collaborative cultures, deepening learning, and securing accountability. Focusing direction was described as "the 'glue' that will increase the coherence of district and school efforts at every level and build a clear path to improve learning in demonstratable ways" (Fullan & Quinn, 2016, p. 17). To focus direction, leaders must be purpose-driven, set impactful goals, clarify strategy, and employ change leadership strategies (Fullan, 2006; Fullan & Quinn, 2016; Kotter, 2012). With a clear

direction, leaders can "use the group to change the group by building deep collaborative work horizontally and vertically across their organizations" (Fullan & Quinn, 2016, p. 47, emphasis in original). In other words, central office leaders develop school leaders who develop teacher leaders to create sustainable, systemic organizational change and improvement.

To achieve the third element of Fullan and Quinn's (2016) Coherence Framework, deeper learning, central office leaders must identify deeper learning as a goal, develop pedagogies for deep learning competencies, and shift instructional practices through capacity building at all levels. Although Fullan and Quinn's (2016) third element is explicitly tied to "deeper learning" instructional strategies, central office leaders can apply the same improvement process to any teaching and learning initiative or focus.

The final element of Fullan and Quinn's framework (2016), securing accountability, was further defined as two components: internal and external accountability. Internal accountability refers to organizational conditions that increase the likelihood that people will be accountable to themselves and the organization. According to Fullan and Quinn (2016), a strong culture of internal accountability "must *precede* external accountability" to be effective and meaningful (p. 111, emphasis in original).

External accountability is the learning organization's relationship with any governing authority or stakeholder group, such as the school board, state education departments, parents, and community members. Fullan and Quinn (2016) argued, "Securing accountability is not about pleasing the [external] system...but about acting in ways that are in your interests" and in ways that further the organization's end goals for teaching and learning improvement (p. 125). The organization's internal accountability

systems align internal improvement processes to achieve coherence and focused improvement, ultimately satisfying the external accountability systems.

Harvard University Public Educational Leadership Project (PELP) Coherence Framework (2003)

Harvard University's Public Educational Leadership Project first designed the *PELP Coherence Framework* in 2003 to assist public school districts with achieving organizational coherence in four areas:

- 1) Connecting the instructional core with a districtwide strategy for improvement
- 2) Highlighting district elements that can support or hinder effective implementation
- 3) Identifying interdependencies among district elements
- 4) Recognizing forces in the environment that impact the implementation of strategy. (Childress et al., 2011, p. 2)

The *PELP Coherence Framework* (2003) centered on the instructional core of teaching and learning. The instructional core was further defined as the interaction between teachers' knowledge and skill, students' engagement in learning, and academically challenging content. The instructional core served as the centering element, or target, of school and central office coherence.

The instructional core was grounded in a theory of change and "the organizations' collective belief about the relationships between certain actions and desired outcomes" (Childress et al., 2011, p. 3). The district's deliberate actions to strengthen the instructional core and improve student outcomes were defined as district strategy. The *PELP Coherence Framework* (2003) did not prescribe a particular strategy because the

unique context of each district and the district's capacity to support the instructional core varies. However, Childress et al. (2011) emphasized that "gaining coherence among actions at the district, school, and classroom levels will make a district's chosen strategy more scalable and sustainable" (p. 3).

The districtwide improvement strategies in the *PELP Coherence Framework* (2003) included the district's operating environment, or external context, primarily outside the district's locus of control, such as state and federal mandates and political or community pressures. PELP's five internal organizational elements that contributed to coherently implementing a district's chosen strategy were district culture, structures and systems, resources, and stakeholders (Childress et al., 2011, p. 3). Those organizational elements are influenced by the actions of central office leaders and measured against the district's identified strategy to help district leaders determine how the organization "is presently supporting (or hindering) strategy execution" and to identify "concrete ideas that can be translated into action steps for moving the organization towards greater coherence with strategy" (Childress et al., 2011, p. 6).

Education First and the Council of Chief State School Officers Coherence Lab Framework (n.d.)

Education First and the Council of Chief State School Officers identified four guiding themes within a *Coherence Lab Framework* (n.d.): build and focus coordination, cultivate trusting relationships, change behaviors at scale, and think and work in equitable ways (p. 3). Coherent systems build focus by rigorously establishing and implementing a shared vision, a plan, and a model to accomplish a small number of clearly defined instructional priorities. These priorities were then applied to identify distractors, system

inefficiencies, and initiative overload. Key priorities were also used as a measure to reduce and reject work that was misaligned. Leaders at every level also modeled collaboration and focused coordination by protecting time for ongoing horizontal and vertical collaboration. The outcomes of intentional collaboration were the identification of critical interdependencies between priorities and initiatives, removing barriers to success, and developing systems of implementation support.

Education First and the Council of Chief State School Officers *Coherence Lab*Framework (n.d.) also emphasized the importance of cultivating trusting relationships across the organization. By engaging authentically, leaders create clear channels to receive "rich, authentic, and ongoing input from internal employees and external stakeholders, and...that input leads to changes by leadership" (p. 7). Leaders intentionally seeking the perspectives of diverse groups and prioritizing the voices of those closest to implementation, such as school leaders, teachers, students, and community members, were critical to cultivating trust with all stakeholders. Furthermore, leaders were cognizant of how power structures and dynamics impact and influence organizational learning and, when appropriate, intentionally ceded their power and decision-making to support a more equitable power distribution.

According to the Education First and the Council of Chief State School Officers Coherence Lab Framework (n.d.), to change behaviors at scale across a district, "system leaders must understand the principals of social networking and change management to understand how to promote organizational learning and change that will shift mindsets and behaviors and make improvements stick" (p. 8). Central office leaders build a culture of learning and growth by understanding the value of formal and informal networking opportunities and strategically identifying experts and change agents with strong relational influence to disseminate organizational understanding, knowledge, and implementation.

Lastly, changing behaviors at scale required clearly defined, specific expectations for each team member's daily work practices and invested resources to support individual and organizational capacity building at every level (Education First and the Council of Chief State School Officers *Coherence Lab Framework*, n.d.). Setting clear expectations for leadership across the organization and keeping the focus on a few key priorities were foundational to cultivating a culture of reciprocal responsibility that sustainably changed organizational structures and behavior at scale.

By analyzing Fullan and Quinn's *Coherence Framework* (2016), the Harvard Education Leadership Project (PELP) *Coherence Framework* (2003), and the Education First and the Council of Chief State School Officers *Coherence Lab Framework* (n.d.), practitioners can discern actionable drivers for developing central offices as coherent learning organizations. The coherent systems of support that surfaced from this research synthesis included building focus and coordination, cultivating assistive relationships, and changing behaviors at scale. Establishing central office coherence requires the unified efforts of educational leaders combined with the dynamic processes of organizational and sociocultural learning.

Central Office as a Learning Organization

When a central office acts as a coherent learning organization, collective work can be described as a marriage between educational leadership, organizational learning theory, and sociocultural learning theory (Blazer & Schueler, 2022; Knapp, 2008;

Leithwood & Azah, 2017; Honig, 2008, 2012; Honig & Hatch, 2004). Organizational learning, sociocultural learning, and educational leadership practices have been "tested empirically in the form of single case studies profiling districts that had some success in educational improvement efforts" (Blazer & Schueler, 2022, p. 7). Additionally, related patterns in instructional leadership and system coherence have been highlighted through studies on central office effectiveness with a focus on how organizational behaviors and educational leadership actions work together (Blazer & Schueler, 2022; Honig, 2008, 2012; Honig & Hatch, 2004; Leithwood, 2010; Leithwood & Azah, 2017; Thompson et al., 2008; Trujillo, 2013).

Honig (2008) asserted that school district central offices act as learning organizations when they engage the ideas from sociocultural learning theory and theories of organizational learning:

These theoretical areas seem particularly useful because each lens focuses attention on two complementary dimensions of what organizational learning by district central offices may entail: sociocultural learning theory amplifies the importance of central office administrators working with schools to support their teaching and learning improvement efforts; organizational learning theory highlights how central office administrators might use evidence from various experiences, including their school assistance relationships, to inform district operations. (p. 631)

Viewing central office leadership for improvement through these learning theories allows educational leaders to consider how the organization can evolve and become more intelligent.

Despite the non-educational origins of each theory, Leithwood and Azah (2017) concluded that researchers should focus on designing alternative measures of district improvement processes to leverage sociocultural and organizational theories of learning to improve and understand central office reform processes. Similarly, Knapp (2008) theorized that both organizational learning and sociocultural learning theories could illuminate the central aspects of district instructional reform and "identify the ways in which each theoretical frame can inform and possibly enrich the other, with the ultimate goal [of] a more sophisticated and satisfying explanation for the dynamics of district instructional reform..." (p. 533).

Organizational Learning Theory

Central offices operating as coherent learning organizations employ the research-based constructs of organizational learning (OL). Central office and school leaders use evidence from their shared experiences to actively assist with managing internal and external demands and to forward school improvement work (Honig & Hatch, 2004). Shared actions and decision-making challenge traditional central office roles as policymakers and primary decision-makers (Xia et al., 2020). Instead, central office administrators reposition themselves as guides for and informed supporters of school-level decisions (Anderson et al., 2012; Honig, 2003; Honig & Hatch, 2004).

Central office personnel focused on OL provide support in differentiated, adaptive, and assistive ways based on school-based evidence, as opposed to one-size-fits-all, top-down, bureaucratic methods (Anderson et al., 2012; Xia et al., 2020). In a 2019 study of decision-making power relationships between district and school leaders, Xia et al. revealed the necessary, dynamic associations between principal and district influences,

arguing, "There is no one single power relationship across all decision areas; instead, various power relationships are dependent on different decision areas. The nature of the relationship between districts and school principals actually varies" (p. 425). The organization improves its ability to drive improvement by attending to each school's context, and each principal's leadership needs by identifying evidence from collaboration with principals and continually adjusting support and resources.

Honig (2008) emphasized one specific strand of organizational learning theory (OL) known as "organizational learning from experience, trial and error learning, and learning under conditions of ambiguity" (p. 632). This line of OL identifies evidence from organizational experiences and translates the evidence into resources accessible to others for future decision-making within the organization (Honig, 2008). Central office actions become more coherent and empower school-level decision-making when "they *search* for information about a school's chosen goals and strategies and *use* that information (rather than district priorities or state and federal regulations, for example)" to hold static current processes or make organizational course corrections (Honig & Hatch, 2004, p. 25, emphasis in original).

Additionally, a learning organization seeks evidence through dynamic improvement cycles rather than fixed, linear processes. Organizational learning theory focuses on "information flow and management (search, storage, retrieval, interpretation, etc.) – how [information] moves into and through an organization, what meanings it acquires for whom, and what consequences it has for the organization" (Knapp, 2008, p. 526, emphasis in original). Organizational learning presumes some form of "active"

collective inquiry by organizational members" through which collected evidence is interpreted and practical "sense-making" occurs (Knapp, 2008, p. 526).

Once central office leaders receive new evidence, they interpret and "make sense of it" to determine if organizational policy or practices need to be adjusted to better support schools. Evidence that is operationalized and encoded into central office practices can be retrieved to guide subsequent decisions about the shared work with schools (Honig & Hatch, 2004). Knapp (2008) referred to this organizational learning process as "organizational embedding, encoding, and memory" through which meaning is ascribed and even "transformed into a repertoire of routines, practices, or guidance for action" (p. 526, emphasis in original).

Central offices operating as learning organizations grow collectively more intelligent as they embed information, support principals with problem-solving, collect evidence from school partnerships, and adjust organizational systems and processes as needed. Evidence compounds over time, increasing overall organizational intelligence. Organizational learning theorists considered learning "a collective, often 'intelligent,' response to events and conditions inside or outside of the organization, manifested in changes in collective thinking, organizational design, and behavior, or organizational potential for behavior" (Knapp, 2008, p. 525). Analysts of district-wide reform initiatives also have reported an evolutionary, dynamic pattern of district support as the organization improves (Anderson et al., 2012; Honig, 2008, 2012). This collective intelligence builds within coherent systems and can be systematically retrieved to strengthen and inform future decision-making (Knapp, 2008).

However, despite the multiplicative, dynamic nature of collective organizational intelligence, schools often reach what Anderson et al. (2012) described as "success plateaus" where improvement stalls (p. 406). Even successful school leaders can benefit from the organization's collective intelligence to support ongoing improvement. Thus, differentiated central office support and partnerships are "not just aimed at turning around failing or at-risk schools, but also at creating conditions and processes that enable [all] schools to engage in continuous improvement" (Anderson et al., 2012, p. 406).

Leithwood and Azah (2017) described the use of dynamic "learning-oriented improvement processes," such as district and school improvement planning, and noted that the implementation of plans "were inter-dependent, data-informed, and continuous" (p. 41). Thus, the heart of organizational learning within a school district leverages collective intelligence in continuous, evidence-informed improvement cycles.

Sociocultural Learning Theory

Complimentary to organizational learning theory, sociocultural learning theory emphasizes the "finer-grained aspects of organizational life" in which "learning is viewed as essentially a social process, situated within cultural, institutional, and historical contexts" (Knapp, 2008, p. 527). Vygotsky's (1978) early work on the social nature of learning situates learning as a collective rather than an individual process. Although this tradition does not address educational organizations explicitly, scholars suggested that its constructs were potentially valuable for understanding school district reform by providing a conceptual vocabulary for describing effective central office practices and developing the interpersonal and professional capacity of leaders at all levels (Knapp, 2008; Honig, 2008, 2012; Zepeda et al., 2017).

Educational system reform is a complex and challenging task and is a largely social process where success depends more on shaping organizational culture than structural change (Chapman, 2019). Sociocultural learning grounds the work of "developing the interpersonal capacities of school and central office stakeholders to lead for teaching and learning" (Zepeda et al., 2017, p. 240). Communities of practice, often called Professional Learning Communities in education, support organizational improvement when "individuals work collaboratively with supportive colleagues who are also engaged in continuous development" (Mitchell & Sackney, 2011, p. xx).

Communities of practice, joint work, and assistance relationships are three sociocultural constructs employed by scholars to describe sociocultural learning within the context of education.

Communities of practice are "collectives of [educators] in which the members share joint work and have developed a common vocabulary and repertoire for approach" (Knapp, 2008, p. 527). Within a school district, central office personnel, school leaders, and teachers may assimilate into formal and informal communities of practice, provided they have collectively identified meaningful joint work. Joint work centers around a long-range problem the group views as lasting and valuable, such as improving instruction or closing achievement gaps.

Further, assistance relationships from sociocultural learning theory have been associated with deepening and improving people's work across settings. The concept of assistance relationships was used by Honig (2012) to describe the complexities of supportive central office and principal relationships. Honig (2012) described the application of these sociocultural learning constructs in the context of a school district:

Participants in assistance relationships (e.g., central office administrators) help deepen others' participation in particular work practices (e.g., principals' engagement in instructional leadership) when they focus that participation on "joint work" or specific activities of value to community members in the present and over time. (p. 739)

Relational partnerships between central office leaders and principals exemplify sociocultural learning when they lead to collective organizational understandings that support teaching and learning improvement.

Through assistance relationships, learners socially construct the meaning of ideas and potentially shape habits of the mind, which can shift a school district's organizational culture. Joint work involves central office and school leaders working shoulder-to-shoulder to tackle problems of practice, such as designing school-specific professional learning. By combining communities of practice, assistance relationships, and joint work, participants deepen one another's engagement in particular work practices by modeling or demonstrating practices rather than the district leaders directing school leaders to comply with specific mandates. The social work of leaders learning to improve together builds the organization's capacity through the collective efficacy of leaders at every level.

Limitations of Organizational and Sociocultural Learning Theories

Knapp (2008) cautioned that organizational and sociocultural learning theories do not address every feature of educational leadership or school district reform. Unlike political theories, learning theories assume that participants have shared organizational interests and do not assume that the interests of educators are inherently in conflict (Knapp, 2008). Both learning theories address questions of control, both directly and

indirectly. Still, a future challenge for research "lies in elaborating ways that learning theories can account for resistances, power struggles, and competition among agendas that are so often in evidence" (Knapp, 2008, p. 534).

For example, scholars in the field of central office effectiveness have identified the collaborative, assistive relationships between the central office and school leaders as a critical element of systemwide improvement. However, leading collectively can often be paradoxical. Central office leaders find themselves "simultaneously engaged in both formal and informal leadership activities, often employing their hierarchical position and power on some occasions and concurrently sharing or distributing leadership [with school leaders] in others" (Kruse, 2020, p. 47). In contrast to the "command-and-control power dynamics" of central offices focused on compliance, collaborative central offices organize themselves to be responsive to school leaders and school needs, thereby demonstrating a culture of support and forging strong relationships with principals and across central office departments (Ikemoto & George W. Bush Institute, 2021).

While power dynamics exist vertically between the central office and school leaders, they also exist horizontally within informal communities of practice between school leaders and their peers. Liou and Daly (2020) concluded that leaders are susceptible to the influence of their peer networks, and school district leaders should consider building "a web of knowledge in facilitating the flow of reform information and norm of collaboration across the district – especially in time of change – highlighting the ecosystem of relationships that surround leaders and emphasizing the idea of leading networks" (p. 178). Central office leaders strategically focused on guiding the social networks (sociocultural learning) and leveraging the flow of information (organizational

learning) to influence school leaders may become more adept at anticipating conflict and supporting district improvement and change efforts.

Further, central office leaders influence school decision-making and organizational learning through identified institutionalized rules, norms, and shared understandings, defined as "systemic power," and persuasive leveraging of institutionalized expectations, defined as "episodic power" (Wong et al., 2020, p. 394). In their 2020 study of school and central office power dynamics, Wong et al. explained that effective central office leaders did not act unilaterally or force school leaders to make decisions. Instead, "it was the interplay of central office leaders' persuasive practices and school leaders' responses that together coproduced school-based decisions" (Wong et al., 2020, p. 405).

Over time, "this interactive dynamic created new norms related to appropriate roles for central office and school leaders" as new learning was observed and encoded into the organization's policies and practices (Wong et al., 2020, p. 405). In other words, central office leaders who balance power dynamics and shared decision-making successfully increase organizational intelligence and continuously improve central office support schools.

School districts are complex learning organizations and cannot be led effectively by central office leaders acting in isolation. Although sometimes paradoxical, at times, district leaders must cede their hierarchical decision-making power to form assistive relationships with school leaders. Collaborative decision-making within trusting school and central office assistive relationships can potentially increase organizational intelligence and overall systemwide coherence. Staying attuned to the internal and

external power dynamics, competing interests, and peer networks influencing school leaders' decision-making is critical to anticipating conflict and forwarding district improvement efforts. By incorporating the constructs of organizational and sociocultural learning theory, school districts can evolve, adapt, and improve to provide responsive support for principals and increase equitable outcomes for students districtwide.

Chapter Summary

In 2011, Childress et al. claimed that school districts are "uniquely positioned to ensure equity and to increase the capacity of all schools, not just some" (p. 1).

Educational research has identified the development of central office and school leaders' instructional leadership as a high-leverage factor for improving teaching and learning at scale (Honig, 2012; Scott et al., 2020; Zepeda et al., 2021). Honig and Rainey (2020a) emphasized that improvement efforts should extend to the entire central office, reinforcing the importance of developing instructional leadership capacity at every level "while also transforming other parts of the central office to ensure principals' growth as equity-focused instructional leaders, and, ultimately, provid[ing] an equitable and excellent education for each and every student" (p. 57).

Developing schools, systems, and instruction that meet the needs of all children requires redesigning how schools and central offices collaborate and a commitment to continuous improvement (Honig & Rainey, 2015; Lanoue & Zepeda, 2018). Educational leadership scholars have worked to identify the characteristics of high-performing school districts and to define practices central office leaders can employ to influence student achievement positively (Anderson & Young, 2018; Blazer & Schueler, 2022; Honig,

2008; Honig & Rainey, 2015; Leithwood et al., 2019; Leithwood & Azah, 2017; Rorrer et al., 2008; Zepeda et al., 2017; Zepeda et al., 2021).

A growing body of empirical research has aimed to identify the characteristics of high-performing school districts and articulate how some can improve student learning in meaningful ways (Anderson & Young, 2018; Leithwood, 2010; Leithwood et al., 2019; Trujillo, 2013). In a 2019 large-scale, quantitative study, Leithwood et al. identified nine independent variables, referred to as district effectiveness characteristics, which contributed to student achievement and provided a framework for guiding the work of district improvement: shared mission, vision and goals for students; coherent instructional programs and guidance; use of evidence from multiple sources; high-quality professional development; comprehensive professional leadership development; coherent district alignment; district governance and elected leadership; organizational improvement processes; and relationships. Both qualitative research and scholarly literature align with the quantitative findings of this empirical study, provide practitioners with actionable strategies, and describe central office conditions that positively impact student achievement (Leithwood et al., 2019).

Central office coherence across goals, strategies, resources, partnerships, and professional learning emerged as a chief characteristic of school and central office effectiveness (Anderson & Young, 2018; Leithwood et al., 2019; Zepeda et al., 2021). Leithwood et al. (2019) identified the coherent alignment of the central office as the effectiveness characteristic "most strongly represented among the district characteristics in their database" (p. 521). Districtwide collaboration, connectivity, and coherence

support the organizational culture and practices necessary to develop a highly effective central office (Zepeda et al., 2021).

The theory of coherence and its constructs have been applied and examined across literature and research in the field of education and beyond. Substantial connections have been drawn between school district central office coherence and system and school improvement (Augustine et al., 2009; Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Hall, 2017; Honig & Hatch, 2004; Honig et al., 2010; Honig & Rainey, 2020ab; Lanoue & Zepeda, 2018; Leithwood et al., 2019; Leithwood & Azah, 2017; Moore Johnson et al., 2015; Smith et al., 2020; Zepeda et al., 2021).

Scholars have defined coherence in various ways. Still, each of the varying definitions has similar underlying constructs: building focus and coordination, cultivating assistive relationships, and changing behavior at scale (Childress et al., 2011; Education First and the Council of Chief State School Officers, n.d.; Fullan & Quinn, 2016; Honig, 2008; Zepeda et al., 2021).

When a central office acts as a coherent learning organization, collective work is a combination of educational leadership, organizational learning theory, and sociocultural learning theory (Blazer & Schueler, 2022; Knapp, 2008; Leithwood & Azah, 2017; Honig, 2008, 2012; Honig & Hatch, 2004). Organizational learning, sociocultural learning, and educational leadership practices have been tested empirically in single case studies profiling districts that succeeded in educational improvement efforts (Blazer & Schueler, 2022, p. 7). Additionally, related patterns in instructional leadership and system coherence have been highlighted through studies on central office effectiveness with a focus on how organizational behaviors and educational leadership actions work together

(Blazer & Schueler, 2022; Honig, 2008, 2012; Honig & Hatch, 2004; Leithwood, 2010; Leithwood & Azah, 2017; Thompson et al., 2008; Trujillo, 2013).

Honig (2008) asserted that school district central offices act as learning organizations when they engage the ideas from sociocultural and organizational learning theories. Sociocultural learning theory emphasizes the importance of central office leaders working in trusting relationships with school-level leaders to support improvement efforts. Organizational learning theory highlights how school districts can use the evidence procured from assistive relationships with schools and other sources to inform district operations. Viewing school district leadership for improvement through the lens of both learning theories allows educational leaders to consider how the organization can evolve and become more intelligent over time.

Analysts of district-wide reform initiatives have reported an evolutionary, dynamic pattern of district support as the organization improves (Anderson et al., 2012; Honig, 2008; Honig, 2012). Collective intelligence builds within coherent systems and can be systematically retrieved to improve and inform future decision-making (Knapp, 2008). In 2021, Zepeda et al. asserted that a clear, cohesive direction for district improvement supported by all divisions of the central office "accesses the expertise of multiple divisions within the system" (pp. 72-73).

Educational research has identified central office and school leaders' instructional leadership capacity as a high-leverage factor in improving teaching and learning at scale (Honig, 2012; Scott et al., 2020; Zepeda et al., 2021). Central office leaders who collectively commit to a shared vision can develop cohesive central office structures and processes to support principals' capacity development. However, to truly achieve

organizational coherence, district and school leaders must share accountability for student outcomes and function as a learning organization that continuously searches for evidence of improvement, incorporates feedback from schools, reflectively adjusts central office support, and retrieves organizational learning to inform future decision making (Fullan, 2006; Fullan & Quinn, 2016; Honig, 2008).

Chapter 3 provides the rationale for using qualitative research, describes the specific action research techniques used in the study, and explores the data sources, data collection, and data analysis methods. It also examines the study's validity, trustworthiness, and limitations.

CHAPTER 3

ACTION RESEARCH METHODOLOGY

Educational research has identified the development of central office and school leaders' instructional leadership as a high-leverage factor for improving teaching and learning at scale (Honig, 2008, 2012; Scott et al., 2020; Zepeda et al., 2021). A growing body of empirical research has aimed to identify the characteristics of high-performing school districts and articulate how some can improve student learning in meaningful ways (Anderson & Young, 2018; Leithwood, 2010; Leithwood et al., 2019; Trujillo, 2013). Central office coherence across goals, strategies, resources, partnerships, and professional learning emerged as a primary characteristic of school and central office effectiveness (Anderson & Young, 2018; Leithwood et al., 2019; Zepeda et al., 2021).

Substantial connections have been drawn between central office coherence and system and school improvement (Augustine et al., 2009; Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Hall, 2017; Honig & Hatch, 2004; Honig et al., 2010; Honig & Rainey, 2020a; Lanoue & Zepeda, 2018; Leithwood et al., 2019; Leithwood & Azah, 2017; Moore Johnson et al., 2015; Smith et al., 2020; Zepeda et al., 2021). When a central office acts as a coherent learning organization, collective work is a synthesis of educational leadership, organizational learning theory, and sociocultural learning theory (Blazer & Schueler, 2022; Knapp, 2008; Leithwood & Azah, 2017; Honig, 2008, 2012; Honig & Hatch, 2004).

To achieve organizational coherence, district and school leaders share accountability for student outcomes and function as a learning organization that continuously searches for evidence of improvement, incorporates feedback from schools, reflectively adjusts central office support, and retrieves organizational learning to inform future decision-making (Fullan, 2006; Fullan & Quinn, 2016; Honig, 2008, 2012; Honig et al., 2010; Honig & Hatch, 2004; Honig & Rainey, 2020a; Westover, 2020; Zepeda et al., 2017).

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. The study sought to establish the Focus County School District (FCSD) Teaching and Learning Division as an evidence-based learning organization that continuously evaluated, revised, and expanded systems of support to equip principals with the skills, knowledge, and tools necessary to develop high-quality instruction within their buildings. The perspectives of the curriculum coordinators and their supervisors were used to guide the study as they collaboratively designed coherent systems and structures to develop principals' instructional leadership capacity in every school.

The researcher approached the study with some overall questions: What central office systems and processes foster coherence and support curriculum coordinators in developing principals' instructional leadership capacity? What lessons can be learned using the action research process to develop coherent systems designed to build principals' instructional leadership capacity?

To address the purpose of this study, the following research questions guided this inquiry:

- 1. How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district?
- 2. How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district?
- 3. How does the Action Research Design Team (ARDT) articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?

This chapter provides the rationale for using qualitative research, describes the research design, and contextualizes the study. Additionally, it explores the logic model, interventions, data collection methods, and data analysis. Lastly, it discusses the validity and trustworthiness of the study.

Rationale for Qualitative Research

In a 2019 large-scale quantitative study, Leithwood et al. identified nine individual characteristics of central office effectiveness impacting student learning. This study identified seven of the nine characteristics with "significant, indirect effects on student learning: uses of evidence, coherent instructional program, mission, vision, and goals, district alignment, [trusting] relationships, professional leadership, and learning

oriented improvement processes" (Leithwood et al., 2019, p. 528). The study's findings substantially overlapped with a large body of research focused on districts performing beyond expectations in improved student learning (Anderson & Young, 2018; Leithwood, 2010; Trujillo, 2013).

Although each of the individual characteristics received statistically high-reliability scores, Leithwood et al. (2019) were unable to add any "conceptual glue" to link each district effectiveness characteristic to "an overall explanatory and/or predictive theory" (p. 532). Leithwood et al. (2019) noted, "theory development in district effectiveness literature has been limited and largely *post hoc*" and suggested, "Future theoretical work exploring the links between the district [effectiveness] characteristics and existing or new theory has the potential to enrich current understandings about effective district practice" (p. 522, 532, emphasis in original).

Honig's (2008) theoretical concept of sociocultural and organizational learning theories may provide theoretical insight to elaborate district central office leaders' participation in teaching and learning improvement efforts. Honig (2008) used concepts of organizational learning theory and sociocultural learning theory as lenses to conceptualize central offices as evidence-based learning organizations. The elements detailed in Honig's (2008) article complement the Leithwood et al. (2019) district effectiveness characteristics by teasing out specific organizational conditions for effective school and central office interactions, such as mutual trust, the development of supportive tools, engagement in joint work, the use of evidence, and brokering/boundary spanning.

Thus, if Leithwood et al.'s (2019) quantitative study articulated the "what"—
central office characteristics most impactful for student learning—then Honig's (2008)
learning organization concept theorized "how" those characteristics might be evidenced
in practice with central offices acting as dynamic, evidence-based learning organizations.
Honig's (2008) framework helped to illuminate the possible practices and participation of
mid-level central office leaders in school-based teaching and learning improvement
efforts. Honig's (2008) work further concluded that future research should "take central
office administrators and their relationships with schools as the main units of analysis"
(p. 654). This study sought to analyze curriculum coordinators' assistive relationships
with principals and how evidence from that joint work built the principals' instructional
leadership capacity and improved organizational coherence.

The theory of coherence has been applied across academic fields and has been examined in research and literature in a variety of contexts, including the extensive study of central office effectiveness (Augustine et al., 2009; Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Hall, 2017; Honig & Hatch, 2004; Honig et al., 2010; Honig & Rainey, 2020a; Lanoue & Zepeda, 2018; Leithwood et al., 2019; Leithwood & Azah, 2017; Moore Johnson et al., 2015; Smith et al., 2020; Westover, 2020; Zepeda et al., 2021). Within the Leithwood et al. (2019) quantitative study, the two characteristics awarded the highest ratings were mission, vision, and goals and the extent of coherent district alignment. Similarly, the foundations of central office coherence are the clear articulation and strategic alignment of the core work of central office leadership and the provision of necessary support to build organizational capacity (Zepeda et al., 2021).

For the purpose of this study, the theory of coherence served as the "conceptual glue" binding together the district office effectiveness characteristics of Leithwood et al. (2019) and Honig's (2008) concept of the central office as an evidence-based learning organization. Weaving together three distinct areas of theory and research required a constructivist approach. Scholars and practitioner-scholars close to the problem must work together to create new understandings and find practical applications grounded in theory.

Qualitative Research

Denzin and Lincoln (2018) defined qualitative research as a field of inquiry that crosscuts disciplines and subject matter. Qualitative research involves identifying questions and procedures, collecting data in a specific context, and using inductive data analysis to reveal themes, meanings, and the complexity of the context studied (Merriam & Grenier, 2019). Scholars and practitioner-scholars undertaking qualitative research apply systematic investigations in applied settings with a more practice-focused goal, like better understanding how coherence in central office leadership builds the instructional leadership capacity of school principals (Knapp, 2017).

Within qualitative research, "the researcher is the primary instrument of data collection and analysis, the process is inductive, and rich description characterizes the end product" (Merriam & Tisdell, 2016, p. 14). Bloomberg (2023) explained,

Qualitative research seeks to establish credibility, dependability, and confirmability, and is concerned with the issue of transferability, rather than generalizability (as is the case in quantitative research); that is, how and in what

ways the findings of a particular study might apply or be useful in other similar contexts. (p. 151)

Context is essential to interpreting qualitative research findings and provides perspective on how others might approach problems of practice in similar settings.

Qualitative inquiry is constructivist because "it is concerned with how the complexities of the social and cultural world are experienced, interpreted, and understood within a particular context and at a particular point in time" (Bloomberg, 2023, p. 74). Constructivist researchers assume the role of a "passionate participant," working closely to solve authentic problems of practice (Bloomberg, 2023, p. 74). As such, qualitative researchers "study things in their natural settings attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2018, p. 3). The collection, analysis, and interpretation of narrative and visual data assists the researcher in constructing new knowledge and context-relevant findings regarding the phenomenon of interest (Bloomberg, 2023).

Social constructivism and interpretivism within qualitative research emphasize that reality is socially constructed, and individuals develop meaning through their experiences and context (Bloomberg, 2023). The paradigm of constructivism places "emphasis on seeking understanding of the meaning of human actions and experiences and on generating accounts of meaning from the viewpoints of those involved" (Bloomberg, 2023, p. 151). The constructivist paradigm requires the researcher to acknowledge how their assumptions affect the co-construction of meaning during the research process.

The inherent value of a qualitative approach is the rich detail and practitioner insight captured that might be missing from quantitative studies (Glanz, 2014). Capturing the meanings, nuances, and insights practitioners experience in their naturalistic settings without the purposeful manipulation of subjects for experimental purposes helps the researcher understand how applied interventions impact, influence, and are perceived by the participants themselves (Glanz, 2014).

Qualitative research allowed for a comprehensive understanding of how central office coherence supported or stunted the development of principal capacity and provided the necessary contextual information to help develop interventions to assist central office leaders in designing coherent systems of support for principals. The researcher's "passionate participation" in the study allowed for co-constructed meaning surrounding the needed coherent systems within the context of the Focus County School District (FCSD) central office (Bloomberg, 2023, p. 74). The descriptive case study methodology provided an opportunity to explore how curriculum coordinators work collaboratively as a learning organization to design systems and tools to support principals' development as instructional leaders. Action research methodology was used to situate the research within the context of the FCSD Teaching and Learning Division.

Overview of Action Research Methods

Action research is a type of qualitative research and can be used to understand behavior and interactions within the context of the natural setting of the participants, such as the complex partnerships between central office and school leaders. Action research occurs "in conjunction with, and often concurrently with, day-to-day school [and district] activities" (Zepeda, 2017, p. 292). Action research is an approach that calls for research-

in-action versus research-about-action (Glanz, 2014). Action research design is unique because change and understanding are pursued simultaneously. Merriam and Tisdell (2016) explained, "its purpose is to either solve [a] practical problem or at least to find a way to further enhance what is already positive in a practice situation; it is always focused on the improvement of practice" (p. 50). Thus, practitioners conduct action research to improve practices in educational settings, encourage problem-solving, enhance decision-making, promote reflection, seek continuous improvement, and empower participants (Glantz, 2014).

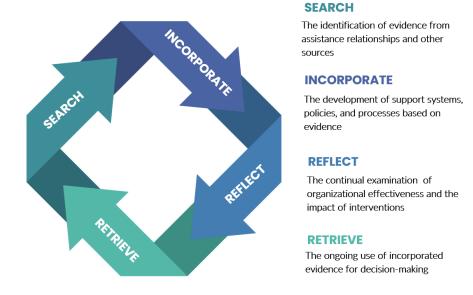
A primary characteristic of action research is its systematic and iterative nature, which provides structure to inquiry about problems of practice and potential interventions (Glanz, 2014; Merriam & Tisdell, 2016). Action research typically "spirals cycles of planning, acting, observing and reflecting" (Merriam & Tisdell, 2016, p. 51). Due to the iterative nature of action research, initial interventions and outcomes inform subsequent action research steps.

Figure 3.1 illustrates the cycles of action the Action Research Design Team (ARDT) and the Action Research Implementation Team (ARIT) engaged in as well as the iterative nature of organizational learning. To enhance the effectiveness of Honig's (2008) conceptual framework as a logic model for action research, the Action Research Design Team (ARDT) added the component of reflection. Reflection is central to the action research process and can be a form of job-embedded learning for research participants (Zepeda, 2019).

Figure 3.1

Action Research Process

The SIRR Cycle for Organizational Learning



Note. Adapted from Honig (2008) District Central Offices as Learning Organizations and Zepeda (2019) Process of Action Research.

Specifically, this study adapted Honig's (2008) conceptual framework, "District Offices as Learning Organizations," by adding the element of reflection to demonstrate the full action research process of central office leaders' working as a learning organization. Honig (2008) suggested that central office leaders work in cycles to search, incorporate, and retrieve evidence for decision-making and organizational learning.

Additionally, Zepeda (2017) identified reflection as a critical skill of action research and asserted that educators who engage in reflection reflect both individually and collectively to socially construct meaning within the organization's context. Glanz (2014) positioned,

Reflection-on-action occurs when educational leaders look back on their work and consider what practices were successful and what areas need improvement.

Reflection-on-action is critical to understanding and thinking about events and phenomena as they unfold in the school [or district]. (p. 23, emphasis in the original)

Reflection-on-action in research encourages participants to examine the effectiveness of interventions in real time and integrate new knowledge into their practices.

Reflection also situates participants to integrate knowledge for retrieval as evidence for future decision-making, resulting in organizational knowledge, learning, and improvement (Glanz, 2014; Honig, 2008; Jeffs & Smith, 1999; Zepeda, 2019). This study's Search-Incorporate-Reflect-Retrieve Cycle (SIRR) denotes the iterative cycles of action research that central office personnel engage with to propel the district toward organizational learning and coherence to build principals' instructional leadership capacity.

Throughout this study, the Action Research Design Team (ARDT) and the Action Research Implementation Team (ARIT) participated in the SIRR Cycles to analyze and improve lateral coherence across the Focus County School District (FCSD) Teaching and Learning Division. Both teams also promoted vertical capacity building by developing

support partnerships between curriculum coordinators and principals with the shared organizational goal of improved teaching and learning.

Action research attempts to bring about change through social learning and provides opportunities for participants to take action to address a problem of practice. As practitioners engage in action research, they "put the knowledge emerging from research to practical use" (Stringer & Aragón, 2020, p. xvii). Educators motivated to solve problems within an organization can "undertake action research, not merely to study their concerns but to [simultaneously] transform them" (Coghlan, 2019, p. 56). Thus, research participants are empowered to approach, address, and evaluate problems and collectively test solutions within their specific organizational contexts.

Action research is interactive, conducted in real-time, collaborative, and responsive, making it a practical and effective tool to investigate how central office leaders can work cohesively and collaboratively to support the development of principals' instructional leadership capacities (Coghlan & Brannick, 2014). Through the study, the ARDT recommended interventions and reflected on evidence to hold static or make course corrections. Likewise, the ARIT applied interventions within assistive relationships, responded to principal feedback, and engaged in joint work with principals to solve problems of practice. Action research was the chosen methodology for the study to empower the ARDT and ARIT to work collaboratively, connectedly, and coherently.

Action Research Design

Throughout the study, the Action Research Design Team (ARDT) and Action Research Intervention Team (ARIT) spiraled through the Search-Incorporate-Reflect-Retrieve (SIRR) action research cycles designed to use organizational learning and

system coherence to improve teaching and learning efforts within the Focus County
School District. Action research allowed the researcher and the participants to reflect on
the impact of central office fragmentation and work in partnership to improve central
office coherence and support for school leaders. The emphasis on collaborative decisionmaking in the action research process undergirded the cycles of inquiry of the ARDT and
ARIT and reinforced the idea that organizational coherence and support for school
leaders are ongoing, dynamic, and evolutionary processes.

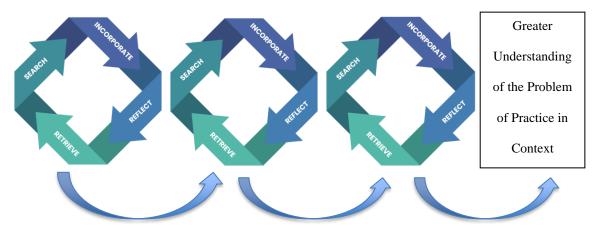
The Spiraling and Iterative Nature of Action Research

The spiraling and iterative nature of action research is a continuous and dynamic process of inquiry and reflection. At its core, action research is not a linear journey but a cyclical and evolving approach to understanding and improving organizational practices (Glanz, 2014). Bryk et al. (2015) described each cycle of inquiry as "articulating a hypothesis, based on a working theory of improvement, and then gathering data to test them" (p. 121). The spirals represent the ongoing cycles of planning, action, observation, and reflection that practitioners engage in as they navigate complex problems in context.

Each spiral involves deeper insight and refinement, propelling the researcher towards improved interventions and a more nuanced understanding. Figure 3.2 represents cycles of the action research process that empower participants to search for evidence, incorporate findings, reflect on outcomes, and retrieve learning to inform the change process.

Figure 3.2

The Spiraling and Iterative Nature of Action Research



Note. Adapted from Honig (2008) District Central Offices as Learning Organizations and Zepeda (2019) Process of Action Research.

The iterative aspects emphasize the repetitive nature of the research process, where feedback from one cycle is retrieved to inform the adjustments made in subsequent iterations. "Each cycle builds on what was learned in previous cycles until a team has discerned how to effect improvements reliably" within the scope and context of the study (Bryk et al., 2015, p. 121). This iterative looping fosters a responsive and adaptive methodology, allowing practitioner-researchers to fine-tune their strategies based on real-time outcomes and complexities that surface (Bryk et al., 2015; Coghlan, 2019; Glanz, 2014; Knapp, 2017). Through each iteration, action researchers refine their approaches, test hypotheses, and incorporate new insights, ultimately contributing to a more comprehensive and effective solution to the identified problem (Knapp, 2017).

The iterations of the Search-Incorporate-Reflect-Retrieve (SIRR) cycles of action research encouraged the researcher and participants to spiral through the phases of reflection to understand better how to address organizational fragmentation and move

toward coherence, organizational learning, and improved support for principals. The logic model defined the study cycles and provided a framework for the researcher and participants.

Logic Model

To frame the study, a logic model was needed to guide the cycles of action research and the embedded interventions to chart continuous improvement efforts. The logic model adapted for this study, the Search-Incorporate-Reflect-Retrieve (SIRR)

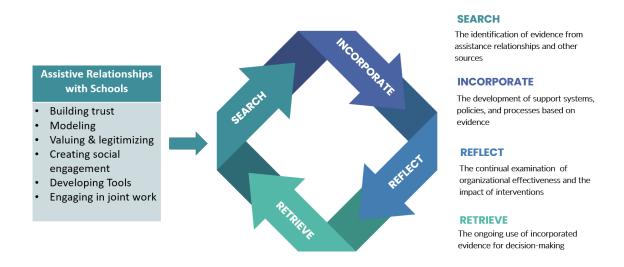
Cycle, denotes the iterative cycles of action research that central office personnel engage with to move the district toward organizational coherence and to build principal capacity.

Honig (2008) developed a conceptual framework, "District Offices as Learning Organizations," depicted in Figure 3.3, to demonstrate the process of central office leaders' working as a learning organization through the assistive relationships developed between school and district-level leaders. Because reflection is central to the action research process and can be a form of job-embedded learning for research participants, the Action Research Design Team engaged in an additional component, reflection, as represented in Figure 3.3, The SIRR Cycle of Organizational Learning.

Figure 3.3

Logic Model

The SIRR Cycle for Organizational Learning



Note. Adapted from Honig (2008) District Central Offices as Learning Organizations and Zepeda (2019) Process of Action Research.

The SIRR Cycle depicted in Figure 3.3 provided a specific structure as the ARDT and ARIT defined the problem of fragmentation and implemented interventions to promote central office coherence. Through the continuous improvement cycles, participants searched for evidence of coherence, incorporated responsive support systems and processes, continually reflected on organizational effectiveness and the effectiveness of interventions, and built organizational knowledge by retrieving learning to impact future decision-making.

Theory of Change

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. Aligning the purpose of the study and the overarching research questions, the theory of change was situated within the theory of coherence by building focus and coordination, cultivating assistive relationships, and changing behavior at scale to build principals' capacity to support and sustain teaching and learning improvement.

The process of achieving coherence and organizational learning began with the Action Research Design Team (ARDT) identifying the specific context and realities of fragmentation in the Focus County School District (FCSD) Teaching and Learning Division's support for developing principals' instructional leadership across the school district. Using the three drivers of coherence (e.g., building focus and coordination, cultivating assistive relationships, and changing behavior at scale), the ARDT helped to identify systems, policies, and processes contributing to fragmentation and to hypothesize objectives and targets to address them. Based on these efforts, the ARDT planned cycles of interventions to increase the coherence of central office support for principals.

The Case

Within the Focus County School District (FCSD), curriculum coordinators worked within silos of content and pedagogical expertise to support job-embedded professional development for teachers. Still, they did not systematically provide coherent support to build principals' instructional leadership capacity. As a result, central office support was fragmented, and school leaders were excluded from developing

improvement initiatives, often resulting in mistrust, miscommunication, and misalignment of efforts.

By focusing primarily on supporting teachers to improve classroom instructional practices, FCSD curriculum coordinators overlooked the importance of partnering with principals to identify collaborative teaching and learning improvement areas. They also sidestepped building the collective leadership capacity necessary to create and sustain change efforts across a large, suburban school district. This study sought to develop the skills and abilities of curriculum coordinators in the FCSD Teaching and Learning Division to collectively design evidence-based, coherent systems and practices aimed at building principals' capacity to support teaching and learning improvement.

Case studies are a type of ethnographic research that "involves an in-depth analysis of an individual, a group of individuals, a site or a scene" (Glantz, 2014, p. 88). Case studies report detailed observations and are written to understand better a situation or social phenomenon and its possible implications (Glantz, 2014). The research was bounded as a case of the experiences of the ARDT and ARIT as they collaboratively developed coherent systems of support at the FCSD Central Office in response to feedback, observation, and evidence from curriculum coordinators' assistive relationships with principals.

Investigating and analyzing evidence of fragmentation and coherence allowed the ARDT to collaborate and communicate in cycles with the ARIT, which then collaborated directly with principals. As interventions were applied, the ARDT and ARIT teams reflected on the evidence of coherence in central office support and attempted to make practical sense of outcomes. The rich descriptions found in case studies allowed for the

investigation of thematic analysis that enhanced the understanding of the phenomenon through deep contextual analysis (Glanz, 2014).

The Action Research Design Team

Action research is a participatory process that "targets practical issues of concern to the organization in collaboration with colleagues and relevant others" (Coghlan, 2019, p. 28). As such, the Action Research Design Team (ARDT) was comprised of district and school personnel and included the researcher, district leaders, an experienced principal, and an experienced curriculum coordinator. Table 3.1 lists the team members and describes their current positions, experience, and primary role in the research.

Table 3.1Action Research Design Team Members

Team Member	FCSD Position	Action Research Role
Primary Researcher	Chief Academic Officer	Leads and conducts all research with the action research design team for data analysis. Brings 19 years of educational leadership experience, including 5 years of central office experience and 7 years as a principal. Previously served as a K-5 principal supervisor.
Ms. Fields	Executive Director of K-5 Teaching & Learning, Principal Supervisor	Provides context and charge for central office literacy leadership and K-5 principal development. Brings 13 years of experience as an elementary principal and 5 years of central office experience.
Dr. Roads	Executive Director of 6- 12 Teaching & Learning, Principal Supervisor	Provides context and charge for central office math leadership and 6-12 principal development. Brings 19 years of educational leadership, including 3 years of central office leadership and 10 years as a high school principal.
Ms. Sinclair	Director of Academics	Provides context and charge for central office leadership and expert knowledge in coaching, academic intervention, data analysis, assessment uses, and student support. Brings 14 years of teaching, 5 years in instructional administration, and 5 years of experience as a central office leader.
Ms. Frame	Curriculum Coordinator of Literacy and English Language Arts	Provides expert knowledge in the Science of Reading, instructional coaching, and teacher support. Brings 6 years of teaching experience, 8 years of instructional administration experience, and 7 years of central office coordinator experience.
Dr. Bowls	Middle School Principal	Provides a current school-level perspective and expert knowledge of middle-grade principal instructional leadership. Brings 5 years of successful principal experience.

The primary researcher served as the Chief Academic Officer of the Focus

County School District and had a vested interest in examining central office coherence,
studying curriculum coordinator effectiveness, and developing principals' instructional
leadership capacity. She has experience as a high school administrator and an elementary
principal. Before becoming the Chief Academic Officer, she was an elementary and
secondary principal supervisor and evaluator.

The ARDT benefited from the practical experience of a middle school principal, who provided a current school-level perspective and expertise in effective principal instructional leadership in a post-COVID school environment. The Executive Directors of Teaching and Learning, in their dual role of coaching and evaluating principals' instructional leadership and evaluating the curriculum coordinators who support instructional improvement, further enriched the team's expertise.

The Director of Academics supervises and facilitates district instructional support processes and programs, such as Multi-Tiered Systems of Support (MTSS), Early Intervention and Remedial Education Programs (EIP/REP), and support for English Language Learners (ELL). Additionally, she is responsible for designing and maintaining systems for district data analytics and continuous improvement processes.

The Curriculum Coordinator of Literacy and English Language Arts began her career as a teacher and a school-level instructional leader. She provided central office leadership and support to elementary schools through a large-scale, multi-year transition from balanced literacy to the Science of Reading. She served as the Vice President of the statewide Language Arts Supervisors organization and the area representative for the statewide Curriculum and Instructional Supervisors Association.

The members of the ARDT were chosen for their leadership, instructional experiences, and varied roles within school leadership and central office leadership. The ARDT had a robust set of professional experiences and expertise, including former and current principals and principal supervisors from the elementary, middle, and high school levels. The team worked to create and implement interventions to collaboratively design coherent systems of support to develop principals' instructional leadership capacity. The researcher and the ARDT reviewed evidence from each cycle, designed interventions, and collaborated with the curriculum coordinators on the Action Research Implementation Team (ARIT).

Action Research Implementation Team

The Action Research Implementation Team (ARIT) worked in cycles to implement the interventions designed and evaluated by the Action Research Design Team (ARDT). The ARIT was comprised of four school principals and three curriculum coordinators who were asked via letter in February 2024 to participate in this study, which occurred within the school improvement planning process for the upcoming school year. The curriculum coordinator, Ms. Frame, served on the ARDT and the ARIT due to the nature of her position and the high demand for Literacy and English Language Arts support. Table 3.2 details each ARIT member's current position and professional experience.

 Table 3.2

 Action Research Implementation Team Members

Team Member	FCSD Position	Professional Experience
Ms. Frame	Curriculum Coordinator of Literacy and English Language Arts	Provides expert knowledge in the Science of Reading, instructional coaching, and teacher support. Brings 6 years of teaching experience, 8 years of instructional administration experience, and 7 years of central office coordinator experience.
Mr. Willis	Principal of Nero Elementary School	Provides 4 years of experience as an elementary principal, 2-years experience as a middle school administrator, and 7-years as a middle school math teacher
Ms. Harrison	Curriculum Coordinator of Whole Child Supports	Provides 2 years of experience as a coordinator, 4 years as a middle school teacher, 10 years as a school counselor and behavior specialist, and 6 years as a middle school assistant principal
Mr. House	Principal of Harris High School	Provides 2 years of experience as a high school principal, 4 years as a high school assistant principal, and 11 years as a high school teacher and basketball coach
Ms. Merrit	Curriculum Coordinator of Writing Instruction	Provides 12 years of experience as an elementary teacher, 8 years of experience as an elementary administrator, and 2 years of central office experience.
Mr. Skell	Principal of Southside Middle School	Provides 6 years of experience as a high school math teacher, 7 years as a high school assistant principal, and 2 years as a middle school principal.
Ms. Buyer	Principal of Deville Elementary School	Provides 7 years of experience as an elementary principal, 9 years as an elementary teacher, and 9 years as an elementary administrator

Research Plan and Timeline

The timeline for the research followed Glanz's (2014) process of reflective action, which suggested that sustained improvement comes from cycles of reflection and action. The timeline in Table 3.3 outlines the cycles of reflection and action used in the study. The timing for the interventions, interviews, questionnaires, and observations are indicated and occurred during the spring and summer of the 2023-2024 school year.

Table 3.3Action Research Timeline

Cycle Date	Action Research Activity			
	Action Research Design Team (ARDT)	Action Research Implementation Team (ARIT)		
April 2024 Pre- Study	Secure IRB and District ApprovalOrientation Meeting	Invitation/consent to participateOrientation MeetingPre-Interviews		
May 2024 Cycle #1	 ARDT Meeting #1 Plan interventions and suggested sample activities Review Pre-Interview responses 	ARIT Meeting #1 Focus: Building Focus and Coordination (identifying priorities, communication, building support tools, removing obstacles and distractions)		
	 Researcher: Observe collaborative pairs Researchers Journal-record data/reflections 	 Curriculum Coordinators: Prep for collaborative activities/actions SIRR Cycle Log (Search for Evidence, Incorporate, Retrieve, Reflect) Upload collaborative evidence and artifacts 		

Coordinator/Principal: Cycle #1 Questionnaire

Table 3.3Action Research Timeline

Cycle Date	Action Research Activity	
	Action Research Design Team (ARDT)	Action Research Implementation Team (ARIT)
June 2024 Cycle #2	 ARDT Meeting #2 Cycle 1 Data Review Plan interventions and suggested sample activities 	ARIT Meeting #2 Focus: Cultivating Assistive Relationships (building trust, engaging in joint work with principals/teachers, authentic input/feedback, supporting the inclusion of diverse groups, recognizing power dynamics, brokering, and boundary-spanning)
	 Researcher: Observe collaborative pairs Researchers Journal-record data/reflections 	 Curriculum Coordinator: Prep for collaborative activities/actions SIRR Cycle Log (Search for Evidence, Incorporate, Retrieve, Reflect) Upload collaborative evidence and artifacts Coordinator/Principal: Cycle #2 Questionnaire
July 2024 Cycle #3	 ARDT Meeting #3 Cycle 2: Data Review Plan interventions and suggested sample activities 	ARIT Meeting #3 Focus: Changing Behavior at Scale (capacity building, defining key leadership behaviors, modeling thinking/action, differentiated support, tapping networks)
	 Researcher: Observe collaborative pairs Researchers Journal-record data/reflections 	 Curriculum Coordinator: Prep for collaborative activities/actions SIRR Cycle Log (Search for Evidence, Incorporate, Retrieve, Reflect) Upload collaborative evidence and artifacts Coordinator/Principal: Cycle #3 Questionnaire
August 2024 Post- Study	 ARDT Meeting #4 Cycle 3 Data Review Post-Interview Responses Final reflections/insights ARDT Post-Study Focus Group 	ARIT Post-Study Interview

Context of the Study

The Focus County School District (FCSD) is a large, suburban school district located 35 miles from a large, urban city. Focus County is geographically large, covering 312.22 square miles with a population of 540 people per square mile (United States Census Bureau, 2020). FCSD was also one of the fastest-growing, large school districts in the state, increasing student enrollment by three percent in 2022-2023 compared to a state average of one-half percent for other large districts (Governor's Office of Student Achievement, 2023). One of the more unique features of FCSD is that of the 34 schools within the district, 13 are considered rural, one is classified as town fringe, and the remaining schools qualify as large suburban locales, making differentiated support from the central office critical to each school's success (National Center for Education Statistics, 2023). With such variation in school community needs within the district, a one-size-fits-all central office support model is ineffective.

School District Financial Challenges

In the United States, public education is the responsibility of each state, and state law specifies how local public schools are funded. The state in which the study was conducted funds public schools through the Quality Basic Education Act (QBE), enacted into law in 1985 to set provisions for educational funding for grades Kindergarten through twelve (Owens, 2022). Each year, funding is earned or lost based on the district's reported data. The funding formula is calculated using student enrollment by program, the training and experience of certified staff, and the health insurance eligibility of certified staff. The funding formula has been widely criticized for providing less funding for districts with inexperienced or underqualified staff, thereby suppressing local

districts' abilities to provide adequate salaries to attract and retain experienced, highly qualified teachers.

Additionally, funding is a multi-year average applied retroactively, so high-growth districts are further disadvantaged by having to provide additional teaching allotments for multiple years before any state funding is received. The Focus County School District is a high-growth district that struggles to maintain competitive salaries with other large suburban districts in the area. Instead, the district relies heavily on local property taxes to cover the gaps in the QBE funding formula.

The state requires all local public-school districts to collect their local fair share at a minimum of five mils, or five dollars for every 1000 dollars of property value, an amount which the state then deducts before sending state funding to the school district. Rural and heavily residential districts with lower-than-average property wealth and limited industry have less ability to raise their property taxes to support local schools. The result is funding inequalities significantly impacting how low-wealth school systems can support the neediest students and communities.

Focus County has limited industry and employment opportunities, and the school district is the county's largest employer, with over 4,000 employees, including 2,100 certified staff. In the absence of local career opportunities, over 80% of the working population of Focus County commute outside of the county limits for employment.

FCSD was classified as a low-wealth school district according to state funding definitions, which means that although total student enrollment is the 11th largest school district in the state, the district's collected revenue to fund its public schools is equivalent to that of the 29th-ranked school district (Focus County School District, 2024).

Additionally, 86% of the local tax base that supports the public-school district is residential property taxes (Focus County School District, 2024). Because so much of the school district's local revenue depends on home values, the district budget is particularly vulnerable to large swings in revenue as the housing market fluctuates.

Such challenging and unpredictable local revenue sources are a barrier to the district's sustained improvement efforts and require the annual reevaluation of instructional support positions and programs. Often, new central office positions and programs are funded by state and federal grants for a specific improvement initiative, but due to limited local resources, the positions and programs are unsustainable following the grant's lifespan.

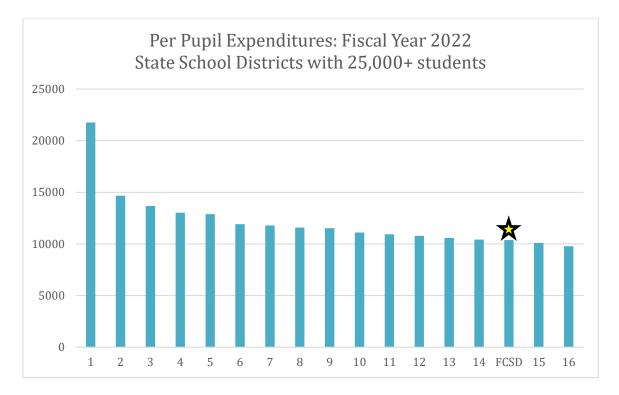
FCSD annually commits more of its financial resources (68%) to instructional expenditures than statewide averages (64%) (Focus County School District, 2024).

Maintaining lower class sizes (15:1), providing instructional resources, and keeping teaching salaries regionally competitive are the baselines for all annual budget decisions.

Despite being a low-wealth school district, FCSD's per pupil expenditures (PPE) are comparable to those of other state school districts with a student enrollment of 25,000 or more, as represented in Figure 3.4.

Figure 3.4

Large School District Per Pupil Expenditures (PPE)



Note. As reported by the Governor's Office of Student Achievement (2023).

However, committing a higher percentage of the overall district budget to classroom instruction reduces the costs of central office support services. FCSD central office expenditures are less than half of what comparable state school districts spend on central office support (Focus County School District, 2024). District finances do not support any significant expansion of the Teaching and Learning Division support staff, making the development of principals' instructional leadership capacity paramount for improving teaching and learning.

Student Body Characteristics and Achievement

Focus County School District student enrollment was racially comprised of 48.6% White, 31.5% Black, 12.6% Hispanic, 6% Multi-racial, and 1% Asian/Pacific Islander

(Governor's Office of Student Achievement, 2023). Students with Disabilities (SWD) comprised 15.7% of the student population. Linguistically, 93.6% of children five and older speak English only at home, and 13% of students enrolled in FCSD were English Learners (EL) (National Center for Education Statistics, 2024).

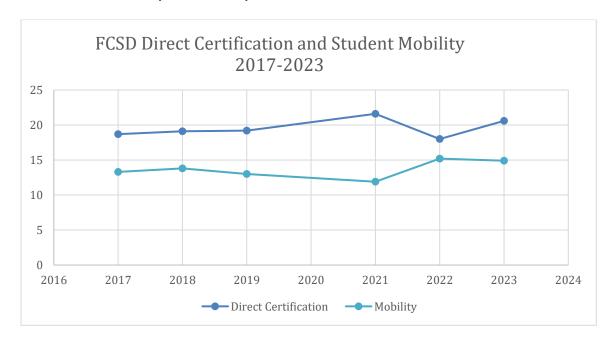
The state in which the study was conducted is only one of six remaining states that do not provide additional funding to educate students living in poverty (Owens, 2022). Of the FCSD students experiencing poverty in 2023, 20.6% were identified through Direct Certification, and 56% were identified through Free/Reduced Lunch designations (Focus County School District, 2024). Directly certified students include students living in a family unit receiving food stamp benefits, students living in a family unit needing Temporary Assistance for Needy Families (TANF), and students identified as homeless, unaccompanied youth, foster, or migrant (Governor's Office of Student Achievement, 2023). The district's median income for parents with children in public school was \$94,315, higher than both state and national averages (National Center of Education Statistics, 2024). However, there are significant family income and poverty level variances by school and locale within the district.

Another demographic indicator often associated with poverty is the Student Mobility Rate. Student Mobility measures the rate of entries and withdrawals to schools within a district during the school year and can indicate housing insecurity. In many instances, the rate of enrollment turnover reflects the percentage of families who experience financial hardship and lose their homes. Since 2017, the mobility of students enrolling and withdrawing from schools during the school year has fluctuated between 12% and 15%.

As many as 4,800 FCSD students have cycled in and out of enrollment during each school year, creating gaps in instruction, student learning, and overall achievement. The COVID-19 pandemic impacted families' financial and housing stability within the Focus County School District, as indicated by changes in 2021 and 2022 Direct Certification and Student Mobility Rates in Figure 3.5.

Figure 3.5

FCSD Student Poverty and Mobility Rates



Note. As reported by the Governor's Office of Student Achievement. Statistical data were not provided for the 2020 school year due to the Coronavirus pandemic.

Empirical research has long established a strong correlation between the effects of poverty and student achievement (Governor's Office of Student Achievement, 2023).

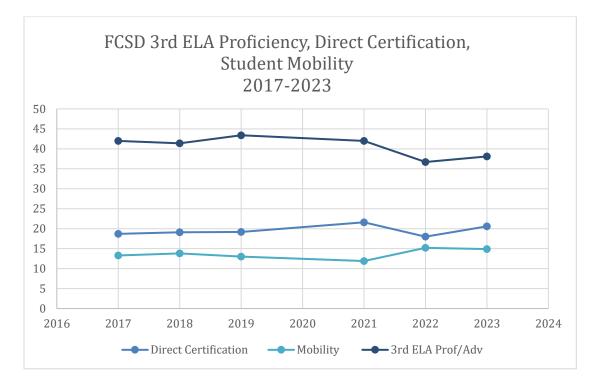
According to the Governor's Office of Student Achievement (2023), poverty and housing insecurity issues can significantly affect students' academic progress. Since 2017, the FCSD's Direct Certification (DC) percentage and Student Mobility Rate have increased

by 2%, negatively impacting overall student literacy achievement (Governor's Office of Student Achievement, 2023).

In 2023, a state report noted "statistically significant (p<0.001) and negative relationships...between schools' percentages of Direct Certification students and schools' percentages of 3rd graders who score proficiently/above" in literacy on state standardized tests (Governor's Office of Student Achievement, 2023, p. 2). Across the state during the 2021-2022 school year, a 10% increase in a school's Direct Certification population corresponded to an 8.2% decrease in a school's 3rd-grade English Language Arts proficiency (Governor's Office of Student Achievement, 2023). Between 2017 and 2023, Focus County Schools saw a 2% increase in Direct Certification and a 1.6% increase in Student Mobility Rate, resulting in a 4% drop in 3rd-grade English Language Arts Achievement, as illustrated in Figure 3.6.

Figure 3.6

FCSD 3rd Grade ELA Proficiency, Poverty, and Student Mobility

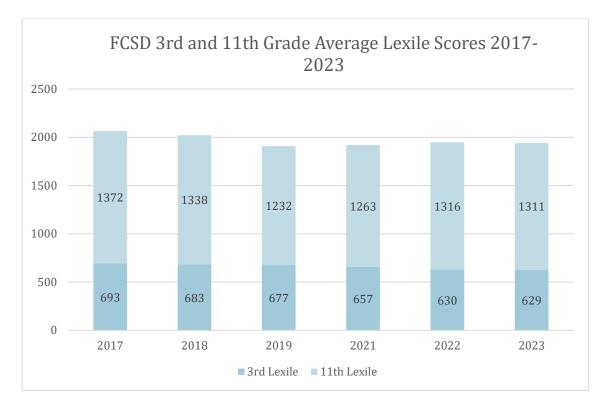


Note. As reported by the Governor's Office of Student Achievement. Statistical data were not provided for the 2020 school year due to the coronavirus pandemic.

As FCSD student mobility and poverty rates have increased, not only has 3rd-grade English Language Arts Proficiency decreased, but also 3rd and 11th-grade student Lexile levels, a measure of reading comprehension proficiency, have decreased. From 2017-2023, 11th-grade Lexile scores have decreased by 61 points, a 4.4% decrease, and 3rd-grade Lexile scores have decreased by 64 points, a 9.2% decrease, as illustrated by Figure 3.7.

Figure 3.7

FCSD Student Lexile Levels for 3rd and 11th grade students



Note. As reported by the Georgia Department of Education. Statistical data were not provided for the 2020 school year due to the coronavirus pandemic.

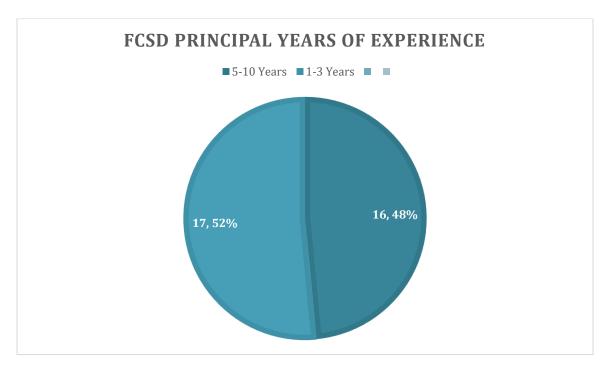
School Leadership Characteristics

In 2023, Focus County School District employed 101 school leaders across 34 schools comprised of 60 females and 41 males. Although school leadership has grown increasingly racially diverse over the last five years due to strategic initiatives to recruit and retain leaders of color, in 2023, principals were 74.26% white, 22% black, and 3% Hispanic, which is slightly less diverse than the racial makeup of the student body (Georgia Department of Education, 2023).

Leader Retention Rate is the percentage of leaders retained from the prior year within the same school district (Georgia Department of Education, 2024). The FCSD Leader Retention Rate was 84.16% in 2023 and fluctuated above and below the state average between 2019-2023 due to increased principal promotion and retirement rates due, in part, to the coronavirus pandemic and a superintendent change. Although school leader retention rates have declined, no principals have left the district to pursue positions in other school districts. However, during the 2024 school year, 51.5% of principals were within their first three years of the principalship, as represented in Figure 3.8 (Georgia Department of Education, 2024).

Figure 3.8

FCSD Principal Years of Experience



Note. Focus County School District (2023).

An inexperienced principal workforce was challenging to support with limited central office staff. The School Leadership, Human Resources, and Teaching and Learning Divisions are tasked with onboarding, developing, and retaining school leaders. Additionally, adding and onboarding new classroom teachers, school leaders, and support staff presented a constant challenge for a comparatively small number of district-level leaders. As such, engaging school leaders in the collective work of instructional improvement was critical to developing organizational capacity and ensuring an equitable education for every student in every school. System coherence and intentional principal development were paramount to the success of the district and the improvement of student outcomes.

Central Office Support

The FCSD Teaching and Learning Division included 12 content-specific curriculum coordinators to support the instructional development of all school leaders and teachers across the district. Curriculum coordinators are mid-level district instructional leaders who provide support, guidance, professional development, and coaching to school administrators, instructional coaches, and teachers. Curriculum coordinators develop and execute district-level teaching and learning improvement plans for their areas of expertise and subordinates. However, they have no evaluative authority over school or central office personnel. Before being promoted to the central office, half of the coordinators served in formal school leadership positions, but the remaining coordinators served only as classroom teachers. None of the coordinators served as school principals.

Varied background knowledge and school leadership experiences impacted curriculum coordinators' leadership abilities and confidence to engage with school leaders and challenging teacher groups. To leverage the impact of the curriculum coordinators on continuous school and district improvement efforts, they first needed to develop new skills and professional capacities to become more inclusive of principals and collaboratively build instructional leadership capacity across all levels of the organization. In addition to individual and professional growth, the coordinators also needed to build collaboration, connectivity, and coherence to function as an evidence-based learning organization that supports the individual improvement of each school, the collective work of the Teaching and Learning Division, and the strategic work of the school district.

Data Sources

This study examined the perspectives of central office curriculum coordinators and school principals on forming assistive relationships and the organizational learning critical to developing systems and processes of coherence. Various data were collected from primary (participants in the study) and secondary (school and central office documents) sources.

Participants

The Action Research Design Team (ARDT) was comprised of the Chief

Academic Officer (researcher), a middle school principal, one curriculum coordinator,
the Director of Academics, and two Teaching and Learning Executive Directors. The

Action Research Implementation Team (ARIT) included the curriculum coordinator from
the ARDT, two additional curriculum coordinators, two elementary principals (grades K-

5), a middle school principal (grades 6-8), and a high school principal (grades 9-12). Data from the ARIT were collected and analyzed to provide direction for the ARDT to create interventions based on scholarly literature and evidence from the assistive relationships.

The research cycle provided time for the purposeful reflection of the ARDT and ARIT teams based on the results of the implemented interventions.

Section Criteria

Qualitative research relies on participants' intentional and targeted selection to accelerate understanding, garner specific practitioner insights, and amplify the studied phenomena in context (Bloomberg, 2023; Merriam & Tisdell, 2016). The researcher used purposeful sampling techniques to yield insight and understanding of the phenomena, central office coherence, and organizational learning (Bloomberg, 2023).

The researcher employed "critical or crucial case sampling" by selecting participants identified as knowledgeable individuals with demonstrated expertise and formal leadership experience in the areas of study who could provide a practitioner's insight for an in-depth study of coherent school and central office partnerships (Bloomberg, 2023, p. 268). Action Research Design Team members had at least one year of demonstrated central office leadership, diverse curricular and pedagogical experiences, and various formal instructional leadership positions within schools and the central office. Collectively, ARDT members brought practitioner expertise and formal experience as school administrators, principals, instructional coaches, library media specialists, and classroom teachers.

By design, the ARDT team members had formal experience across every position and grade band being studied, which provided reliable insight and a real-world

perspective as they planned interventions. Including a sitting middle school principal on the ARDT ensured that a current view and voice of the principalship was considered throughout the design process. Additionally, given the complexity of studying central office coherence, organizational learning, and support for principal instructional leadership development, having curriculum coordinators and principals on both the design and implementation teams was critical to developing interventions and considering the needs of all research participants.

The Action Research Implementation Team (ARIT) members were sampled using the "maximum variation or heterogeneity sampling" strategy (Bloomberg, 2023, p. 266). ARIT participants were selected because they represented the broadest possible range of the characteristics or dimensions being studied (Bloomberg, 2023). Selecting participants for maximum variation and heterogeneity supported the researcher in determining what is unique about each situation, such as the differences between elementary, middle, and high school principal perspectives, and what is standard across diverse settings, such as the development of trusting partnerships between principals and central office leaders (Bloomberg, 2023).

The Action Research Implementation Team (ARIT) principals represented every level and K-12 grade band—elementary, middle, and high school. The participating ARIT curriculum coordinators had content and pedagogical expertise in early literacy, K-12 writing, and K-12 academic interventions/supports. Attention was given to selecting leaders whose race, ethnicity, and gender represented the broadest sample available within the school district. The ARIT team was made up of five women and two men, and the racial makeup was 57% white/Caucasian and 43% black/African American.

The Action Research Implementation Team (ARIT) selection also incorporated "theoretical sampling" by examining school and central office leaders who demonstrated a natural propensity for joint work, collaboration, and shared accountability. Theoretical sampling is "guided by an evolving theory...with the aim to develop categories and to integrate those categories in ways that reveal their relationship to the theory being developed (Bloomberg, 2023, p. 267).

The theoretical sample selection of leaders was guided by existing scholarship surrounding the theory of coherence. It included the intentional selection of leaders whose dispensations toward collaboration might "illuminate the theoretical or conceptual ideas of interest" and contribute to identifying the specific practitioner applications of the evolving theory of coherence (Bloomberg, 2023, p. 267). By selecting ARIT members with a wide range of background knowledge and experience and an existing openness to school and central office partnerships, the implementation team was well-positioned to clearly articulate the practitioner's role and identify specific behaviors and actions contributing to central office coherence.

The next section of this chapter describes the data collection methods included in this action research study.

Data Collection Methods

This study used a qualitative approach to data collection and analysis. Qualitative research contributed to a comprehensive understanding of how a central office can function as a coherent learning organization and the impact of coherence on principals' instructional leadership capacity. The researcher's immersion in the study allowed for coconstructing meaning around moving from fragmentation to coherence.

The qualitative data collection techniques and the information to be considered are determined by the researchers' theoretical orientation, the problem and purpose of the study, and the sample selected (Merriam & Tisdell, 2016). This qualitative research used the descriptive case study approach focused on curriculum coordinators' support for principals' instructional leadership through the theoretical lens of coherence. The descriptive case study methodology provided an opportunity to explore how principals and curriculum coordinators in the Focus County School District used the drivers of coherence (e.g., building focus and coordination, cultivating assistive relationships, and changing behavior at scale) to improve the effectiveness of their joint work and expand the principals' instructional leadership capacity.

Data collection for this study incorporated numerous qualitative methods to increase opportunities for "methodological triangulation" (Bloomberg, 2023, p. 277). These methods included:

- Individual pre- and post- study interviews with ARIT curriculum coordinators and principals;
- 2. Questionnaires completed electronically by each ARIT member following each research cycle;
- Observations of collaborative meetings and activities coordinated by curriculum coordinator and principal pairs during each research cycle;
- 4. Researcher field notes based on observations during collaborative meetings and activities;
- 5. Document and artifact review to provide additional context about the focus of the study and the nature of the collaborative work; and,

6. Focus group data collected from the Action Research Design Team (ARDT) at the conclusion of the study to articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity.

Each data collection method contributed information and layered context to triangulate the findings in the data. The researcher and the ARDT analyzed the qualitative data generated from the various research methods using a coding scheme, analyzing patterns in the coding, identifying patterns, and generating themes.

Action research methods consider that each research setting has unique social, cultural, and historical contexts that contribute to how meaning is constructed (Bloomberg, 2023). When action researchers are involved in specific social contexts with their participants, they are more likely to understand how meaning is constructed and the nuances in the findings (Coghlan, 2019; Glanz, 2014; Merriam & Tisdell, 2016). The design of this study systematically checked the researcher's preconceptions and assumptions through a careful examination of the data from multiple sources, corroborative data findings, and the Action Research Design Team's full participation in data analysis.

Interviews

Semi-structured interviews were conducted pre/post-study with the Action Research Implementation Team members. Participants completed an estimated 45-minute pre-study interview regarding the coherence of central office supports, the central office as a learning organization, and curriculum coordinators' impact on principals' instructional leadership capacity. Pre-interviews allowed the researcher to hear the

participants' perspectives directly and to investigate deeper than what might be readily observed during collaboration and follow-up activities (Bloomberg, 2023; Merriam & Tisdell, 2016). Semi-structured interview protocols were used to give the participants the flexibility to articulate their perspectives fully and to allow the researcher to probe for deeper context and understanding. A semi-structured interview incorporates questions tied to the study's research questions and theoretical framework but also allows for some spontaneity and follow-up probes (Bloomberg, 2023).

The semi-structured interviews for the study were recorded, transcribed, coded, and analyzed for overall themes. Table 3.4 illustrates the pre-study interview questions. Post-study interview questions are provided in Appendix C.

Table 3.4Pre-Study Interview Questions

Research Questions	ARIT Interview Prompts	
Q1: How can curriculum	In what ways do curriculum coordinators engage with principals and their teams in instructional improvement work? How often?	
coordinators work as a learning organization to collaboratively	What elements are needed for successful central office and principal instructional partnerships? What types of support are valued?	
design coherent systems of support to develop	In what ways can coordinators build strong relationships with leaders at the school level?	
principals' instructional leadership capacity	Share a time when central office instructional support efforts were successful. What made the efforts successful?	
in a large, suburban school district?	Conversely, share a time when central office instructional support efforts were unsuccessful. What made the efforts unsuccessful?	
	What barriers exist to coordinators engaging productively with principals in ways that transform schools and student outcomes?	
,	What support systems are needed to effectively develop principals' instructional leadership capacity?	
Q2: How do curriculum coordinators describe the process	Has Teaching & Learning clearly articulated goals, strategies, and initiatives for district improvement? How do you know if your work is aligned or misaligned?	
of working as a learning organization and	Describe your process for designing support for principals' instructional leadership. How has your process evolved?	
the impact of coherent systems of support on their abilities to develop principals'	Describe how you either formally or informally reflect on the effectiveness of your support for principals and schools. • How does reflection inform your future decision-making? • How do you share your reflections with others?	
instructional leadership capacity in a large, suburban school district?	At what level do you collaborate and network with other central office leaders to ensure coherence across your subject area and with other departments?	
	How can coherent systems and processes within the Teaching & Learning Department support your ability to impact improvement in schools effectively? Examples? Areas for improvement?	

The flexibility of the semi-structured interview format was designed to allow the researcher to be responsive to each ARIT participant and their perspectives. Due to the researcher's immersion in the context of the setting, the one-to-one setting of the interviews elicited in-depth, content-rich personal accounts, perceptions, and perspectives of the Action Research Implementation Team. Although the interviews resulted in large amounts of detailed data aligned with the research questions and scholarly literature, participants' answers could not always be compared one-to-one across question prompts due to the fluid nature of a semi-structured interview protocol.

Questionnaires

In addition to semi-structured interviews, electronic questionnaires were completed individually by ARIT members after each action research cycle and focused on participant perceptions of the effectiveness of the collaborative partnership.

Questionnaires included open-ended prompts where participants could anonymously share thoughts and feelings, reflect on the collaborative work, and articulate the effectiveness of the partnership in a risk-free setting. Questionnaires allowed principals and curriculum coordinators on the Action Research Intervention Team (ARIT) to confidentially and candidly express their opinions about interventions applied within the cycle, their impact on central office coherence, and the perceived effects on the principals' instructional leadership capacity.

Eliciting questionnaire responses immediately following each research cycle strengthened the research data by engaging participants in the reflective process while interactions were fresh in their minds when participants were most likely to recall the high and low points of the experience (Bloomberg, 2023). Additionally, eliciting

responses following each cycle allowed the researcher to capture participant perception changes over time. However, one limitation of questionnaires is that there are no opportunities for follow-up or clarification of questions in the written responses (Bloomberg, 2023). Table 3.5 demonstrates the open-ended prompts and their relation to the research questions. The same prompts were provided after each of the three research cycles.

Table 3.5Research Cycle Questionnaire

Research Questions	Questionnaire Prompts	
Q1: How can curriculum coordinators work as a learning organization to collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a	Briefly describe your collaborative work in this cycle. What was most beneficial to you, and what are your improvement goals?	
large, suburban school district?	How could collaboration have been improved or adjusted? What challenges,	
Q2: How do curriculum coordinators describe the process of working as a	if any, did you encounter?	
learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a	Describe the quality of the assistive relationship. Has the relationship become more or less effective over time? Explain.	
large, suburban school district	Has the assistive relationship impacted your leadership skills and abilities? Why or why not?	

As questionnaires were completed after each research cycle, the Action Research Design Team (ARDT) triangulated the patterns identified in the written commentary, observation notes, and cycle artifacts to adjust interventions for the second and third cycles.

Researcher Observations and Field Notes

During each cycle, the researcher observed interactions between the collaborative pairs and kept detailed field notes to capture participants' behaviors, the setting, activities, and any observer actions (Merriam & Tisdell, 2016). Whenever feasible, the researcher used Microsoft Teams to transcribe conversations so that more of the researcher's attention could be focused on participants' reactions, responses, and body language. In addition to available transcriptions, field notes were highly descriptive and reflective, capturing the observer's commentary, reactions, initial interpretations, and working hypothesis (Merriam & Tisdell, 2016). Field notes were focused on addressing the research questions, coded for identifying patterns, and added context to interviews, questionnaires, and artifact data.

An excerpt of the researcher's observation field notes, coding, and reflections is provided in Table 3.6.

Cycle #1 Observation	Interpretation and Coding
(RW is in the hallway of his school as a monitor for GMA testing. KF is at her desk at the central office.)	Flexibility of CO staff to mee online instead of in person due to standardized testing
KF: Okay, if we get started, I can take some notes and draft the survey for your approval.	Developing Tools: staff survey
(The Internet froze, and RW went back to his office)	501.0
KF: Coordinator began with content and suggestions about instructional techniques, pedagogy, specific delivery models.	Coordinator perspective: focused on content/pedagogy, measuring the teachers' SOR content knowledge, and focused on teachers'
KF: What are some next steps for instructional changes? What do they want to keep [from current practices], and what do they want to change?	perception and understanding of needed changes to literacy instruction.
(The principal patiently listens to the suggestions, thinking and considering them. Hand on chin, looking around the room while she talks, nodding)	
RW: We should give them opportunity to type out answers. That gives them an opportunity to type the information in instead of only rating. "Give me anything you like about this program. Good/bad/otherwise."	Principal perspective: Focused on soliciting staff perception of the effectiveness of the provided PL.
(The principal apparently wants more of a Science of Reading PL perception survey. Coord. wanted more content-specific information. Testing the teachers understanding of the material.)	Principal perspective: leading change, securing buy-in for lasting change
RW: We discussed virtual PL or in-person, the pros and cons. Based on our initial conversation, I already know which way we are going to go.	
RW: When you think about the staff meetings, I think about how we've done it. We sit vertically, and there is	

Coordinator flexibility: Frequent interruptions are a part of a principal's workday.

a reason for that.

Table 3.6Cycle 1: Nero Elementary Observation and Coding

Cycle #1 Observation **Interpretation and Coding** Principal begins rattling off topics he had Principal perspective: leading change, prepared – conversation shifts to his needs securing buy-in for lasting change, effective PL, relevant PL, practical value and perspective: for practitioners, implications for vertical teams and PLCs The vertical team piece • Which aspect or model of the PL model do you find most beneficial Content, clarity, and organization of the material • Relevance to the classroom practice • Practical strategies for supporting students Principal-Centered: The coordinator KF: I like those. Um... I would love to shifted away from her initial ideas of hear them expand on why they chose the measuring teacher mastery to most beneficial PL model too. understanding that the survey measures PL effectiveness and relevance for longterm instructional change.

The observations and field notes allowed the researcher to capture thoughts and ideas about each principal/coordinator pair's collaboration and actions. The reflections helped the researcher understand the meaning of the participants' actions and interpret the rich data and descriptions that imbue qualitative research (Glanz, 2014). The triangulated data from the combination of observation field notes, artifacts, coordinator logs, and questionnaires informed the ARDT's selection of relevant, impactful interventions for the following cycle.

Artifacts

Documents and artifacts that are part of the research setting and generated by study participants are data sources for qualitative research (Merriam & Tisdell, 2016). Reviewing documents and artifacts provided the researcher and Action Research Design Team with opportunities to observe the collective work of the coordinator and principal pairs without intruding in the research setting (Merriam & Tisdell, 2016).

Following each research cycle, curriculum coordinators were asked to upload artifacts, such as documents, data, tools, presentations, etc., that they used or created to support their joint work with principals. For example, to build focus for the work during cycle one, one principal and coordinator pair decided to informally survey the 6th - 8th grade English Language Arts teachers impacted by the writing professional learning being designed. The coordinator developed an electronic survey, the principal sent the survey link to his teachers, and then the coordinator aggregated the response data before the next cycle. A copy of the electronic survey and the aggregated data were provided as artifacts for research cycles one and two. Artifacts from the collaboration documented the collaborative work to support the principal's instructional leadership and demonstrated the coherence concentration for cycle one - building focus and coordination.

The artifacts provided after each cycle and from each pair varied tremendously. However, each demonstrated the depth of collaboration taking place, documented the actions occurring within the partnerships, and added context to decisions made by the collaborative pairs that could not otherwise be observed.

Focus Groups

After the study, the researcher conducted one focus group with the Action Research Design Team (ARDT) to gain their perspectives and sense-making about the impact of the study. The focus group, or group interview, prompted the ARDT to articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity. Bloomberg (2023) noted,

The unique advantage of the group discussion method is the *participant interaction* and what it adds to (goes beyond) what might be learned from a series of individual interviews. Moreover, as participants exchange opinions, they consider their own views in relation to others – which may encourage them to refine their thoughts...The goal, overall, is to create a candid conversation that addresses, in depth, the selected topic. (p. 285, emphasis in original)

A focus group was chosen as the data collection method because of the ARDT group dynamics and the open communication between district and school leaders. The ARDT members were accustomed to speaking frankly with one another, and the focus group allowed information to be socially constructed and shared, supporting the constructivist nature of the study (Glanz, 2014). Table 3.7 demonstrates the open-ended prompts asked of the focus group at the conclusion of the study.

Table 3.7

Post-Study Focus Group

Research Questions	Prompts	
Q3: How does the Action Research Design Team articulate the impact of the design and implementation of	How can central office leaders continue to collaborate to provide coherent systems of support for principal development?	
coherent systems and structures on curriculum coordinators' abilities to	What are the limitations of coordinator support regarding principal development?	
develop principals' instructional leadership capacity in a large, suburban	What are the advantages of acting as a learning organization? Disadvantages? Barriers?	
school district?	What are your perspectives on how well the coordinators supported principals' instructional leadership capacity?	
	 What are your feelings on the action research process? How could we apply it in other areas to improve school and central office coherence? What areas need additional exploration or study? 	

ARDT members provided detailed descriptions and open dialog as they interacted and collectively explained the advantages of acting as a coherent learning organization and how action research could be applied in the future to address other problems of practice.

Interventions

Glanz (2014) defined interventions as practices, programs, or procedures that are implemented to "investigate its effect on the behavior or achievement of an individual or group" (p. 64). The interventions primarily used in this study evolved through collaborative partnerships between principals and curriculum coordinators and were informed by observation notes, questionnaires, coordinator logs, and artifacts after each

research cycle. Interventions and associated activities were aligned to the three drivers of coherence supported in scholarly literature – building focus and coordination, cultivating assistive relationships, and building capacity at scale. However, the exact nature of the intervention was developed by the Action Research Design Team (ARDT) in response to evidence collected each cycle from the collaborative work of the coordinator and principal pairs.

Although the ARDT prescribed some of the interventions, the independent actions taken by curriculum coordinators on the Action Research Implementation Team could also be considered evidence-based interventions. Central office coordinators attended collaborative meetings with their principals during each research cycle. They planned follow-up actions and activities aligning with the *Theoretical Framework of Coherence and Organizational Learning* drivers to move the joint work forward.

Following each collaborative meeting or action, curriculum coordinators built supportive tools, analyzed data, gathered resources, developed networks, and designed professional learning to support the school principals' instructional vision. Much of the progress made throughout the research cycles was a direct result of the intentional choices, actions, and suggestions curriculum coordinators made to move the collaborative work forward. The *Theoretical Framework of Coherence and Organizational Learning* illuminated and defined the interventions and actions within the partnerships during each research cycle.

Data Analysis Methods

The study's findings were analyzed using structured processes for organizing, coding, generating themes, and presenting the results. The data from individual

curriculum coordinators, school principals, and collaborative pairs were reviewed individually and holistically. The Action Research Design Team examined questionnaire data after each collaborative cycle to inform interventions.

Coding

The researcher and the Action Research Design Team (ARDT) created codes from repeated ideas from data in questionnaires, coordinator logs, interview transcriptions, observation notes, and artifacts. The constant comparative method, which is the process of comparing coded data, was used for the data analysis of this study. The line-by-line coding technique was used to assist with comparisons of the various types of data collected. Following each research cycle, the ARDT considered the data from the cycle, coded information, synthesized ideas, identified patterns, and collected evidence for themes.

To support and enhance the ARDT analysis, Google Gemini Advanced v.1.5 Pro, a large language model from Google AI, played a role in facilitating the constant comparative method across large volumes of text from data collections. Gemini's advanced natural language processing capabilities accelerated the ARDT's initial coding efforts, facilitated data comparisons across sources, refined categories, and identified negative cases in the data. Gemini's large language capabilities assisted the researcher and ARDT in accurately identifying keywords, determining keyword frequencies, and extracting related quotes and patterns in participant responses for analysis.

Triangulated data sources and themes were rigorously "assessed against one another to cross-check data and interpretation," using both manual and electronic analysis to support the credibility of the qualitative research findings (Bloomberg, 2023, p. 277).

Throughout the iterative cycles of data collection, ARDT members aligned codes with the research questions and coupled them with direct quotes and concrete examples from observations and artifacts to form themes.

Thematic Analysis

Thematic analysis was used as part of this study's data analysis process. The thematic analysis allowed the researcher to capture common topics and concepts essential for the investigated phenomenon of central office coherence. Data were analyzed in themes and validated with observation, questionnaires, coordinator logs, artifacts, and interview data. Table 3.8 demonstrates how the data collected were connected to the research questions, codes, and themes.

High-Frequency Word Analysis

To gain a deeper understanding of the key themes and topics that emerged from the qualitative data, a high-level analysis of high-frequency words was conducted across various data sources, including pre/post-interview transcripts, cycle questionnaires, and coordinator logs. This analysis was facilitated using Google Gemini Advanced v.1.5 Pro, an Artificial Intelligence (AI) tool that enabled the efficient counting and analysis of words across multiple documents. The frequency of specific terms provided additional evidence to support the themes identified through qualitative analysis while revealing patterns in the language used by principals and coordinators to reveal their experiences. This approach allowed for a more comprehensive and nuanced view of the experiences of Action Research Implementation Team members.

 Table 3.8

 Data Collection Efforts Connected to Coding and Themes

Research Questions	Coding	Themes
RQ1 How can central office instructional	Trust/Relationships	Theme 1: Central office instructional leaders foster
leaders, functioning as a learning organization,	Joint Work	coherence by establishing collaborative structures and
collaboratively design coherent systems of support to develop	Shared Understanding	processes that promote shared understanding, data-driven decision-making, and shared
principals' instructional leadership capacity in a large, suburban school	Evidence-based decision-making	responsibility for instructional improvement. Theme 2: Organizational learning
district?	Building Tools	empowers central office leaders to continuously reflect and equip principals with the skills, knowledge, and tools necessary for effective instructional leadership.
RQ2 How do curriculum coordinators describe the process of	Coordinator Flexibility	Theme 3: A central office functioning as a learning organization is characterized by
working as a learning organization and the	Principal-Centered	the continuous evaluation of evidence, principal-centric support
impact of coherent systems of support on	Reflection	systems, and the evolving pursuit of coherence.
their abilities to develop principals' instructional leadership capacity in a large, suburban school district?	Responsiveness	
RQ3 How does the Action Research Design Team (ARDT)	Differentiated Support	Theme 4: Curriculum coordinators play a critical role in promoting coherence and alignment between
articulate the impact of implementing coherent	School Context	the district and schools, leveraging collaborative structures and
systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?	Collective Responsibility	processes to impact the effectiveness of a principal's instructional leadership and teachers' instruction.

Reliability, Validity, and Generalizability

The nature of qualitative research requires a different type of rigor than quantitative research (Merriam & Tisdell, 2016). Practitioners looking to apply research to their instructional practices with practitioners and students want assurances that the research produced valid, actionable knowledge and that there can be some confidence in its probable success in the classroom (Merriam & Tisdell, 2016). Thus, the applied nature of qualitative research "makes it imperative that researchers and others have confidence in the conduct of the investigation and the results of any particular study" (Merriam & Tisdell, 2016, p. 238).

How a study was conceptualized and the data collected and analyzed can support the validity and reliability of the outcomes. Techniques such as member checking, prolonged engagement, persistent observation, triangulation, and thick description support the credibility of the research findings (Mertler, 2021; Merriam & Tisdell, 2016). Additionally, deliberate care should be taken with data analysis to strengthen trustworthiness.

This study was intentionally designed to allow for reliability and validity through the rigorous application of qualitative research methodology. Multiple data sources and various data types supported the triangulation of the findings and increased reliability and credibility. Strategies used to ensure trustworthiness included:

 Triangulation: The ARDT used multiple data sources to cross-check observation data with interviews, cycle questionnaires, coordinator logs, and artifacts to confirm and verify study findings (Bloomberg, 2023; Merriam & Tisdell, 2016).
 Triangulation increased credibility and quality by countering the concern that a

- study's findings are not simply an artifact of a single method, source, or investigator bias (Glanz, 2014).
- 2. Respondent Validation/Member Checking: Throughout the study, the ARDT reviewed the data collected from each cycle, analyzed data, and examined data reports to ensure the accurate representation of perspectives and experiences (Bloomberg, 2023; Glanz, 2014). After the study, ARDT and ARIT participants were asked to review the study's findings and themes to provide feedback on their accuracy.
- 3. Prolonged Engagement: Extended observation, document analysis, researcher's journals, and interviewing assisted the researcher in understanding the participants' understanding of the phenomena. The goal was data saturation when the data became repetitive, and no new information surfaced with continued exploration (Merriam & Tisdell, 2016).
- 4. Researcher's Position and Bias: The researcher articulated and clarified how her theories, beliefs, worldview, and perspectives informed and influenced the findings and conclusions of the study (Merriam & Tisdell, 2016). Using a large language AI tool, Google Gemini Advanced v.1.5 Pro, helped minimize researcher bias by providing an objective lens through which to analyze the data, which is particularly valuable to qualitative research, where interpretation plays a significant role.
- 5. Searching for Variation: The researcher presented all discrepant findings to the ARDT and ARIT for further exploration. Searching for variation in the understating of the phenomenon entailed seeking and reporting all information

that might disconfirm or challenge expectations or emergent findings (Bloomberg, 2023).

While this study is context-specific and not generalizable to all contexts, rich information and thick descriptions were used so that others could determine its transferability to other contexts (Bloomberg, 2023). Attention was given to triangulating data extensively, and rigorous analysis methods supported the mitigation of researcher bias.

Subjectivity Statement

At the time of the study, the researcher was the Chief Academic Officer (CAO) in a public school district, working in a central office that served 34 schools and a virtual academy. The researcher's early instructional background is that of a high school English teacher and a K-12 library media specialist. The researcher was also an elementary and high school assistant principal for seven years and an elementary school principal for an additional seven years, totaling fourteen years of school leadership experience. Following a promotion to the central office, the researcher supervised, developed, and supported 19 elementary school principals as the Executive Director of Elementary Operations for three years before transferring from the Operations Department to the Teaching and Learning Division. The researcher first served as the 6-12 Executive Director of Teaching and Learning, supporting the instructional leadership development of 15 secondary principals. The Superintendent then appointed the researcher the Chief Academic Officer (CAO). At the time of the study, the researcher had served as the CAO for three years.

Of particular interest to the researcher was how central office leaders could better support and develop principals' instructional leadership capacity. As a school

administrator for over a decade within the same school district, the researcher experienced fragmented communication and competing central office initiatives between Teaching and Learning, Operations, and Human Resources. Every department, division, and academic content leader appeared to have a siloed focus competing for the attention of principals. The fragmentation of the central office presented reoccurring barriers to school improvement and was a source of constant frustration.

As CAO, the researcher sought guidance about how the Teaching and Learning Division could develop principals' instructional abilities and how to maintain coherence across instructional programs and initiatives. However, the absence of clear practitioner guidance drove the researcher to seek new ways for the central office to better partner with principals to impact student achievement positively.

Limitations

No matter how well designed and conducted, qualitative research has inherent limitations (Bloomberg, 2023). Qualitative researchers assume that the participant-observer will impact the study by providing guidance and promoting collective sense-making (Merriam & Tisdell, 2016). Additionally, "case study research is a qualitative approach in which the investigator explores a bounded system (a case)...over time, though detailed, in-depth data collection involving multiple sources or information" (Merriam & Tisdell, 2016, p. 40). As a qualitative case study, the research was bound to the Focus County School District context and focused on curriculum coordinators' and principals' assistive relationships. Qualitative research emphasizes the specificity of the context of the study, thus creating challenges or the generalizability of the findings to other contexts (Bloomberg, 2023).

The researcher holds a higher position in the organizational hierarchy within the study's context than the participants. As such, there is a possibility of a phenomenon called "participant reactivity" (Bloomberg, 2023, p. 312, emphasis in original). Participant reactivity occurs when participants know the researcher and may "try overtly hard to cooperate by offering the kind of responses they perceive the researcher is seeking" (Bloomberg, 2023, p. 312). Conversely, participants may be guarded and less candid if they know the researcher and may withhold information they believe contrary to the researcher's views. To mitigate this phenomenon, anonymous questionnaires were submitted after each cycle so that participants could candidly respond to open-ended prompts. Additionally, pre- and post-interview data were triangulated with observational data and artifacts to strengthen the context of interview responses.

Another limitation of the study was the sample selection. The study's selection criteria required participants to be open to collaborative partnerships between school and central office leaders. Selecting participants with a natural propensity to collaboration and a positive perception of school and district partnerships narrowed the field of participants to those most likely to succeed at establishing coherence. Further study is needed to examine the barriers to coherence with principals or coordinators who view school and district relationships as adversarial or who have an "us versus them" mentality.

Chapter Summary

Chapter three describes the data collection and analysis methods used in this action research study. Action research was the preferred method of study due to its emphasis on collaboration (Coghlan, 2019). Collective decision-making in the action research process assisted participants of the ARDT and ARIT in constructing knowledge

surrounding central office coherence, effective practices of curriculum coordinators, and the potential benefits to principals' instructional leadership. Interviews, focus groups, feedback, questionnaires, observations of ARIT meetings and actions, cycle questionnaires, artifacts, and the researcher's reflections were used as data sources. All collected data were coded and analyzed for themes and patterns related to the research questions.

The next chapter presents the study's findings in the Focus County School

District. The case study is described in detail within the context of moving from central office fragmentation to coherence, the impacts of coherence on principals' instructional leadership capacity, and the research cycles.

CHAPTER 4

FINDINGS FROM THE ACTION RESEARCH CASE

Educational research has identified the development of central office and school leaders' instructional leadership as a high-leverage factor for improving teaching and learning at scale (Honig, 2008, 2012; Scott et al., 2020; Zepeda et al., 2021). A growing body of empirical research has identified the characteristics of high-performing school districts and how central office support can improve student learning in meaningful ways (Anderson & Young, 2018; Leithwood, 2010; Leithwood et al., 2019; Trujillo, 2013). Central office coherence across goals, strategies, resources, partnerships, and professional learning are primary characteristics of school and central office effectiveness (Anderson & Young, 2018; Leithwood et al., 2019; Zepeda et al., 2021).

Substantial connections have been drawn between central office coherence and system and school improvement (Augustine et al., 2009; Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Hall, 2017; Honig & Hatch, 2004; Honig et al., 2010; Honig & Rainey, 2020a; Lanoue & Zepeda, 2018; Leithwood et al., 2019; Leithwood & Azah, 2017; Moore Johnson et al., 2015; Smith et al., 2020; Zepeda et al., 2021). When a central office acts as a coherent learning organization, collective work is a combination of educational leadership, organizational learning theory, and sociocultural learning theory (Blazer & Schueler, 2022; Knapp, 2008; Leithwood & Azah, 2017; Honig, 2008, 2012; Honig & Hatch, 2004).

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. The study sought to establish the Focus County School District (FCSD) Teaching and Learning Division as an evidence-based learning organization that continuously evaluated, revised, and expanded systems of support to equip principals with the skills, knowledge, and tools necessary to develop high-quality instruction within their buildings. The curriculum coordinators' and supervisors' perspectives were used to guide the study as they collaboratively designed coherent systems and structures to develop principals' instructional leadership capacity in every school.

The researcher approached the study with some overall questions: What central office systems and processes foster coherence and support curriculum coordinators in developing principals' instructional leadership capacity? What lessons can be learned using the action research process to develop coherent systems designed to build principals' instructional leadership capacity?

To address the purpose of this study, the following research questions guided this inquiry:

- 1. How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district?
- 2. How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to

- develop principals' instructional leadership capacity in a large, suburban school district?
- 3. How does the Action Research Design Team (ARDT) articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?

Chapter 4 explores the context and the findings from this case study. The context of the study includes a description of the Focus County School District and a description of attempts to increase central office coherence as a method for developing principals' instructional leadership capacity to positively impact student performance. Additionally, problem-framing in the context of the site of this action research study is provided. To facilitate a more comprehensive picture, the findings from this case study are presented in action research cycles and from the perspectives of the Action Research Design Team (ARDT) and the Action Research Implementation Team (ARIT).

Context of the Study

Central office silos have been a cultural norm within the Focus County School District. Despite the district's strategic plan, each division functioned independently when managing the daily business of the school district. Until 2022, Executive Directors (ED) in the Operations Department exclusively supervised principals, resulting in a weighted focus on the operational leadership of the principalship. In 2022, the incoming superintendent created parallel Executive Director positions within the Teaching and Learning Division to share the supervision of principals and create a balance in operational and instructional leadership support, development, and accountability.

The two Teaching and Learning Executive Directors (EDs) were well-respected, experienced principals promoted from within the district. Each ED was responsible for supporting, developing, and evaluating principals at the elementary or secondary level and supervising and developing the Teaching and Learning curriculum coordinators. The EDs and the Teaching and Learning Division were under the direction of the Chief Academic Officer, who was also the primary researcher for this study.

Ms. Fields entered as the K-5 Executive Director with 13 years of experience as a highly effective elementary principal. Under her leadership, her rural, high-poverty elementary school was a statistical outlier that consistently performed well. The students frequently demonstrated high growth and often outperformed more affluent, suburban elementary schools. In addition to guiding the instructional leadership and school improvement processes for 19 elementary principals, Ms. Fields supervised the six curriculum coordinators responsible for elementary curriculum and instruction and the district K-12 literacy team.

Dr. Roads was the 6-12 Executive Director, and he entered the position with 19 years of educational leadership, including 10 years as a high school principal. Dr. Roads had experience in middle school and high school administration. As principal, he initiated the development of an Academy of Engineering and Technology within his school. This innovative "school within a school" instructional model provided students with a 4-year, focused course sequence in preparation for the rigorous post-secondary coursework required for engineering and other high-demand STEM careers. In addition to guiding the instructional leadership and school improvement processes for 17 middle and high school

principals, Dr. Roads supervised six curriculum coordinators, the Director of CTAE, and the district K-12 mathematics team.

Despite the expertise, reputations, and experience of Dr. Roads and Ms. Fields, effectively supervising and supporting 34 principals' instructional leadership efforts was challenging. The Council of the Great City Schools released a report identifying trends in principal supervisor leadership and support, noting that the median number of principals reporting to a single supervisor in 2018 was 14 principals, 3-5 fewer principals than assigned to Dr. Roads and Ms. Fields (Cochran et al., 2020). The report also reemphasized one of the original tenets of the Wallace project: "If principal supervisors had smaller numbers of schools and principals to oversee, then they could focus more effectively on the instructional mission of school leaders..." (Cochran et al., 2020, p. 8).

Within the Focus County School District, Dr. Roads and Ms. Fields' dual roles as principal and coordinator supervisors were challenging due to the total number of employees and other duties and responsibilities. However, by supervising principals and Teaching and Learning coordinators, the position offered the unique opportunity to build greater coherence across the district's instructional programming and support for principals. Dr. Roads and Ms. Fields had firsthand knowledge of principals' instructional challenges and could deploy central office support from coordinators as needed.

The Focus County School District (FCSD) Teaching and Learning Division included 12 content-specific curriculum coordinators to support the development of all K-12 academic subjects and programming. Curriculum coordinators were mid-level district instructional leaders who provided support, guidance, professional development, and coaching to school administrators, instructional coaches, and teachers. Under Dr.

Roads's and Ms. Fields's supervision, curriculum coordinators developed and executed district-level improvement plans for their content areas with the support of lower-ranking central office staff. However, coordinators held no evaluative authority over school or central office personnel.

Before being promoted to the central office, half of the coordinators served in formal school leadership positions, but the other half served only as classroom teachers and teacher-leaders. None of the coordinators served as school principals. Varied background knowledge and leadership experiences impacted curriculum coordinators' confidence and willingness to engage with principals and challenging teacher groups. Typically, coordinators stayed in their comfort zones, providing teachers a "one size fits all" approach to professional learning or only going to schools with welcoming administrative teams. Occasionally, principals would approach coordinators to provide extended professional learning opportunities to teachers to support the school's previously identified improvement initiatives. Still, the target audience was almost always teachers. Principals and other school leaders who could support and sustain ongoing improvement efforts were bypassed as coordinators spent all of their time with teachers.

To leverage the impact of the curriculum coordinators on continuous school and district improvement efforts, they first needed to develop new skills and professional capacities to become more inclusive of principal development. They also needed new capabilities to make recommendations and support the principal supervisors in building instructional leadership capacity across the organization. In addition to individual and professional growth, the coordinators needed to grow collectively to build collaboration,

connectivity, and coherence. Coordinators needed to develop the capacity to function as an evidence-based learning organization that supported each school's improvement, the collective work of the Teaching and Learning Division, and the strategic work of the school district.

The following section will address the Action Research Implementation Team (ARIT), its participants, the group's critical characteristics, and the rationale for its inclusion in the study.

Action Research Implementation Team

The Action Research Implementation Team (ARIT) was comprised of four school principals and three curriculum coordinators. The curriculum coordinator, Ms. Frame, served on the ARDT and the ARIT due to the nature of her position and the high demand for early literacy and English Language Arts support. ARIT members were selected using the "maximum variation or heterogeneity sampling" strategy. The group was selected because it represented the broadest possible range of the studied characteristics or dimensions (Bloomberg, 2023, p. 226). Selecting participants for maximum variation and heterogeneity supported the researcher in determining the characteristics unique to a situation, such as the differences between elementary, middle, and high school principal perspectives and characteristics standards across diverse settings (Bloomberg, 2023).

The four ARIT principals represented every level and K-12 grade band—elementary (2), middle (1), and high school (1). The three curriculum coordinators had content and pedagogical expertise in early literacy, K-12 writing, K-12 academic interventions and whole child supports. The intervention team was comprised of five women and two men, and the racial makeup was 57% White/Caucasian and 43%

Black/African American. Attention was given to selecting leaders whose race, ethnicity, gender, and grade-band experience represented the broadest sample available within the Focus County School District context. ARIT demographic information and grade-band experience are depicted in Figure 4.1.

Figure 4.1

ARIT Demographics and Professional Experience

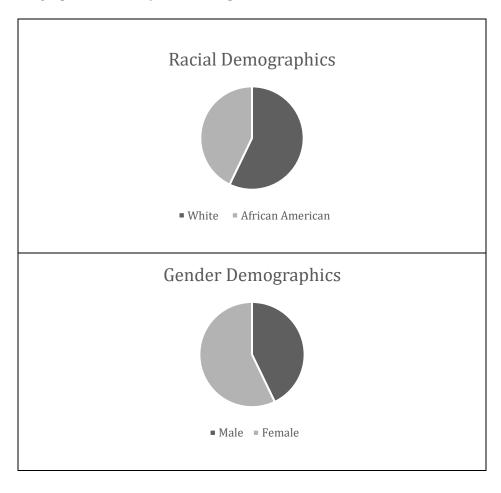
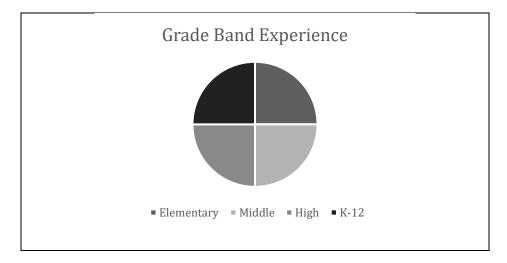


Figure 4.1

ARIT Demographics and Professional Experience



Note. Two ARIT members had middle and high school leadership experience but not elementary school. These individuals are represented twice, once in the middle school data and once in the high school data.

Additionally, ARIT members had previously demonstrated a natural propensity for joint work, collaboration, and shared accountability. By selecting ARIT members with a wide range of background knowledge and experience, current positions covering all grade bands, and an existing openness to school and central office partnerships, the implementation team was well-positioned to clearly articulate the practitioner's role in fostering coherence and working as a learning organization. Table 4.1 outlines the ARIT coordinator/principal pairings and the focus of each collaborative partnership.

 Table 4.1

 Action Research Implementation Team Positions and Collaborative Foci

Team Members	Positions	Collaborative Focus
Ms. Frame	Coordinator, K-5 ELA	Professional Learning: Early Literacy and the
Mr. Willis	Principal, Nero Elementary	Science of Reading
Dr. Harrison	Coordinator, Whole Child Supports	Professional Learning: Formative assessment use
Mr. House	Principal, Harris High School	and intervention resources
Ms. Merrit	Coordinator, K-12 Writing	Professional Learning: Writing instruction and assessment use in the middle
Mr. Skell	Principal of Southside Middle School	school ELA classroom
Ms. Merrit	Coordinator, K-12 Writing	Professional Learning: Writing instruction and
Ms. Buyer	Principal, Deville Elementary	assessment use in K-5 literacy instruction

Note. Ms. Merrit partnered with two principals, one elementary principal, and one middle school principal.

The next section addresses the findings from the case and the interventions and outcomes of each research cycle.

Findings from the Case

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. The curriculum coordinators and supervisors' perspectives guided the study as they collaboratively designed coherent systems and structures to develop principals' instructional leadership.

Action Research Design Team (ARDT) members used the seminal research underpinning the *Coherence and Organizational Learning Theory of Action*. They studied the three drivers of coherence, combined with cycle evidence and data collected from the Action Research Implementation Team (ARIT), to determine appropriate interventions after each research cycle. ARIT coordinators focused on one driver of coherence during each research cycle: Cycle 1: Building Focus and Coordination; Cycle 2: Cultivating Assistive Relationships; and Cycle 3: Changing Behavior at Scale.

The data tells how coherent systems and processes supported the central office coordinator's ability to support principals' instructional leadership efforts. Findings from the study included:

- 1. Collaborative, trusting assistive relationships between principals and central office leaders are essential for effective instructional leadership support.
- 2. Evidence-based decision-making, using academic and perception data specific to each school, is critical to identifying a clear focus and targeted support.
- A principal-centered approach enhances the effectiveness of central office support
 efforts and is characterized by flexibility, adaptability, and responsiveness to
 principal and school needs.

- 4. Coherent systems of support empower coordinators to provide differentiated support for principals by adapting their approach to each school's unique context and the principal's leadership style.
- The iterative cycles of organizational learning provide a valuable framework for central office leaders to collaboratively design and refine coherent systems of support.
- The iterative cycles of organizational learning foster continuous improvement and promote a culture of collective responsibility for instructional leadership development.
- 7. Collaborative partnerships between principals and coordinators, grounded in trust and mutual respect, are essential for effective instructional leader development.
- 8. A central office functioning as a learning organization requires the continuous reflection and adjustment of support systems to ensure responsiveness to the evolving needs of principals and schools.

Findings from the action research cycles are detailed in the next sections, which will illuminate these findings.

Action Research Cycle 1

Action Research Cycle 1 occurred in April and May 2024 and lasted approximately six weeks. Each cycle examined the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. The first action research cycle focused on the first of three divers of coherence, building focus and coordination and included the following:

1. an orientation for the Action Research Design Team (ARDT);

- 2. an orientation for the Action Research Implementation Team (ARIT) with the ARDT in attendance;
- 3. pre-study interviews for members of the ARIT;
- 4. the Cycle 1 intervention, an analysis protocol of pre-study interview responses;
- 5. Cycle 1 principal/coordinator meetings and collaborative actions;
- 6. a questionnaire on the effectiveness of the assistive relationships; and,
- coordinator logs with reflections on the SIRR Cycle of Action Research (Search, Incorporate, Reflect, Retrieve).

Orientation for the Action Research Design Team (ARDT)

After securing informed consent, the ARDT met in May 2024 for an orientation meeting. The purpose of the meeting was to ensure that all ARDT members understood the study's purpose. The orientation covered how action research would guide the study, the roles of the ARDT in determining interventions, and the role of the researcher. The meeting was conversational as the group discussed their personal experiences with central office coherence and fragmentation as school and district leaders. The researcher also presented the purpose of action research and its iterative nature. To ensure the study stayed closely aligned with the research, the Empirical Findings Table (Appendix A) was reviewed. Additionally, the team discussed the *Coherence and Organizational Learning Theory of Action* and the ARDT's role in using data from interviews, questionnaires, observations, and coordinator logs to determine interventions for each cycle. At the end of the ARDT orientation, all members agreed to their roles in the study.

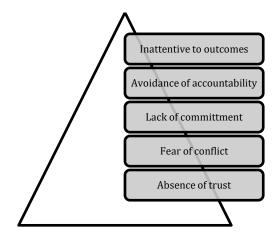
Orientation for the Action Research Implementation Team (ARIT)

The ARIT joined the ARDT to begin their orientation activities. The researcher briefly presented information on the study's purpose, action research cycles, and related timelines before moving into activities to support team building and strong collaborative partnerships. The researcher used the article *Lessons from Google: 5 Ways to Create Psychological Safety*, which focused on the tech company's multi-year team effectiveness study, Project Aristotle. Aristotle was an ancient Greek philosopher who believed "the whole can be greater than the sum of its parts." Google executives determined that high-functioning teams had high levels of psychological safety, meaning that team members were safe to take risks and speak up without judgment.

ARIT members sat with their collaborating partners during the session and discussed the article together before sharing ideas with the whole group. Many of the team members had never heard the term psychological safety. However, they agreed that teams make better decisions when leaders are intentional about ensuring diverse perspectives are heard, valued, and considered. To build trust early in the process and support the formation of strong collaborative partnerships committed to coherence, the ARDT and ARIT discussed Patrick Lencioni's (2002) *Five Dysfunctions of a Team* model, as shown in Figure 4.2.

Figure 4.2

The Five Dysfunctions Model



Note. Adapted from Lencioni (2002), The Five Dysfunctions of a Team.

The ARDT and ARIT discussed examples of functional and dysfunctional teams they had experienced as educators. Collectively, participants agreed that an absence of trust and a fear of conflict undermines the effectiveness of any partnership.

Next, members took an abbreviated version of the Myers-Briggs Personality Test and self-identified keywords and stressors that resonated with their personality types. School and district leaders with similar personalities grouped to discuss commonalities and present their personalities, keywords, and personality stressors. Members shared their personality types with the whole group and discussed their idiosyncrasies with the group. The discussion was lively and good-humored, with multiple leaders making self-deprecating comments about their personality quirks.

The group discussion was designed to build collegiality between the ARDT and ARIT members. Participating as a large group avoided initial barriers and insecurities for the new ARIT partnerships. The discussion allowed central office leaders to demonstrate transparency, humility, and vulnerability as they acknowledged their personality

strengths and stressors in front of the principals and vice versa. The conversation evolved into good-natured banter as colleagues affirmed how each personality type manifested in the workplace. Having everyone share aloud supported ARIT participants in learning more about their partners' preferred work habits and stressors without having to initiate a sensitive conversation at the beginning of the partnership. What might have been an awkward first interaction became an opportunity to establish camaraderie, good humor, initial trust, and psychological safety among the study participants.

The researcher believed the ARIT and ARDT members would also benefit from looking at the empirical coherence models that served as the foundation for the study's theory of action. Participants reviewed three coherence frameworks from the seminal research: Harvard Public Education Leadership Project's (2003) *PELP Coherence Framework*, Fullan and Quinn's (2016) *Coherence Framework*, and Education First and the Council of Chief State School Officers (n.d.) *Coherence Framework*. Collaborative pairs used the three frameworks to design original coherence models, creating their theory of action for coherence. Each team took a different approach to diagramming the overlapping concepts of coherence and discussed what resonated with them.

Once each collaborative team shared its coherence models, they were compared to the study's *Coherence and Organizational Learning Theory of Action* and the three drivers of coherence (building focus and coordination, cultivating assistive relationships, and changing behavior at scale). ARIT and ARDT members were then invited to identify any missing components in the study's model. Although no new elements were suggested for the study's theory of action, the discussions were rich, and study participants

developed a strong, functional understanding of the theory of coherence anchored in firsthand knowledge of the seminal research.

To conclude the orientation, all members agreed to their roles in the study, and principal/coordinator pairs were provided time to schedule their first collaborative meetings and activities. Building on the positive environment from the orientation meeting and equipped with an understanding of the theory of coherence, principals and coordinators stayed in the orientation room to discuss the first steps. The researcher noted in her journal that the relaxed body language, individuals leaning in toward one another, occasional bursts of laughter, and the general proximity of the pairs indicated high levels of initial comfort. Following the orientation activities, pairs appeared to have established foundational connections for the shared work ahead.

Pre-Study Interviews for the Action Research Implementation Team (ARIT)

After informed consent was collected, pre-study ARIT interviews took place in May 2024 following a semi-structured interview protocol. All seven coordinators and principals participated individually, either in person or virtually, and interviews were recorded and transcribed using the Microsoft Teams application. Each transcription was printed, and the researcher edited errors in the transcription. The researcher reread the transcripts and coded responses to the interview questions based on how the information related to the research questions identified in the study. Interview questions were aligned with the action research questions and connected to the three drivers of coherence, which helped to track findings more systematically. The following four overarching findings emerged from the pre-study interviews:

- 1. Building trust and strong relationships between district and school leaders is essential for effectively supporting instructional leadership.
- 2. A visible presence in schools supports the effectiveness of coordinators' and principals' instructional leadership.
- Coordinators promote coherence and alignment between district goals and schoollevel implementation.
- The continuous improvement process of data-driven decision-making, ongoing progress monitoring, and reflective practices are vital components of effective central office support.

Establishing trusting relationships, engaged central office leaders, and clear, continuous improvement processes were hallmarks of coherence noted during the pre-study interviews.

Every ARIT member agreed that trusting, strong relationships are essential for effectively supporting principals' instructional leadership. Mr. House, a high school principal, indicated the importance of trust, stating, "If you don't have trust, then you're not going to get productive work." Principals across all grade bands expressed the need to ask questions, share concerns, and seek support without fear or judgment for "not knowing." Similarly, Mr. Willis, an elementary principal, emphasized the need for candid conversations: "I need to trust that I can be open and honest and that I can ask for something, and it's not going to be held against me." Ms. Buyer, an elementary principal, asserted, "...trust is built when you feel like you're being heard and not judged." For principals, trust was most effective when accompanied by respect for the position.

Principals shared the need to feel respected as the building leader as they engaged with central office staff. All four principals mentioned expectations of respect for their decision-making authority and autonomy without a heavy-handed, top-down central office approach. Mr. Skell, a middle school principal, emphasized the importance of being respected as the instructional leader of the building:

I think it's important for coordinators to recognize that principals are the instructional leaders of their buildings. We need to be able to make decisions based on our own contexts and needs. It's not helpful when coordinators come in and try to micromanage everything we do.

Ms. Buyer shared Mr. Skell's opinion, emphasizing that coordinators "...need to respect the fact that principals have a lot of experience and knowledge. We don't need them to come in and tell us how to do our jobs." Further, Mr. Willis rightfully stated that principals are "ultimately responsible for the outcomes of their schools... and need to be able to make decisions based on our own data and our own contexts. It's not helpful when coordinators come in and try to impose a one-size-fits-all approach."

Likewise, coordinators shared a complementary view of trust and relationships, indicating that they are more effective when they have a relationship with the principal and the principal is welcoming and open to collaboration and support. The writing coordinator, Ms. Merrit, described the importance of trust from a central office perspective:

Absolutely, trust. I think that [principals] have to know that we have their best interest at heart and we're going to be supportive of their teachers, not make their

teachers feel like they're doing all the wrong things. They really want to know, 'Are we in the correct place? Are we moving in the right direction?'

Coordinators described an ideal partnership as one that was supportive, flexible, and collaborative. Ideal partnerships balance the need for tight alignment with district improvement priorities and the flexibility to meet each school's specific needs.

All four principals in the study mentioned the need for coordinators to be physically present in schools. Principals indicated that a coordinator's physical presence and visibility contributed to their credibility and demonstrated their commitment to the staff's success. Being present in the building supported coordinators' enhanced understanding of the school's unique context and challenges and built rapport between teachers and central office staff. Two principals wanted coordinators to take the initiative and show up uninvited just to "help out" and check in with administrators and teachers.

Similarly, coordinators expressed the reciprocal need for the principals to be physically present and visible in continuous improvement. Dr. Harrison indicated that successful collaboration was dictated, at least to some extent, by "the willingness of the principal to engage with the coordinator," stating, "It's about collaboratively what we can do together." All three coordinators mentioned that their effectiveness with teachers depended on the principal's clear expectations for their staff members, their engagement in professional learning with teachers, and their commitment to observe instruction collaboratively with coordinators. Essentially, coordinators believed these actions signaled a principal's endorsement and shared credibility and authority with coordinators working within their schools.

Coordinators expressed the need to feel welcome at a school. All four coordinators mentioned that a frosty reception by the principal or other administrators often resulted in personal insecurity and avoidance. One coordinator explained, "There is only one of me to serve nineteen elementary schools. If an administrative team is disconnected or unwelcoming, I'm wasting my time. It's human nature to go where you feel comfortable, and your support is appreciated." The coordinators in the study acknowledged that principals have demanding jobs and cannot always be present. However, principals supported the work by setting clear expectations for staff in advance and dropping by professional learning whenever possible. Essentially, the principal's authority amplifies the coordinator's influence and effectiveness with teachers.

Principals and coordinators agree that coordinators working together promote coherence and alignment between district goals and school-level implementation.

Principals described coordinators as "the bridge between what the district wants and the school needs," pointing out that coordinators "translate the district's vision into something that's actionable for the school." Principals also described the coordinators' function as "connecting the dots" and helping them understand how district initiatives "fit into the bigger picture of school improvement."

Coordinators also viewed themselves as conduits between principals and the central office expectations. Ms. Merrit stated, "We have to be very knowledgeable about what the [district] expectations are, what the standards are, what the goals of the district are, and then be able to communicate that to the principal." Central office leaders support school leaders in translating district expectations into the context of the school's needs.

Coordinators can help principals assess their school's progress using coherent systems of continuous improvement. For example, data-driven decision-making, the systematic monitoring of progress, and continuous reflection practices are vital components of coherent central office support for improvement. Coordinators and principals agreed that maintaining a focus on formative data, monitoring the impact of interventions, and making informed course corrections were at the core of effective central office support for principals' instructional leadership.

Action Research Design Team (ARDT) Meeting Cycle 1

Early in May 2024, the ARDT came together to debrief about the orientation, review the pre-study interview transcripts, and discuss early themes in the data. The meeting lasted over an hour as the team poured over the data in the interview transcripts. Team members began to recognize that although principals and coordinators agreed about the core components of coherence, their interpretations were somewhat nuanced according to their positional perspective. The ARDT decided that coordinators could benefit from comparing their central office perspectives to the principals' perspectives in the Cycle 1 intervention.

Intervention for Research Cycle 1

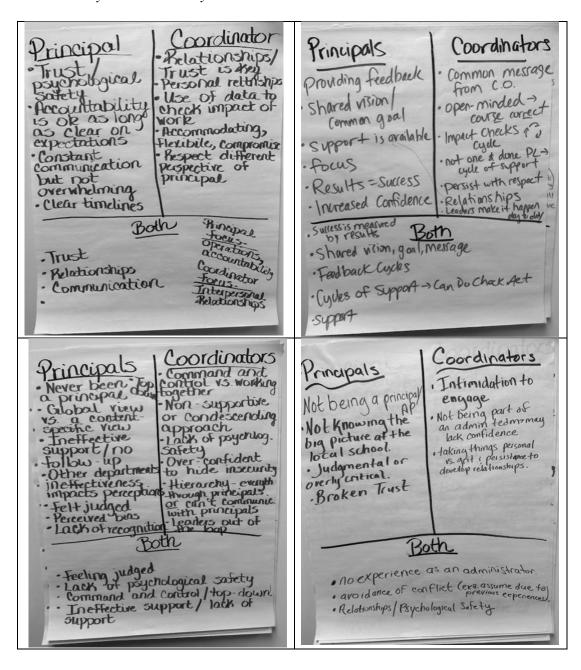
The first intervention included an analysis of the coordinator and principal responses to the pre-study interview questions. The researcher compiled the transcribed principal and coordinator interview responses onto separate documents and removed all identifying information. The ARDT and ARIT coordinators identified key terms, discussed similarities, and illuminated differences. The coordinators focused on the principals' perspectives, while the ARDT members focused on the coordinators'

perspectives. ARDT members and ARIT coordinators took turns sharing patterns in the interview responses and charting them together, noting similarities and differences.

Figure 4.3 is a sample of anchor charts created during the protocol.

Figure 4.3

Intervention Cycle 1: Pre-Study Interview Protocol Charts



The researcher noted in her journal that one could see light bulbs coming on as coordinators began to better understand the principals' perspectives. Ms. Frame reflected, "I had no idea they think we cannot understand what it's like to be a principal because we've never been principals. They bring it up a lot."

Dr. Harrison mentioned the importance of respecting principals' authority and autonomy, stating, "The principal has to carry out the district vision, but the principal also has their vision on how they want to implement. We have to show we respect that." Ms. Merrit concluded, "Principals only rely on us when they trust us, so I think trust is huge to them opening their doors to us." Throughout the activity, ARIT coordinators demonstrated enthusiasm for and openness to new understandings. They closed the meeting, concluding that every coordinator should deeply reflect on their approach to principal collaboration.

Cycle 1 Collaborative Meetings and Actions

During Research Cycle 1, each of the coordinator/principal pairs met to focus on the first driver of coherence: building focus and coordination. Building focus and coordination involved identifying priorities, establishing preferred communication, building support tools, and removing obstacles/distractions. Suggested sample activities for this driver were analyzing student data for trends, applying program rubrics, joint observations, and reviewing school improvement progress. Because the study began in May 2024, state testing windows, final exams, and end-of-year activities made joint classroom observations challenging. Each of the coordinators decided to hone the focus of the collaboration by analyzing some form of formative assessment or survey data.

They then presented an analysis of the data to their partnering principal along with their professional assessment of the problem of practice.

Cycle 1 Actions: Nero Elementary

Ms. Frame and Mr. Willis engaged in professional learning at Nero Elementary School around the Science of Reading. The joint work was a collaborative effort between the principal, coordinator, and a grant-funded literacy coach. At the start of the study, the principal/coordinator pair chose to pause the Science of Reading professional learning to survey Nero Elementary teachers about the effectiveness of the training thus far. Interactions were open and natural as the pair sat side-by-side, sharing what types of questions might be developed before scheduling a second meeting. Ms. Frame offered to draft some questions before they met again.

For the second meeting, the pair met over a Microsoft Teams video conference. The principal was initially attempting to multi-task and supervise standardized testing in the hallway, but when the internet began to freeze, he made his way into a nearby office. The researcher noticed that the coordinator was excited to share what she developed and zealously shared technical survey questions about instructional techniques, pedagogy, content knowledge, and professional learning delivery models.

Mr. Willis patiently listened and considered the suggestions, with his chin resting in his hand. He provided the occasional "Uh huh" to signal his engagement in the conversation. When it was his turn to speak, he suggested that they ask broad, openended questions to the staff, such as, "Give me anything you like about this program—good, bad, or otherwise." The principal then listed off topics he had considered, and the conversation shifted to focus on his perspective.

The contrast in approaches to the survey was apparent to the researcher. The coordinator wanted to assess the teachers' mastery of the Science of Reading professional modules and early literacy concepts. However, the principal was focused on providing his teachers with a voice in the process. Principal Willis suggested these topics related to the teachers' opinions of professional learning:

- 1. How did they feel about the learning?
- 2. What areas needed more clarity?
- 3. How relevant was the learning to classroom practice?
- 4. Did they have enough opportunities for reflection and discussion?
- 5. How were the vertical teams working for them during whole-staff training?
- 6. Expanding on why they liked or disliked the professional learning model.
- 7. If there is something to change about the format to help them acquire the knowledge better.
- 8. How effective were they at communicating the need for PL? The "why" behind it.

Principal Willis ended his brainstorming by reminding Ms. Frame to pose the questions positively to encourage teachers to provide suggestions. As the coordinator listened and acquiesced, a noticeable shift occurred in her perspective. Ms. Frame began to understand the principal's perspective and that he intended the survey to be a tool for supporting the staff, not to assess their knowledge of the Science of Reading. Within minutes, the gap between the coordinator's drive to know about content mastery and the principal's attention to the teachers' voice coalesced into a shared focus and coordinated effort.

To close the conversation, Ms. Frame asked the principal to send the survey out electronically to leverage his position of authority over the teachers and ensure compliance. Mr. Willis was interrupted by a call on his administrative radio and briefly distracted, but then he agreed to send out the survey himself. Principal Willis followed through by emailing the anonymous survey and expecting every teacher to respond. The evidence from the teacher surveys and the outcomes of the state assessment data measured the impact of previous professional learning and helped to refine and refocus summer planning.

During pre-study interviews, principals continuously articulated that coordinators had never led a building or managed a staff. Ms. Frame had even wondered aloud why principals felt being a principal was so important to understanding the work. Although not explicitly stated during the conversation, the researcher observed how Ms. Frame made concessions and demonstrated respect for Mr. Willis's position and positional perspective. In her Cycle 1 coordinator log, Ms. Frame wrote:

I definitely believe creating the survey together and analyzing the survey results together provided me with a common vision based on what he knows about his staff and what I know about the content. We really were forming a bridge between the two to ensure his staff receives the best learning.

The power of collaboration, communication, and coherence between central office and school leaders was illuminated by their first shared task.

Cycle 1 Actions: Harris High School

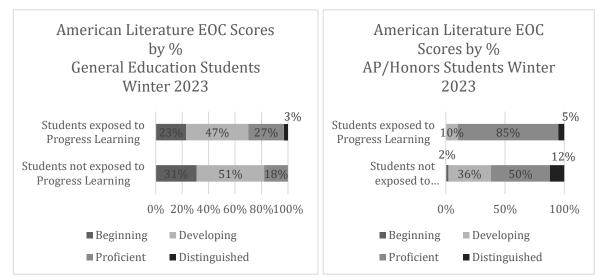
Before the study, Dr. Harrison received Mr. House's permission to collaborate with the Harris High School curriculum administrator to pilot a digital intervention

resource. The application, Progress Learning, supported English Language Arts and Biology teachers in collecting formative data for differentiation and remediation. Dr. Harrison prepared a data analysis of the software pilot to compare the American Literature state assessment results with the usage data from the intervention software. She shared those findings with Principal House in advance of their first meeting.

The first meeting was held in person in the principal's office, with the principal seated in the position of authority behind his desk. The coordinator sat in a chair across from the desk with her notes and hands folded on her lap. The power dynamics were unbalanced, and Dr. Harrison appeared intimidated and initially spoke quietly with hesitation. However, the energy in the room quickly shifted as Mr. House revealed that he had reviewed the data she sent in advance and recognized there were strong correlations between the teachers who used the intervention tools and higher achievement on state assessments. Figure 4.4 is a sample of the data Dr. Harrison aggregated for Principal House.

Figure 4.4

Harris High School Progress Learning and State Assessment Data



Note. Comparisons were drawn from state assessment data and Progress Learning usage data.

In his post-study interview, Mr. House commented that Dr. Harrison's preparation of school-specific evidence from the pilot supported his instructional leadership and gave him the confidence to make program decisions for the upcoming school year.

To conclude the meeting, Dr. Harrison and Mr. House discussed teacher preplanning and how he was moving away from operational meetings to offer more
professional learning sessions. He shared with Dr. Harrison, "I want to add you to the
pre-planning rotations. Some of the sessions will be mandatory, but most will be
differentiated to give teachers a choice in what they learn." Dr. Harrison agreed to
participate and suggested that she incorporate teachers from the pilot to share their
firsthand experiences in support of the principal's decision to require the use of Progress
Learning in the coming school year. She also offered to incorporate a recently released
Johns Hopkins research brief on the effectiveness of Progress Learning in a neighboring

public school district. Further, she arranged for one of the vendor's training experts to provide firsthand support for teachers.

In the Cycle 1 questionnaire, Principal Hodge noted, "The partnership has already helped develop my leadership skills even more. [Dr. Harrison] has given me suggestions on how I can better approach, deliver, implement, and monitor the intervention programs in our school." Additionally, Dr. Harrison confidently reported:

Collaborating closely with Mr. House and the leaders at Harris High has allowed me to gain new perspectives, refine my leadership strategies, and deepen my understanding of effective instructional practices. This partnership has fostered a supportive environment where continuous learning and growth are encouraged, enhancing my overall effectiveness as a leader.

At the conclusion of Cycle 1, both parties agreed that their collaboration was off to a strong start and already impacted their leadership and effectiveness in positive ways.

Cycle 1 Actions: Southside Middle School and Deville Elementary School

A significant part of Ms. Merrit's position as Writing Coordinator was overseeing the use of the district's universal, quarterly writing assessment using the software application, Write Score. During her second year in the position, Ms. Merrit looked for trends in the writing assessment data, both formative and summative. She noticed that Southside Middle School received high percentages of well-prepared writers from feeder elementary schools, but writing achievement steadily declined as students matriculated through Southside Middle. Ms. Merrit approached Principal Skell about supporting English Language Arts teachers to reverse the downward trend.

The researcher was unable to observe the first meeting between Principal Skell and Ms. Merrit. However, Ms. Merrit later described her experience to the researcher, beginning with the difficulty they had getting the meeting started. When she arrived, Mr. Skell was engaged in a discipline issue, and Ms. Merrit waited with the school's curriculum administrator until the principal was free. Although Ms. Merrit was ready to dive into formative writing data, when he arrived, Mr. Skell needed a few minutes just to chat and decompress about the events of the day. Ms. Merritt reflected:

If you're meeting with a principal during the school day, you have to be patient and allow more time for interruptions. Even when they do arrive, it may take them a minute to focus on the task at hand or the purpose of the meeting. Some leaders need small talk and personal connection before they're ready to begin work, and that's all right. It's up to the coordinator to remain flexible, be patient, and adjust to the personality and leadership style of the principal.

On the Cycle 1 questionnaire, the principal had this to say about the meeting: "We met and discussed Write Score data and discussed creating a survey to assess the support that teachers felt they needed for writing."

As described, Ms. Merrit was able to share the trends she had uncovered by monitoring district and state writing assessment data to focus the collaborative work. For Cycle 1, she and Principal Skell decided to survey the school's ELA teachers to determine where to start with professional learning for the 2024-2025 school year. The principal reported "no challenges" and that "the partnership is great."

At Deville Elementary School, Principal Buyer contacted Ms. Merrit for support with writing instruction. Ms. Buyer has previous experience as an elementary curriculum

administrator and completed her own data analysis to determine that writing was a deficit across all grade levels. Ms. Merrit and Ms. Buyer met for the first time to discuss Ms. Buyer's self-identified priorities for school improvement, which focused on vertically aligning writing instruction and expectations across grade levels. Because the principal's data analysis first initiated the partnership, the coordinator/principal pair started immediately planning professional learning.

In stark contrast to the conversational approach needed to engage Mr. Skell at the middle school, Ms. Buyer drove the meeting agenda and used the opportunity to explain to Ms. Merrit what she wanted her to accomplish with teachers during post-planning. Ms. Merrit received direction well and offered suggestions for how the initial professional learning session might be organized. Principal Buyer described their planning session in the Cycle 1 questionnaire: "During session one, we discussed my goal of improving student writing achievement. We discussed the challenges that our school has faced and agreed upon the template for the work we will conduct with the staff during the 2024-2025 school year." Because the pair were like-minded in their approach and the principal's vision for the improvement work was clear, collaborative work was accelerated. Ms. Merrit was meeting with teachers within a few weeks before they went home for the summer break. Ms. Buyer expressed satisfaction, stating, "I think we work well together. I'm excited about our initiative."

In Cycle 1, Ms. Merrit's initial effectiveness in both partnerships depended on her adaptability, emotional intelligence, and interpersonal skills. She reflected, "...I think it will be interesting to see how/if I need to adjust my work or approach based on the leadership styles/personalities of the two principals who I am partnering with." Content

knowledge and an established reputation of positive outcomes for schools were not enough for Ms. Merrit to be successful in collaborating with both principals. She recognized that her ability to adjust her behaviors to the personalities and work styles of the principals was equally important with the content she offered. Her interpersonal abilities and judgment would be instrumental in establishing strong collaborative partnerships.

Cycle 1 Questionnaires

After each research cycle, coordinators and principals responded electronically to the following open-ended questions on a Microsoft Forms questionnaire:

- 1. Briefly describe your collaborative work in this cycle. (Planning and Actions/Activities) What was most beneficial to you and your improvement goals?
- 2. How could collaboration have been improved or adjusted? What challenges, if any, did you encounter?
- 3. Describe the quality of the assistive relationship/partnership. Has the partnership become more or less effective over time?
- 4. Has the assistive relationship/partnership impacted your leadership skills, abilities, or content knowledge? Why or why not?
- 5. Any other reflections about central office coherence or the action research process? (optional)

All four principals reflected positively on their collaboration with the district coordinators during Cycle 1 of the research study. Questionnaire responses indicated that all of the pairs engaged in early goal setting to improve achievement and to guide collaborative

work. Principals expressed their excitement about the focus of the initiatives and believed that the collaboration could enhance their content knowledge and instructional leadership.

Additionally, principals reported that coordinators were instrumental in establishing programs to support student achievement. All principals described the partnerships as effective, with the potential to become more effective over time. Two principals recognized that coordinators' previous school leadership experience enhanced their effectiveness. Three principals expressed appreciation for the support of a content area expert with data analysis. All were optimistic that the collaboration could enhance and impact their leadership skills and ability to accurately diagnose academic areas of strength and deficiency.

Similarly, all three of the curriculum coordinators emphasized the importance of setting clear goals for achievement and understanding the principals' perspectives to plan aligned support. Coordinators reported having focused, productive conversations with prepared and engaged principals without significant challenges. Two of the coordinators utilized teacher feedback tools to inform future planning. Although the focus of the study is on the growth of principals' leadership, coordinators also reported that the partnerships positively impacted their leadership skills. The three coordinators recognized that mutual respect and open communication were crucial for future success in the partnership. After Cycle 1, coordinators were focused on supporting principals' visions, and they anticipated they would grow and benefit from the joint work with principals.

Cycle 1 Coordinator Logs

After each research cycle, coordinators reflected using the SIRR Cycle of Organizational Learning (Search-Incorporate-Reflect-Retrieve). The following openended prompts were answered electronically using the Microsoft Forms application:

- 1. SEARCH: Identify evidence from partnerships, data, artifacts, observations, perceptions, etc. What evidence have you considered during this cycle? What does the evidence reveal about the problem of practice?
- 2. INCORPORATE: Develop support systems, policies, or processes to support the evidence. Considering the evidence, what are your next steps? What might you develop to support the principal in approaching the problem of practice?
- 3. REFLECT: Continually examine the effectiveness and impact of interventions and support. Briefly reflect on the effectiveness of your partnership and the actions taken. Were there any successes or forward progress? What challenges arose?
- 4. RETRIEVE: How can you use the evidence from this cycle to inform your future work (within this study or beyond)? What worked that you would use again? If given an opportunity, would you approach the work/partnership differently in the future? How did you navigate barriers?
- 5. RETRIEVE: How could you use what you have learned this cycle to help other coordinators or central office leaders improve their support of principals' instructional leadership?

During Cycle 1, coordinators reflected on establishing partnerships and gathering data to understand the needs of their partner schools.

As with the questionnaires, responses identified the importance of trust and communication as well as differentiating the approach to each school's context. For example, Ms. Merrit stated, "What worked for me in this cycle and what I will continue to use in my future work is to first listen to what the principal has to say...the principal is the expert when it comes to their building and staff." Principals demonstrated respect for coordinators as content area experts and coordinators viewed principals as the school context experts. Using evidence from a variety of sources, like academic and survey data, was just a starting point for understanding the context of a school. Principals responded favorably to the data analysis support offered by each coordinator.

Coordinators also reflected on the importance of building trust and rapport with principals. Ms. Frame highlighted the collaborative nature of her work, stating, "I definitely believe creating the survey together and analyzing the survey results together provided me with a common vision based on what he knows about his staff (context) and what I know about the content." From this perspective, the joint work taking place between the principal and coordinator enhanced their leadership.

Summary of Findings from Action Research Cycle 1

Cycle 1 focused on the first driver of coherence, building focus and coordination. The coordinator/principal pairs established early collaborative relationships and data-driven systems to focus their joint work. In this cycle, all four partnerships used a combination of assessment data and/or survey data as site-specific evidence for building focus and coordination. Early collaborative work involved data analysis, goal setting, and the development of early action plans. Beginning with school-specific evidence from multiple sources supported the principals' confidence that work was relevant and specific

to the context of their school and relevant to their staff needs. The consistent focus on data-informed planning ensured that collaborative planning was grounded in a variety of evidence and supported coherence between school and district improvement efforts.

Pre-interviews demonstrated a shared understanding between principals and coordinators about the critical role of trust and respect in district-school partnerships. Principals emphasized the need to feel safe, to be heard, and to be respected as instructional leaders. As Mr. House clearly put it, "If you don't have trust, then you're not going to get productive work." Coordinators also highlighted the importance of open communication, transparency, and support. This mutual emphasis on trust and respect laid the foundation for the assistive relationships addressed in Cycle 2.

Additionally, the pre-interviews highlighted the importance of coordinators' physical presence in schools, which principals said contributed to coordinators' credibility and fostered rapport with teachers. All principals in the study described effective central office support as grounded in relationships where the coordinators understand the unique context of their school. The coordinators also identified the need to tailor support to individual school needs without a "one-size-fits-all" approach.

One surprising finding was how critically important coordinators' actions appear to be in promoting coherence and alignment between district goals and school-level implementation. Principals expected coordinators to take the initiative, create tools, prepare data, be present, and regularly communicate. However, principals are also expected to be respected as the final decision-maker for their buildings. Coordinators acknowledged the reciprocal nature of coherence and had expectations of principals, as well. Coordinators stated that they needed principals to provide a clear vision for the

work, set expectations for their staff members, and be physically present, at least sometimes, to lend authority and credibility to the coordinator's work.

The reciprocal nature of a trusting relationship between coordinators and principals was a highlight of Cycle 1 and segued into the second driver of coherence, cultivating assistive relationships explored in Cycle 2.

Action Research Cycle 2

Action Research Cycle 2 started in June 2024 and lasted five weeks, concluding in early July 2024. To examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement, the second action research cycle focused on the second of three drivers of coherence, cultivating assistive relationships. Cycle 2 included the following:

- 1. ARDT meeting to review Cycle 1 data and plan interventions;
- 2. Cycle 2 principal and coordinator meetings and collaborative actions;
- 3. a questionnaire on the effectiveness of the assistive relationships; and,
- coordinator logs with reflections on the SIRR Cycle of Action Research (Search, Incorporate, Reflect, Retrieve).

Action Research Design Team (ARDT) Meeting – Cycle 2

In June 2024, the ARDT came together to debrief Cycle 1 and to discuss early themes in the data. The meeting lasted two hours as the team worked to discuss Cycle 1 actions, observations, questionnaires, and coordinator logs. As the team searched Cycle 1 evidence, they noticed initial patterns in the data:

- Interpersonal skills collaboration, building trust, navigating leadership styles
 and personalities, emotional intelligence, attending to power dynamics, and
 respecting the positions.
- 2. Communication sharing clear evidence, active listening, modeling thinking-inaction, using "talk moves" to direct a conversation, building staff buy-in, and providing authentic feedback, reciprocal conversation with equity of input.
- 3. Coordinator Skills building a clear focus to narrow the scope; differentiating support based on school context; building tools helpful to the leader; considering barriers and solutions to problems; considering staff response; and managing change leadership.

After reviewing the data from Cycle 1, the ARDT concluded that while coordinators were working to build focus and coordination, they were simultaneously cultivating assistive relationships. The relationship between the two coherence drivers is represented in Figure 4.5.

Figure 4.5

Connections Between Coherence Drivers

Interpersonal Skills Collaboration Two-Way **Cultivating Building Focus and** Communication **Assistive** Coordination **Relationships** Reciprocal • Identify Priorities Relationships • Engaging in Joint Work • Building Support Tools Brokering and Boundary • Removing Obstacles Authentic Input Spanning **Diverse Viewpoints Power Dynamics**

As a result of these findings, the ARDT decided that no new interventions needed to be implemented for Cycle 2 and communicated that decision to coordinators.

Coordinator/principal pairs continued with their collaborative meetings and actions

before completing Cycle 2 questionnaires and coordinator logs.

Cycle 2 Collaborative Meetings and Action

During Research Cycle 2, each of the coordinator/principal pairs met to focus on the second driver of coherence: cultivating assistive relationships. Cultivating assistive relationships involved building trust, engaging in joint work, prioritizing reciprocal relationships, giving authentic input and feedback, supporting the inclusion of diverse perspectives, recognizing power dynamics, and brokering and boundary spanning.

Suggested activities included collecting input/feedback from staff members, engaging in

joint professional learning, and collaborative observations. Cycle 2 took place during the month of June 2024, which prohibited the collaborative observation of classroom instruction. The initial foci and actions from Cycle 1 drove the work for Cycle 2. Because Cycle 2 took place during the month of June 2024, most of the state standardized testing results were available.

Cycle 2 Actions: Nero Elementary School

For Cycle 2, Ms. Frame and Mr. Willis met virtually over Microsoft Teams to review 2024 standardized testing data for 3-5th grade English Language Arts. Ms. Frame also prepared information regarding the early literacy screener, Acadience Reading. Both assessments were used to inform instructional areas of focus for professional learning for the coming school year. Ms. Frame compiled trend data over the last three years for performance bands, Lexile levels, domain trends, writing performance, and foundational literacy skills. During this meeting, Ms. Frame walked Principal Willis through each slide, pointing out areas of success and areas for growth. Mr. Willis commented that while he has reviewed data with the staff in the past, they had not yet "been intentional about attacking areas of weakness" through professional development.

In the Cycle 2 questionnaire, Mr. Willis commented, "[Ms. Frame and I] are aligned with the work that we have to do to meet the needs of our scholars." He went on to describe how the relationship had strengthened into an assistive relationship with authentic communication: "We are able to challenge each other's thoughts as it relates to the data. I truly lean on [Ms. Frame] for her guidance and expertise with our reading program and instructional expectations." Ms. Frame also commented on the quality of the partnership, even during a virtual meeting: "We met via Teams, but the collaboration was

still there. It was an interactive conversation and sparked discussion for future plans."

The collaboration demonstrated authentic, two-way feedback cycles where both the central office leader and principal transparently discussed assessment outcomes and reasonable solutions to move the work forward. Neither partner dominated the decision-making, and Principal Willis shared his positional power with Ms. Frame as they navigated the best path forward.

At the conclusion of Cycle 2, Ms. Frame agreed to design a pre-planning professional learning session to start the new school year. Mr. Willis agreed and indicated that he would like to approve the final pre-planning agenda. As was his general practice, he also planned to actively participate in professional learning to set a clear vision and expectations for the new school year.

Cycle 2 Actions: Harris High School

Dr. Harrison and Mr. House once again met in his office; however, after the initial meeting, Dr. Harrison demonstrated increased confidence in her communication with Mr. House. To start the meeting, Dr. Harrison shared an analysis of Spring 2024 End of Course (EOC) state assessment scores, pointing out positive changes in scores for the teachers participating in the Progress Learning pilot. Dr. Harrison pointed out that overall American Literature scores continued to decline and would require targeted support for significant improvement.

Dr. Harrison confidently persuaded Mr. House that teachers should "... fully engage with Progress Learning in the classroom to enhance instruction," citing that "evidence shows that consistent use of the platform, integrated with daily instruction, makes a notable difference in student outcomes." Dr. Harrison also shared three critical

considerations for next year's priorities: securing teacher buy-in, monitoring the usage of Progress Learning, and integrating the program effectively into classroom instruction.

Principal House expressed his disappointment in the declining American

Literature EOC scores and was agreeable to adjusting the course to focus on the priorities

Dr. Harrison suggested. He commented that he appreciated Dr. Harrison for "providing
specific evidence and data from his school," as that helped him make better decisions.

Based on the declining achievement data, he decided that drastic changes needed to occur
"in the way we do business," operationally and instructionally. As a result, Principal

House decided that all teachers of state-tested courses would be required to use Progress

Learning to support common assessments, collect data, and plan for
remediation/acceleration. Principal House worked with the master scheduler to adjust the
bell schedule to integrate Hornet Time for all students.

Hornet Time is a daily, flexibly scheduled instructional block designed to support remediation and acceleration for students during the school day. The Progress Learning adaptive intervention features were used for online remediation, and the formative data the program generated could be used to identify the skills to address during the differentiated instructional block. The collaborative partnership supported Mr. House in making operational and instructional decisions. Independently, Dr. Harrison could never have accomplished such sweeping school reform from her central office support role. The principal's operational and instructional leadership were instrumental in forwarding such large-scale change.

Mr. House valued the support and consistent communication from Dr. Harrison, stating in his Cycle 2 questionnaire:

The relationship has impacted my leadership skills in a positive way. [She has provided] consistent communication on how I can better serve our students and staff. I have relied heavily on Dr. Harrison for suggestions on better ways to communicate the changes...and the "why" for leveraging intervention programs in classes.

Dr. Harrison also expressed satisfaction with the assistive relationship. In her Cycle 2 questionnaire, she shared that as she supported Mr. House's instructional leadership, her own leadership was evolving and improving: "The relationship with Mr. House has encouraged me to continually reflect on the positive impact I can have on school improvement by remaining flexible and attentive to the principal's needs and vision."

Both leaders articulated how the assistive relationship was mutually beneficial and resulted in increased effectiveness in their instructional leadership. The early imbalance of relational power observed during the first meeting between Mr. House and Dr. Harrison had dissipated as the pair engaged in joint work to review evidence in the data and to plan for the coming school year.

Cycle 2 Actions: Southside Middle School and Deville Elementary School

Ms. Merrit and Mr. Skell met in person for the second meeting to discuss writing results within the End of Grade (EOG) state assessment data. Ms. Merrit prepared an analysis in advance, comparing the state assessment and Write Score results. Ms. Merrit used the data from each assessment to provide Mr. Skell with a comparative analysis of evidence from both assessments.

Additionally, Ms. Merrit had taken a step toward boundary spanning at the central office to connect with the district's secondary English Language Arts coordinator. Ms. Merrit and the ELA coordinator discussed the plans to support Southside Middle School's ELA department and how the two coordinators could work together to support all aspects of ELA instruction. Ms. Merrit proposed joining the ELA coordinator for collaborative support and adding two additional dates for Write Score formative data analysis. Ms. Skell appreciated Ms. Merrit's initiative and readily agreed to the plan for the coming year. Ms. Merrit's boundary-spanning efforts supported coherent communication from the central office and aligned efforts to support the Southside Middle School ELA Department.

The collaboration and coordination between Principal Skell and Ms. Merrit resulted in productive action and planning, but Ms. Merrit once again spent the first 10-15 minutes of the planning meeting in personal conversation, getting to know Mr. Skell prior to getting to the meeting agenda. Mr. Skell is an extrovert whose natural inclination is to engage relationally with others before settling into work. However, Ms. Merrit is an introvert focused on efficiency and maximizing the brief time she schedules with principals. Ms. Merrit said this of the meeting: "A challenge I encountered was getting to the actual purpose of our meeting: to review data. We spent a lot of time in conversation about other topics." However, Mr. Skell reported in the same meeting, "We did not encounter any challenges."

This interaction highlights the need for central office leaders to have strong interpersonal skills, anticipate the relational needs of principals, and adjust their approach to principals' personalities and leadership styles to achieve the most successful

collaboration outcomes. The interpersonal skills and emotional intelligence of the coordinator contributed to the successful partnership and meaningful alignment between the principal and the central office.

Ms. Merrit also met with Ms. Buyer at Deville Elementary to discuss writing achievement on state assessment data and to schedule the next steps for professional learning. Principal Buyer was prepared with analyzed end-of-year assessment data, attending to both reading and writing outcomes. Ms. Merrit previously laid the groundwork for school improvement with Deville Elementary teachers during post-planning professional learning, but analyzing assessment data collaboratively narrowed the scope of the writing initiative and helped Ms. Merrit and Ms. Buyer feel more confident in their decision-making. Ms. Buyer remarked, "The challenge is that writing is a very broad topic, so it can feel overwhelming to create an improvement plan that covers so much."

Demonstrating her commitment to a healthy school climate and positive staff morale, Ms. Buyer emphasized the importance of moving teachers toward better writing instructional practices "without overwhelming them with the process." The conversation between Ms. Merrit and Principal Buyer was a great example of the reciprocal nature of collaboration and the important role principals play in managing the change process for school staff. This attention to academic improvement and staff climate exemplifies how a principal engaged in instructional leadership can move the school forward in meaningful ways that are simultaneously healthy and supportive to teachers.

Ms. Merrit recognized the value of Ms. Buyer's experience, engagement, and perspective: "What I found most beneficial was gaining a clear picture of where [Deville Elementary] is as far as [state assessment] data are concerned. While I had writing data to share, Ms. Buyer shared an analysis she had done for both Reading and Writing data." In her Cycle 2 questionnaire, Principal Buyer described the collaborative improvement work from her perspective: "It was beneficial to determine how we would roll out information/gather teacher needs for the upcoming year. It was also helpful to keep student learning/performance outcomes at the root of our planning." While both the coordinator and principal were focused on improving writing instruction, they shared responsibility for managing the change process and not overwhelming teachers with a broad scope of work.

Cycle 2 Questionnaires

After each research cycle, coordinators and principals responded electronically to open-ended questions on a Microsoft Forms questionnaire. Cycle 2 actions shifted from initial planning and focus to early implementation and deeper collaboration. Principals and coordinators actively engaged with data during collaboration, using it as evidence to inform their decisions. For example, Mr. House worked with Dr. Harrison to review state assessment data and Progress Learning usage by teachers to assess correlations and plan interventions. All four collaborative pairs used a variety of data to guide their planning, demonstrating the importance of having multiple sources of evidence available.

The quality of assistive relationships continued to strengthen, characterized by increased trust, open communication, and a shared focus on instruction. Principals expressed their appreciation for the support and guidance provided by coordinators. Ms.

Buyer valued having Ms. Merrit as a "sounding board" and recognized the importance of open communication and mutual respect in a productive partnership. As relationships progressed, coordinators grew in confidence, and principals expressed an openness to incorporating coordinators' support and guidance.

Additionally, coordinators demonstrated a growing understanding of the nuances of collaboration. Ms. Merrit observed that "a 'one size fits all' approach does not work." In her reflection, Ms. Merrit said she is "learning [her] approach can, and needs to, adjust based on the leader [she is] working with." This reflects a deeper understanding of the complexities of collaborative relationships and the need for flexibility and personalized support.

Ensuring teacher buy-in and staying focused on instructional improvement in the context of other school-related demands arose as challenges during Cycle 2. Principals demonstrated change leadership by considering how to set a vision for the work and how they would build teacher buy-in. Coordinators benefited from considering the principals' attention to staff climate and morale. Additionally, coordinators reflected on their own practices. For example, Dr. Harrison noted that the experience encouraged her to "continually reflect on the positive impact [she] can have on school improvement by remaining flexible and attentive to the principal's needs and vision." This focus on reflection and flexibility highlights the coordinators' commitment to developing principals' capacity as instructional leaders and cultivating assistive relationships.

Cycle 2 Coordinator Logs

In Cycle 2 of the action research process, there was a shift from the initial groundwork of establishing partnerships and gathering data toward early implementation.

Coordinators began to gain a sense of the nuances required to support principals' instructional leadership.

A key theme found in Cycle 2 coordinator logs was the importance of reflective practice. Coordinators actively examined their own actions and the effectiveness of their partnerships supporting organizational learning. Ms. Merrit, for example, reflected on the importance of adapting her approach to different leadership styles, observing that "some leaders are very instructionally focused while others are more operationally driven." Coordinators demonstrated a growing awareness of principals' individual needs. They sought to clarify principals' preferences and tailor their support to meet the needs of each school.

Coordinators also recognized that effective collaboration requires a deep understanding of instructional practices and an awareness of each school's unique contexts and leadership personalities. Ms. Merrit's experience working with two principals with contrasting leadership styles highlighted this need for adaptability. She notes the challenge of "shifting [her] approach" to effectively collaborate with both principals but committed to personalized support for each leader. Although the other coordinators in the study were only working with one principal, their reflections also acknowledged a need to differentiate support for school leaders.

Organizational learning also requires the use of evidence from various sources.

Coordinators demonstrated evidence-based decision-making using multiple forms of data to inform their actions and support principals with instructional choices. For instance, Dr. Harrison leveraged assessment data in combination with software usage data to connect the fidelity of the resource implementation with student achievement. Notably missing

from the study was classroom observational data due to the study taking place during the summer months. However, the continued focus on available data ensured the collaborative efforts were coherently aligned to impact student progress and school improvement goals.

Summary of Findings from Action Research Cycle 2

Cycle 2 of action research focused on cultivating assistive relationships, the second driver of coherence. Building trust, engaging in joint work, and fostering reciprocal communication supported assistive relationships and deepened the joint commitment between principals and coordinators. The ARDT's analysis of Cycle 1 data revealed that coordinators were already cultivating these relationships while building focus and coordination, indicating the interconnected nature of the first two drivers of coherence.

Additionally, in Cycle 2, principals and coordinators alike reported increased trust, open communication, evidence-based decisions, and a shared focus on academic improvement. While the study aims to improve coherence in ways that impact principals' instructional leadership, coordinators also grew as instructional leaders. They developed new abilities to view the change process through the eyes of a principal. Principals' dual role of supporting staff and students influenced coordinators' recommendations, and coordinators' targeted data analysis influenced principals' evidence-based instructional and operational decision-making.

As with Cycle 1, the reciprocal nature of the relationships in Cycle 2 was beneficial to both coordinators and principals. The study's assistive relationships supported a deeper understanding of school needs, the development of targeted

professional learning, and the overall coherence between the work of central office and school leaders.

Action Research Cycle 3

Action Research Cycle 3 lasted eight weeks between July and August 2024. To examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement, the third action research cycle focused on the last of the three drivers of coherence, changing behavior at scale. Cycle 3 included the following:

- 1. ARDT meeting to review cycle 2 data and plan interventions;
- 2. Cycle 3 principal and coordinator meetings and collaborative actions;
- 3. a questionnaire on the effectiveness of the assistive relationships;
- coordinator logs with reflections on the SIRR Cycle of Action Research (Search, Incorporate, Reflect, Retrieve);
- 5. post-study ARIT Interviews; and,
- 6. ARDT Focus Group

Action Research Design Team (ARDT) Meeting—Cycle 3

In July 2024, the ARDT members came together to debrief Cycle 2. The meeting lasted around an hour as the team reviewed Cycle 2 actions, observations, questionnaires, and coordinator logs. As the team looked at the evidence, they ascertained that the assistive relationships between the coordinators and principals were strong and growing more effective as collaborative work progressed. Each partnership focused on key academic priorities that were identified and refined using multiple data sources as

evidence. Trust was established between coordinators and principals, who reported effective collaboration, two-way communication, and respect for diverse perspectives.

The third driver, changing behavior at scale, included some prerequisite skills to move the work beyond the coordinator/principal partnership into active implementation with staff. During this cycle, principals and coordinators needed to consider how they could scale their collaborative vision to whole school implementation. Teacher surveys elevated teacher voice and supported principal/coordinator pairs in tailoring professional learning to the identified needs of staff. Two of the four pairs implemented staff surveys, which provided insights into the socio-cultural inner workings of the school. Considering staff capacity and teacher voice and tapping social networks to support the changes in instructional practices were critical to moving the work forward.

The ARDT members decided that principal/coordinator pairs should complete two activities to prep for implementation when teachers return for the new school year. Coordinators and principals needed to be intentional about the strategies they employed to establish the principals' vision and ownership of the improvement effort. They also needed to consider a compelling presentation of the rationale necessitating the changes in practice required of teachers and how to build a strong coalition of followers. School leaders need followers (teachers) who will help build momentum, influence others to change their behaviors, and *scale the initiative* to all staff members.

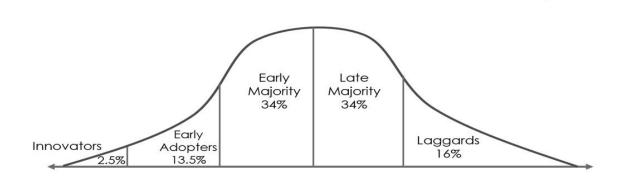
Intervention for Research Cycle 3

As the intervention for Cycle 3, the ARDT provided two activities for the pairs to complete as they considered leading the staff members involved in the change. Activities were adapted from Education First and the Council of Chief State School Officers. (n.d.).

Coherence Lab Toolkit resources and supplemented by a Power Mapping (2024) protocol from the Georgia Leadership Institute for School Improvement. The Coherence Lab Toolkit activity was grounded in Roger's (1960) Diffusion of Innovation (DOI) Theory. The theory divides a leader's followers into five categories: innovators, early adopters, the early majority, the late majority, and the laggards. The DOI bell curve is reflected in Figure 4.5.

Figure 4.5

Coherence Lab Toolkit: Diffusion of Innovation Bell Curve



Note. Adapted from Education First and the Council of Chief State School Officers. (n.d.). *Coherence lab: Coherence toolkit*.

Coordinators guided principals through questions about their staff members (followers). They discussed which teacher-leaders and early adopters might support the principal in their initial efforts to implement changes at scale successfully.

Coordinators and principals examined how individuals and their relationships, also described as social networks, can support or detract from a new initiative. Power mapping visualizes the sociocultural influence and relationships within a staff social network that can impact and influence a change initiative. Principals and coordinators mapped out supporters and detractors and their perceived social power within the school.

The pairs used an Eisenhower matrix to consider the different people in a school, district, or community and identify who could help support change efforts and where to focus early actions.

The power mapping protocol required leaders to purposefully consider the individuals in a school network who typically support or oppose change and chart their perceived social power and influence levels. The protocol also helped to identify others in the district network, like leaders from other schools or the central office, who might support the work or create barriers to change. The intervention and protocol aimed to guide principals' and coordinators' planning to help them consider how sociocultural factors and social networks within a school can impact the success or failure of change initiatives. By engaging in this intentional work, the pairs strategically and thoughtfully considered how individuals in a school work together to influence one another and change behavior at scale.

Cycle 3 Collaborative Meetings and Action

During Cycle 3, each of the coordinator/principal pairs met to focus on the third driver of coherence: changing behavior at scale. Changing behavior at scale involves capacity building, defining key behaviors, modeling thinking/action, differentiated support, tapping networks, and appealing to emotion. Suggested activities for Cycle 3 included developing school improvement action steps, designing plans for ongoing partnership, considering networks to scale the work, connecting mindsets/beliefs to concrete behaviors, identifying successful key leadership behaviors, planning copresentations to support other principals in similar work, etc. Teams completed the two intervention activities to inform Cycle 3 meetings and actions.

The timing of Cycle 3 coincided with teacher pre-planning and the start of the 2024-2025 school year. As a result, all four ARIT pairs embedded their joint work into the school's formal improvement plan. Preplanning opportunities were leveraged for the principals to establish their instructional leadership visions for the year, introduce school improvement initiatives, and engage in initial professional learning opportunities. For three of the partnerships, preplanning included a co-developed review of academic data to establish the urgency for change and an introduction to the initiative through professional learning (Kotter, 2012).

Cycle 3 Actions: Nero Elementary School

Nero Elementary School began the last day of pre-planning by reviewing the endof-the-year literacy screeners and state standardized English Language Arts assessment
data. Ms. Frame and Mr. Willis had planned an 8:00 a.m. staff meeting in the media
center, complete with breakfast and high-energy music. Open House was the night
before, so teachers meandered in groggy with low energy but quickly perked up as
Principal Willis and Ms. Frame worked the room greeting teachers. To increase staff
networking and K-5 collaboration, teachers sat in vertical teams as assigned by Principal
Willis. Mr. Willis opened the professional learning session by reminding the staff of their
accomplishments last school year. He piqued their curiosity for the session by saying,
"The data you're going to see is encouraging...what we're doing is working, and we are
trending in the right direction." He then introduced Ms. Frame's purpose for being there
and joked that he would "give her an office at the school," a clear signal to his staff that
he values her expertise and considers her an extension of his leadership team.

Ms. Frame started the meeting by reviewing student achievement to highlight the effectiveness of their previous efforts in early literacy professional development. Mr. Willis and his administrative team stayed in the media center for the duration of the session and actively engaged in the discussions with table groups. Mr. Willis is a former Division 1 college football player, so his physical stature and coaching commentary, like "stay locked in as we look at this data" and "that's so powerful," encouraged and engaged teachers. Throughout the presentation, he would interject physically and verbally and lead his staff to clap for one another as they shared examples of successful practices. Although Ms. Frame was leading the data analysis activity, Principal Willis was clearly the instructional leader in the room. He set the tone for his staff, publicly celebrated their successes, and voiced his approval.

The session functioned like an exemplary co-teaching classroom. Ms. Frame was like the content teacher who had deep knowledge of the content standards, prepared the materials, and planned the lesson. She walked teachers through a vertical analysis of the student outcomes. The professional learning was structured to look at one data set at a time, and Ms. Frame paused so vertical teams could make connections and share which practices were successful in their classrooms and what they were considering changing in this year's instruction.

Principal Willis functioned as the co-teacher who would stop to clarify, celebrate success, and connect the student outcomes to the efforts he had observed in classrooms and collaborative planning. He circulated the room, joining table conversations and, at times, using his physical proximity to keep staff from becoming distracted. Mr. Willis

and Ms. Frame took turns answering questions for teachers and were prepared with a shared understanding of the data and its implications.

Mr. Willis, Ms. Frame, and the other school administrators mingled with the tables of teachers, answering questions, listening for understanding, and encouraging exemplars to share with the whole group. Teachers learned their efforts had produced the highest 4th-grade ELA growth in the district and higher-than-average 5th-grade student growth. In fourth grade, student growth at Nero Elementary was also significantly higher than peers across the state. Positive emotions in the room ran high as teachers celebrated, and their principal and district coordinator showered them with praise and encouragement, connecting their change efforts to positive student outcomes.

The coherent partnership between Mr. Willis and Ms. Frame elevated the effectiveness of Ms. Frame and enhanced the instructional leadership of Mr. Willis. When asked if the partnership impacted his leadership skills, Mr. Willis replied:

Absolutely, I see [Ms. Frame] as a part of our team and one who is super supportive of helping me grow my skillset for the literacy work that we have to do. I have a ton of room for improvement and growth, so I will continue to rely on [her] to support me and my teachers.

Mr. Willis previously valued Ms. Frame's content expertise, but the assistive relationship made a difference in the growth of his instructional skill set. Her intentional collaboration helped Mr. Willis see her as "part of the team" and "equally invested" in the success of his staff and students. For a central office leader to be perceived as a valued partner in school improvement, an advanced level of district effectiveness and coherence is required.

Ms. Frame further explained how the partnership has made her more effective as a district leader, stating, "His questions require me to think about things I would not consider at first. He is definitely more global, whereas I tend to be more detailed. That requires me to consider more perspectives and think through various scenarios."

Although Ms. Frame has multiple years of leadership experience at the school level, she has always functioned in an academic leadership capacity, so having access to the principal's perspective broadened her understanding of supporting staff.

Prior to the study, Ms. Frame had little experience navigating the challenges of managing staff morale, school climate, student behavior, or operations while also attending to the core task of instructional improvement. As an academic leader, Ms. Frame focused on evidence-based instructional actions that lead to higher student outcomes. However, the principal considered the broader issues of leading, motivating, and encouraging teachers to make the needed changes. The reciprocal relationship and respect for the principals' perspective challenged Ms. Frame's laser focus on the technical aspects of literacy and developed her ability to think about the instructional change process, the teachers' perspectives, and the social networking involved.

Near the conclusion of the study in late July 2024, the State Department of Education, in partnership with State Public Broadcasting, produced a professional video featuring the assistive relationship and literacy leadership of Principal Willis and Ms. Frame, K-5 ELA Coordinator. The State Deputy Superintendent of Teaching and Learning spotlighted the video at the annual statewide Association of Curriculum and Instructional Leaders 2024 Fall Conference.

By the study's conclusion, Principal Willis and Coordinator Frame scaled their work to the entire school staff, served as a districtwide literacy PL design model, influenced the literacy leadership of other district principals, and influenced curriculum leaders across the state. The 8-minute video provided in Appendix B exemplifies central office and school coherence, organizational learning, and the impact of assistive principal/coordinator relationships on a principal's instructional leadership.

Cycle 3 Actions: Harris High School

During Cycle 3, Principal House structured Harris High School's preplanning as an instructional conference with breakout sessions. He began the day by sharing his vision for instruction and the day's purpose. Disciplinary departments rotated through required and self-selected professional learning courses. One of the required sessions for the day was Dr. Harrison's Progress Learning introductory session, which Principal House had co-planned with Dr. Harrison.

Dr. Harrison prepared for the session by inviting a software trainer from the vendor and two Harris High School teachers from the Progress Learning pilot program. The session was in a traditional computer lab with computers lining the walls. Some teachers logged into computers with their backs to the presenter while others turned in their chairs to face the presenters with laptops or notebooks in their laps. Due to limited seating in the computer lab, Mr. House and his academic administrator joined the first 10 minutes of the session and had to stand in the front of the room by the door. However, his opening comments at the whole group staff meeting and physical presence in the session signaled his endorsement of Dr. Harrison and the new intervention program.

The session began with Dr. Harrison sharing initial data from the pilot and having one of the pilot's teachers share his experience with the program, including challenges and successes. The teacher acknowledged that a major barrier to implementing Progress Learning was students not bringing their charged, school-issued laptops to class. However, he admitted that he could "do a better job of setting expectations for one-to-one devices" and then offered some workaround suggestions to his peers. He also testified that the students who actively engaged with the intervention had better outcomes on the end-of-course state assessment.

Following the teacher's testimonial, Dr. Harrison shared a 2024 Johns Hopkins study that supported the tool's effectiveness when applied as an academic intervention to close learning gaps. Having set a clear purpose with school-specific data, a teacher's testimonial, and reputable research findings, the program's trainer began walking teachers through a live demonstration of navigating the tool. At the beginning of the vendor's demonstration, Principal House stepped out of the room to be visible in the other professional learning breakout sessions.

Dr. Harrison and Principal House had prepared relevant professional learning for teachers and established clear evidence for the change, but the vendor's unfamiliarity with her product somewhat reduced the session's effectiveness. However, Dr. Harrison closed the session with a strong discussion of how teachers could incorporate the program into their instruction. Several teachers participated and stayed afterward to express interest in further training. Teachers were also observed approaching the model teacher from the pilot program and Dr. Harrison following the session to ask questions.

Dr. Harrison's Cycle 3 coordinator log described the feedback she received from teachers following the session:

Verbal feedback from staff members has been a significant indicator, with many expressing enthusiasms for the program and requesting follow-up training sessions... [teachers'] requests for additional training underscores the need for ongoing support and highlight the potential of Progress Learning to positively impact instructional practices.

Despite the vendor's lackluster demonstration, teachers were still invested and interested in the program. Based on the teachers' enthusiasm, it is plausible to conclude that the principal's clear instructional vision, the data and evidence from the pilot, the teacher's testimony and influence, and Dr. Harrison's expressed commitment overcame the trainer's deficiencies.

The professional learning was also successful because it was not a "one-and-done" training. Principal House deepened his collaboration with Dr. Harrison by developing a flexibly scheduled instructional period to close student learning gaps and provide targeted remediation, tutoring, and acceleration. He and Dr. Harrison utilized Progress Learning data to provide teachers with reliable, easily accessible, formative data they could use to flexibly-schedule students into Hornet Time each week. The pair collaborated shoulder-to-shoulder to create operational processes for flexible weekly scheduling and job-embedded professional learning to support teachers using digital intervention data and tools.

Dr. Harrison connected school leaders with additional district support, so the Harris High School team successfully established a flexibly scheduled intervention and support period. For instance, Dr. Harrison connected the assistant principal responsible for scheduling with the district director responsible for the Student Information System (SIS). Dr. Harrison's action demonstrated boundary spanning by connecting school leaders with district leaders to ensure the school had the appropriate technical support needed to be successful with this new initiative (Honig, 2008). Although the study has concluded, the pair planned for the entire school year. They will continue working together to expand teachers' use of formative data to continuously improve the effectiveness of Hornet Time.

Cycle 3 Actions: Southside Middle School and Deville Elementary School

During teachers' preplanning at Deville Elementary School, Ms. Merrit provided whole group writing professional learning focusing on analyzing the school's end-of-grade state assessment data and an overview of each grade level's writing standards and exemplars. The session lasted for thirty-five minutes, and Principal Buyer remained in the session, sitting at the back table for the duration. Although Ms. Buyer refrained from actively participating in the professional learning, her presence signaled her endorsement of the work and the formal school improvement plan focused on writing achievement. Principal Buyer did not interject during the professional learning and remained seated at her table, but teachers remained focused, positive, and engaged in discussing their students' data.

During Cycle 2 planning, Ms. Merrit and Principal Buyer shared the vision of using this pre-planning session in Cycle 3 to create clear, common grade-level expectations for writing, beginning with an analysis of student achievement data.

Teachers were sitting in grade-level teams, and Ms. Merrit segmented the data analysis to give grade-level teams the opportunity to discuss and analyze student outcomes. Teachers were actively engaged in their table discussions and were willing to share their findings aloud with the whole group.

The collective analysis focused on three years of writing outcomes for Deville Elementary students, and teachers made inferences and connections about the instructional practices that positively impacted the students' writing scores. Teachers were smiling and excited as Ms. Merrit congratulated them on the gains in their writing data before summarizing with a quick preview of the upcoming year's work. Although the session was brief, the teachers concluded by applauding Ms. Merrit before Ms. Buyer transitioned the staff to the next preplanning topic.

Principal Buyer expressed her appreciation for Ms. Merrit, stating in her Cycle 3 questionnaire, "[Ms. Merrit] does a wonderful job following through with my overall vision for writing improvement." Ms. Merrit credited the Power Mapping intervention for helping her consider the possible responses of the grade-level teams. She described her collaboration with Principal Buyer, stating:

[Ms. Buyer] has a strong sense of where her teachers fall on the Power Mapping matrix, which will be helpful as I begin monthly sessions with her staff. She also knew exactly what common expectations for writing she wanted to put in place for her staff.

Ms. Buyer also noted the timeliness of the opening professional learning: "...we captured our growth and positive trends and allowed the momentum to take off and guide the start of the school year."

Ms. Buyer and Ms. Merrit expressed their shared belief that the quality of the assistive relationship improved over time and that their shared work would result in enhanced writing instruction and student outcomes. Although the study has concluded, Ms. Buyer and Ms. Merrit have scheduled a full year of professional learning support, collaborative classroom observations, grade-level scoring of student work, and the quarterly data analysis of formative writing assessments.

At Southside Middle School, Ms. Merrit and Mr. Skell completed the Power Mapping protocol but were not ready to provide professional learning during preplanning. Principal Skell appreciated the value of the Power Mapping process, stating, "We discussed where each member of the ELA department falls on the matrix and how much [social] influence they have on others." Principal Skell reported no concerns with the partnership other than "finding time in both schedules" to collaborate during a busy time of the year.

Although Principal Skell was not ready to initiate professional learning during preplanning, Ms. Merrit began the work of boundary spanning and collaboration at the central office in partnership with the 6-8th grade ELA coordinator. Ms. Merrit noted how the 6-8th ELA coordinator emphasized "backward design" as part of her training for Southside Middle School ELA staff. Ms. Merrit committed to developing her support in a similar format so that teachers would see continuity between planning for

reading/literature and writing. By attending to the existing focus of the ELA coordinator, Ms. Merrit increased the coherence of central office messaging and professional learning.

Additionally, the district social studies coordinator supported disciplinary literacy and collaborated with Ms. Merrit to adapt writing rubrics from ELA for use within literacy-rich social studies classrooms. The partnerships between Ms. Merrit and the ELA and Social Studies coordinators demonstrated district-level coherence, resulting in aligned literacy and writing support for the principal and staff at Southside Middle School.

Cycle 3 Questionnaires

In Cycle 3 of the action research process, there was an overall shift to the tangible outcomes of the collaboration and its impact on school improvement for three of the four partnerships. Nero Elementary, Deville Elementary, and Harris High School included a review of data and initial professional learning as part of preplanning activities. The only school that did not start on professional learning during preplanning was Southside Middle School, but firm plans were in place to begin the work shortly after the start of the school year.

Coordinators and principals unanimously viewed the improvement work as beneficial for achieving school improvement goals. They also acknowledged the positive impact of the partnerships on their instructional leadership skills and content knowledge, with one principal remarking, "The partnership continues to build my self-efficacy and knowledge around the science of reading." Further, coordinators revealed that the partnerships had made them more aware of the need to adjust their approach and support based on the work style of each leader and the differentiated needs of each staff. One

coordinator reflected, "I think an important aspect of being successful in working with schools as a district coordinator is the ability to balance the passion you have for your [content] area with the knowledge of a school's perspective of your approach."

Principals and coordinators reported growth in their leadership because of the collaborative work. The work evolved throughout the study, with Cycle 1 focusing on establishing goals, initial plans, and early trust. Cycle 2 saw the implementation of early collaboration through various tools and supports developed by the coordinators. Data analysis and teacher survey data began illuminating and refining the focus of the assistive partnerships. Finally, in Cycle 3, the coordinator/principal pairs codified the planning into their formal school improvement action steps, planned ongoing support for the school year, and began implementing the new initiatives during preplanning.

Cycle 3 Coordinator Logs

Cycle 3 responses show a concrete progression of collaborative planning and analyzing evidence to the early implementation of new initiatives. Coordinators relied on various pieces of evidence to support their assistive relationships, keeping the work grounded in school-specific evidence and data. The three coordinators grounded their improvement work with principals in summative assessment data, but they incorporated verbal feedback, social network mapping, and staff survey data as initiatives progressed. Due to the time of year, observational data was unavailable, but each coordinator planned to add classroom observations at the beginning of the school year. In their reflections, coordinators also observed teachers' engagement during professional learning, listened for potential concerns or hesitations, and reflected on teacher responses during the open discussion. Reflecting on the teacher discussions during professional learning gave

coordinators an informal, formative measure of the initiative's early effectiveness.

Intentionally reflecting on the totality of the qualitative and quantitative evidence assisted coordinators and principals in discerning the next steps.

When considering how the organization might learn from the evidence and retrieve the information to enhance future initiatives, each coordinator mentioned the relationship with the principal as the critical factor in impacting teacher practice. Before the study, the FCSD Teaching and Learning Division regularly circumvented the principals' positional authority by coordinating with academic administrators and directly supporting teachers. However, intentional communication with the principal, proactively communicating about improvement efforts, considering the principal's perspective, and building trust with the principal emerged as primary drivers for increasing central office coherence. Dr. Harrison explained:

It's not about you as the district coordinator; it's about prioritizing the development of relationships with the principal and other leaders in the building to build trust. When leaders trust you, they are more likely to collaborate, consider your ideas, and embrace your vision for improvement...The focus should always be on understanding the needs of the school, being flexible, and working together to create a shared vision that benefits the entire school community.

Ms. Merrit also added, "I would suggest taking the time to intentionally communicate with principals when given the opportunity. I think both parties often forget we all have the same goal—improving teaching and learning outcomes." Ms. Frame emphasized the importance of meeting with principals before planning sessions for feedback and guidance to adjust what is shared and identify how the principal wants to be involved in

the process, adding, "They will be more engaged in the experience with the teachers" when they are involved in the planning.

Summary of Findings from Action Research Cycle 3

Action Research Cycle 3 focused on changing behavior at scale, the final driver of coherence and organizational learning. During Cycle 3, principal/coordinator pairs analyzed school social networks and engaged in activities to consider how new initiatives spread across the individuals in a school. Pairs also anticipated the influence of supporters and detractors using a Power Mapping protocol (GLISI, 2024). Due to the alignment of Cycle 3 with teacher preplanning, three of the four partnerships began initial implementation by embedding professional learning into teacher preplanning activities. Each pair codified initiatives by including them in the school's formal improvement plan.

Cycle 3 further emphasized the critical importance of collaborative relationships between the principals and coordinators in developing coherence. All principals and coordinators consistently reported growth in their instructional leadership skills. Three of the four principals indicated that the partnership had developed their content knowledge, and all four principals reported growth in their instructional leadership.

Coordinators relied heavily on evidence from assessment data, teacher surveys, and teacher feedback to support their collaboration with principals and determine each initiative's next steps. Although coordinators' growth was not the primary focus of the study, all coordinators reported developing their leadership skills by better understanding the principal's perspective, learning to adapt their approach to meet the principal's needs, and learning to scale the initiative within the school's context.

Post-Study ARIT Interviews

Post-study ARIT interviews took place in August 2024 following a semi-structured interview protocol provided in Appendix C. All seven coordinators and principals participated individually, either in person or virtually, and interviews were recorded and transcribed using the Microsoft Teams application. Each transcription was printed, and the researcher edited errors in the transcription. The researcher reread the transcripts and coded responses to the interview questions based on how the information related to the research questions identified in the study. Interview questions were aligned with the action research questions and connected to the three drivers of coherence, which helped to track findings more systematically. The following three overarching findings emerged from the post-study interviews:

- Strong assistive relationships undergird successful collaboration and support principals' instructional leadership.
- Coordinators taking a principal-centered approach to support improves district leaders' understanding of a school's context and breaks down perceived barriers between school and district leaders.
- Coherent support builds principals' capacity for instructional leadership and improves the effectiveness of central office leaders.

As with the pre-study findings, every ARIT member agreed that trusting, strong relationships are essential for effectively supporting schools and principals' instructional leadership.

Principals consistently emphasized the importance of assistive relationships built on open communication and mutual respect. Principal House stresses the importance of building focus and collaboration to support his vision for improvement: "The biggest piece [of collaboration] is communicating what we're trying to improve upon."

Throughout the study, cultivating strong, trusting, assistive relationships with a clearly communicated focus for improvement undergirded all improvement efforts.

Coordinators reflected on the need to be more intentional about future collaboration with principals by actively seeking their input, involvement, and feedback. Dr. Harrison emphasized that coordinators must be "intentional about seeing what [the principal's] needs are." Respecting the principal's perspective and knowledge of their staff members helped coordinators to provide more effective support.

While coordinators acknowledged the need for flexibility and differentiated support in pre-study interviews, in post-study interviews, they emphasized adapting their approach to the principal's leadership style and the school's context. Ms. Merrit reflected that the study has enhanced her ability to "anticipate working with different kinds of leaders in the future...figuring out where leaders are coming from and how I can target my approach to best support them and what they need."

Coordinators also shifted away from an overreliance on a school's academic data as the sole source of evidence. At the conclusion of the study, all coordinators acknowledged that other qualitative measures, such as the principal's perspective, knowledge of their staff members, and principals' public endorsement of the work, enhanced their effectiveness. Taking a principal-centered approach to support improved district leaders' understanding of the unique needs of a school and staff and enhanced the effectiveness of differentiated support.

In pre-study interviews, principals stressed the need for coordinators to respect their autonomy and authority. However, in post-study interviews, all four principals expressed a greater appreciation for the collaborative support and guidance and the impact of coordinator support on their instructional leadership. Ms. Buyer, one of the more vocal proponents of principal autonomy, came to see her coordinator as "one who is super supportive helping me to grow my skill set" and indicated she would "continue to rely and lean on [Ms. Merrit] to support me and my teachers."

Principal Willis also reported the importance of "having an expert who you could count on" and "having someone who you could really dive into data with and have meaningful conversations." The coordinators' intentional focus on support for the principal's vision dissipated principals' feelings of defensiveness and reduced the "us against them" mindset, a common barrier to school and district coherence. At the study's conclusion, principals expressed increased feelings of trusted support and reliable assistive relationships.

Principals unanimously agreed that the collaborative process positively impacted their leadership skills, content knowledge, and confidence. Mr. Skell reported that "the partnership ensured that I look at the process [of improvement] through a different lens." He reflected that his leadership was enhanced by "building on others' strengths." Similarly, Mr. House stated, "The partnership has developed my leadership skills even more" and "has given me suggestions on how I can better approach, deliver, implement, and monitor the intervention program in our school." The principals' expressed perceptions suggest that the coherent partnerships fostered a deeper understanding of the

complexities of instructional leadership and the importance of strong, supportive relationships between principals and coordinators.

Action Research Design Team (ARDT) Focus Group

The ARDT Focus Group met at the conclusion of the study to respond collectively to the following prompts to answer research question three: "How does the Action Research Design Team articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?" The focus group followed a semi-structured interview format and used the prompts in Table 4.2 to guide the conversation.

Table 4.2

Post-Study Focus Group Interview Prompts

Research Question	Interview Prompts	
	How can central office leaders continue to collaborate to provide coherent systems of support for principal development?	
Q3: How does the Action Research Design Team articulate the impact of the	What are the limitations of coordinator support in regard to principal development?	
design and implementation of coherent systems and structures on curriculum	What are the advantages of acting as a learning organization? Disadvantages? Barriers?	
coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban	What are your perspectives on how well the coordinators supported principals' instructional leadership capacity?	
school district?	 What are your feelings on the action research process? How could we apply it in other areas to improve school and central office coherence? What areas need additional exploration or study? 	

The ARDT focus group lasted approximately one hour, and each team member contributed equally to the discussion. The conversation was transcribed using Microsoft Teams, and the researcher corrected the transcription following the focus group.

In response to prompt one, "How can central office leaders continue to collaborate to provide coherent systems of support for principal development?" ARDT members discussed the advantages of working in action research cycles to measure the effectiveness of central office support for principals intentionally. Central office leaders on the team referenced the quarterly reporting cycles, called Impact Checks, previously established with the Focus County School District's continuous improvement process.

During quarterly cycles, FCSD curriculum coordinators, directors, and executive directors, who also serve as principal supervisors, gather to analyze student formative data during Teaching and Learning Impact Checks. Impact Checks follow structured protocols to examine student outcomes at each school and inform course corrections across all school and district leadership levels. Student outcomes and school improvement adjustments are reported quarterly to the superintendent and the Board of Education in alignment with the district's Strategic Plan. The focus group believed the Impact Check process and quarterly reporting supported central office coherence, required intentional collaboration around student outcomes, and supported shared accountability for improvement between principals and district leaders.

The ARDT members discussed the limitations of coordinator support regarding principal development. Dr. Bowls, a middle school principal serving on the ARDT, reflected, "I don't know that it's the place of curriculum coordinators to improve a principal's instructional leadership. I think their purpose is to collaborate with and

support the principal in improving student outcomes." Ms. Frame, a coordinator who served on both ARDT and the ARIT, disagreed, stating, "When coordinators partner with principals, the principal becomes stronger in their content knowledge and stronger at using data to make instructional decisions. I think that's a sign that their instructional leadership is developing." The other ARIT members agreed, citing that every principal felt their assistive partnerships with the coordinators enhanced their instructional leadership.

However, Dr. Bowls' perspective highlighted the limitations of a coordinator's impact on principals' instructional leadership development. Without an evaluative role or positional authority, coordinators only effectively impacted principals' instructional leadership when the principal was open to the partnership and coordinators were viewed as trusted, supportive partners. Coordinators who circumvented the principals to work directly with teachers were ineffective at creating sustainable instructional change.

Coordinators who were inflexible or overly critical in their approach to leaders perpetuated the "us against them" culture where district leaders were viewed as adversaries, not allies to principals.

The advantages of acting as a learning organization are that the organization learns from mistakes, successes, and failures. The continuous search for evidence keeps the central office focused on effectiveness measures, and the collaborative reflection on evidence of effectiveness builds the organization's collective knowledge of how best to support school leaders. By reflecting on what worked or failed, district leaders build institutional knowledge to predict what might work in the future. Regular, collective reflection assists curriculum coordinators in learning from the successes of others and

provides opportunities for brokering and boundary spanning, leading to coherence across the central office.

The only disadvantage of organizational learning discussed was the potential for veteran members to oppose new ideas, taking the jaded position that "we've tried that, and it didn't work." Director Sinclair of the ARDT remarked, "Principals and schools have different needs. District leaders need to be careful not to make broad assumptions that something that failed once can never be successful. There are a lot of factors that contribute to the success or failure of an initiative."

A few barriers to organizational learning were discussed, such as frequent staff turnover, the absence of collaborative processes at the central office level, siloed central office divisions, and unhealthy district culture. Executive Director Fields, who serves as a K-5 principal supervisor on the ARDT, mentioned,

There has to be a balance between support and pressure for principals. Too much support takes the responsibility for improvement completely off principals. But, too much accountability and pressure break down the collaborative relationship between schools and the central office. You have to find the right balance. You have to share the accountability for improvement.

ARDT members believed that the study struck the right balance of support and shared accountability but kept the focus on the principal's instructional leadership.

Every ARDT member shared the perspective that coordinators successfully supported principals' instructional leadership capacity and that the coordinators' leadership capacity was also enhanced. Ms. Frame could articulate how she and Principal Willis mutually benefited from their partnership and the positive perspective of the

teachers at Nero Elementary. Executive Director Roads pointed out that although each coordinator had worked with principals in similar ways using the coherence framework, the receptivity and focus of the principal, to some extent, determined the effectiveness of the partnership.

As the team discussed the action research process, several parallels were drawn between the cycles of action research and the quarterly cycles found in FCSD's continuous improvement and Impact Check processes. The shared opinion was that determining measures of effectiveness and focusing on formative student outcomes in quarterly cycles supported the ongoing, iterative monitoring of central office effectiveness. Additionally, the emphasis on adult actions, instructional leadership, differentiated school supports, course corrections, and collaborative problem-solving closely mirrors techniques found in action research. The ARDT members determined that regularly monitoring student outcomes and the collaborative alignment of district actions contributed to FCSD school and central office coherence.

Regarding the areas of coherence requiring additional exploration or study, the team discussed the possibility of exploring the principal supervisor's contribution to coherence and the deployment of curriculum coordinators to support specific problems of practice. The team also discussed that the study sample included principals who demonstrated openness to central office support and that future studies might focus on the principal supervisor's role in overcoming resistance from more reluctant principals.

Lastly, the ARDT discussed the superintendent's role in creating a coherent instructional leadership climate. ARDT members agreed that a superintendent's clear articulation of expectations for instructional leadership at every level, the central office

taking on a customer service position, and the central office acting as a learning organization in continuous improvement cycles could further drive school and central office coherence.

Chapter Summary

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. The study sought to establish the FCSD Teaching and Learning Division as an evidence-based learning organization that continuously evaluated, revised, and expanded systems of support to equip principals with the skills, knowledge, and tools necessary to develop high-quality instruction within their buildings. The curriculum coordinators' and supervisors' perspectives were used to guide the study as they collaboratively designed coherent systems and structures to develop principals' instructional leadership capacity.

Chapter 4 explored the relationship between central office coherence and principals' instructional leadership capacity through the lens of an action research case study. The Action Research Design Team (ARDT) developed interventions using data and evidence from each research cycle of principal/coordinator assistive relationships and the participants' reflections. The Action Research Implementation Team (ARIT) was comprised of curriculum coordinators and principals focusing on the three drivers of coherence: building focus and coordination, cultivating assistive relationships, and changing behavior at scale. Each action research cycle focused on one of the three drivers, although elements from each driver surfaced in multiple cycles.

The findings reported in Chapter 4 were gleaned from several data sources that included pre- and post-study interviews, observations of joint work, artifacts from collaborative work, cycle questionnaires, coordinator's logs, and an ARDT focus group. Field notes from the researcher's journal and the ARDT's cycle analysis helped to triangulate the data, identify appropriate interventions, and illuminate the relationship between central office coherence and principals' instructional leadership development.

The ARDT participants analyzed and coded the data from each source manually, and Google Gemini Advanced v.1.5 Pro's language processing abilities enhanced them. The findings reported in this chapter led to the development of emerging themes. The next chapter addresses the thematic findings as they relate to the purpose of the study, the research questions, the logic model, and the theoretical framework.

CHAPTER 5

ANALYSIS OF FINDINGS FROM THE ACTION RESEARCH CASE

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. The curriculum coordinators and supervisors' perspectives were used to guide the study as they collaboratively designed coherent systems and structures to develop principals' instructional leadership capacity.

The researcher approached the study with some overall questions: What central office systems and processes foster coherence and support curriculum coordinators in developing the instructional leadership capacity of principals? What lessons can be learned using the action research process to develop coherent systems designed to build principals' instructional leadership capacity?

To address the purpose of this study, the following research questions guided this inquiry:

- 1. How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district?
- 2. How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to

- develop principals' instructional leadership capacity in a large, suburban school district?
- 3. How does the Action Research Design Team articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?

This study used a qualitative approach to data collection and analysis. Qualitative research contributed to a comprehensive understanding of how a central office can function as a coherent learning organization and the impact of coherence on principals' instructional leadership capacity. Three action research cycles were completed between May 2024 and September 2024, and observations, questionnaires, and coordinator reflections were collected for each cycle. Pre- and post-study interviews and an ARDT focus group added depth to the study's findings.

The Action Research Design Team (ARDT) analyzed the collected data, using the findings to design interventions for subsequent cycles. To support and enhance the ARDT analysis, Google Gemini Advanced v.1.5 Pro, a large language model from Google AI, played a role in facilitating the constant comparative method across large volumes of text from data collection. Coded data were used to synthesize and identify themes. The researcher's immersion in the study allowed for co-constructing meaning around moving from organizational fragmentation to coherence. Table 5.1 summarizes the emergent themes connected to the research questions.

Table 5.1Summary of Research Questions Connected to the Findings and Themes

Research	Findings	Themes
Questions		TD 4 G 1 G
RQ1 How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to	The iterative cycles of organizational learning provide a valuable framework for central office leaders to collaboratively design and refine coherent systems of support. Collaborative, trusting assistive relationships between principals and central office leaders are essential for effective	Theme 1: Central office instructional leaders foster coherence by establishing collaborative structures and processes that promote shared understanding, data-driven decision-making, and shared responsibility for instructional improvement.
develop principals' instructional leadership capacity in a large, suburban school district?	instructional leadership support. Evidence-based decision-making using school-specific data is critical to identifying a clear focus and targeted support.	Theme 2: Organizational learning empowers central office leaders to continuously reflect and equip principals with the skills, knowledge, and tools necessary for effective instructional leadership.
RQ2 How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district?	A principal-centered approach enhances the effectiveness of central office support efforts and is characterized by flexibility, adaptability, and responsiveness to principal and school needs. A central office functioning as a learning organization requires the continuous reflection and adjustment of support systems to ensure responsiveness to the evolving needs of principals and schools.	Theme 3: A central office functioning as a learning organization is characterized by the continuous evaluation of evidence, principal-centric support systems, and the evolving pursuit of coherence.

Table 5.1Summary of Research Questions Connected to the Findings and Themes

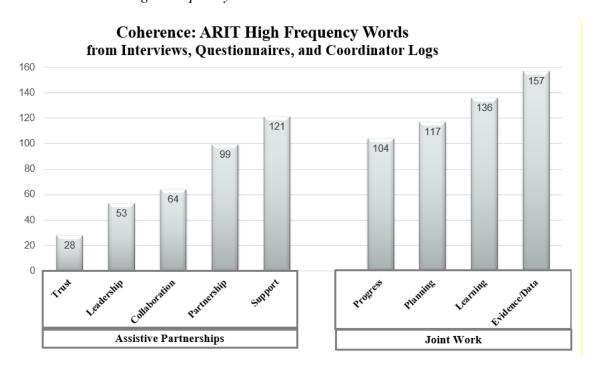
Additionally, a high-level analysis of high-frequency words was conducted across various data sources, including pre/post-interview transcripts, cycle questionnaires, and coordinator logs, to better understand the key themes and topics that emerged from the qualitative data. This approach allowed for a more comprehensive and nuanced view of the experiences of the Action Research Implementation Team members.

To illustrate these findings, Figure 5.1 presents a bar chart displaying the frequency of key terms, including trust, leadership, collaboration, partnership, support,

progress, planning, learning, and evidence/data. This visualization highlights the relative importance of these concepts in the context of assistive partnerships.

Figure 5.1

Coherence: ARIT High-Frequency Words



The frequency of certain terms provided additional evidence to support the themes identified through qualitative analysis while also revealing patterns in the language used by principals and coordinators to describe their experiences. These patterns shed light on more specific characteristics of assistive partnerships and the essential elements of their joint work.

The next section addresses the findings from the case and the themes identified through three action research cycles.

Central Office Leaders and Coherent Systems of Support

The first research question amplified the purpose of the study: How can central office instructional leaders, functioning as a learning organization, collaboratively design

coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district? Findings related to Research Question 1 included:

- The iterative cycles of organizational learning provide a valuable framework for central office leaders to collaboratively design and refine coherent systems of support.
- 2. Collaborative, trusting assistive relationships between principals and central office leaders are essential for effective instructional leadership support.
- 3. Evidence-based decision-making, using school-specific data, is critical to identifying a clear focus and targeted support.

Theme 1: Central office instructional leaders foster coherence by establishing collaborative structures and processes that promote shared understanding, data-driven decision-making, and shared responsibility for instructional improvement.

Organizational coherence in education can be achieved when processes and educational practices "connect and align work across the organization" (Elmore et al., 2014, p. 3). During Cycles 1 and 2, principal/coordinator pairs focused on two coherence drivers: building focus and coordination and cultivating assistive relationships. Although separated into two research cycles, the authentic work of cultivating assistive relationships, building a shared understanding, and coordinating improvement efforts organically co-occurred. Trusting, assistive relationships, evidence-based decision-making, and a shared understanding and responsibility for the work emerged as the collaborative structures necessary to foster coherence between central office leaders and principals.

Establishing Trust

Collaborative, trusting assistive relationships between principals and central office leaders are essential for effective instructional leadership support. Principals and coordinators alike expressed the importance of relational trust, mutual respect, and two-way communication in establishing cohesive district-school partnerships. Although experts of pedagogical and disciplinary knowledge, a leading indicator of a coordinator's initial success with principals was their interpersonal skills and ability to build early trust.

The word "trust" was used by coordinators and principals 28 times in interviews, questionnaires, and coordinator's logs. Participants most often referenced trust during pre-interviews, and questionnaires and logs were submitted at the beginning of the study. Coordinators identified the need to be "more intentional in [their] efforts to build trust with principals." One coordinator described trust as the foundation of the collaborative process: "You have to be able to have a relationship before you can even begin any type of collaborative process...the principal has to have trust, they have to trust you, and you have to trust them." Coordinators established early trust by actively listening to the concerns and perspectives of principals to develop a clear problem of practice and demonstrating flexibility to adapt their preconceived support plans.

During pre-study interviews, principals collectively articulated the need to feel safe, heard, and respected as instructional leaders and final decision-makers. One principal described trust as the foundation of candid, honest communication: "I have to trust that I can be open and honest and trust that I can ask for something and it's not going to be held against me, to trust that I can [give honest feedback] to someone at the district."

To successfully establish trusting, assistive relationships, coordinators must adapt to the principal's broader change leadership perspective, which is situated within the school's and its staff's specific context. One coordinator indicated that she had to resist the impulse to go into collaboration with pre-determined solutions and a laser focus on academics. She recognized that relationship-building and understanding the principal's broader perspective were as important to the improvement work as the solutions themselves. She realized she "needed to be willing to share [her] own challenges and struggles so that principals feel comfortable sharing theirs with me." As a result, her partnering principal acknowledged her as "transparent, knowledgeable, and helpful," indicating that she was supportive in ways that enhanced his instructional leadership.

As the pairs made meaning from various evidence sources, they developed trust with their partners through repeated interactions and transparently modeling their mutual openness to growth. Situational trust is a component of sociocultural learning and begins as principals trust coordinators as guides for building their capacity to tackle complex academic issues. Situational trust is not necessarily formed in advance but earned over time as principals work shoulder-to-shoulder with coordinators to deepen their understanding of effective instructional leadership.

Using Data and Evidence

Coordinators also established coherence in collaboration with principals by using data to promote a clear, shared understanding of the problem of practice. Data use and evidence-based decision-making are essential to effective school and district collaboration, with the word "data" mentioned by coordinators and principals 122 times in interviews, questionnaires, and coordinator's logs. During the study, all the

partnerships began with the coordinator presenting an analysis of the school's academic or teacher perception data. Coordinators indicated their goal was to meet with principals "around their data and support their school improvement plan initiatives...[and] try to come in and see how [coordinators] can support principals' goals."

Regardless of the source of the evidence, coordinators indicated, "The data piece is important because it helps have those conversations that sometimes are difficult to have" and opens an objective dialog about the effectiveness of current instructional practices. One principal stated that he and his coordinator had "a really courageous conversation" about the school's literacy instruction, which led to "being on a different level of connection because [the conversation] wasn't a blame game" about student outcomes. Principals were less threatened by discussing the reality of the student outcomes when those conversations were combined with central office support for the principal's improvement efforts.

Coordinators recognized that principals were more open to listening when presented with "evidence or research to support the [instructional] changes you're suggesting." The word "evidence" was used 35 times in responses, and principals shared that seeing clear evidence of the need for change supported confidence in decision-making. One principal indicated that being presented with his school's data made him more receptive to new ideas: "When I saw the evidence and how the planning piece was coming into place, that's what opened my eyes to, 'Hey, this could work." Principals and coordinators emphasized the importance of data and evidence use in helping to establish a shared understanding of the problem.

Establishing a Shared Understanding

Central office leaders have historically been viewed as out of touch with the realities of everyday school leadership. As such, coordinators bear much responsibility for understanding the principal's perspective and the problem of practice in the school context. Coordinators acknowledged, "Principals need to know that the central office is aware of the challenges they face on a daily basis." Coordinators also identified the "need to see things from the principal's perspective" and to recognize "the challenges principals might face in trying to implement new initiatives."

Coordinators who actively listen and consider the barriers principals experience can assist principals with brainstorming solutions. One principal explained:

The quality of our relationship/partnership has become more effective because [the coordinator] has previous experience being a building leader. She knows the roadblocks and challenges we may face when implementing certain programs and initiatives. We have been able to brainstorm together on how we will approach the staff with implementation.

Coordinators who served in school leadership roles before promotion to the central office tapped into their previous experience when working with principals: "I typically always try to put myself in somebody else's shoes... 'Let me put my administrator hat on.' I know as an administrator, it's not just about you. It's about what's best for the whole school and what's best for everybody." Although school leadership experience is helpful and preferred, even coordinators without formal school leadership experience were able to arrive at a shared understanding with their partnering principals.

One coordinator reflected, "I think an important aspect of being successful in working with schools as a district coordinator is the ability to balance the passion you have for your [content] area with the knowledge of a school's perspective of your approach." When coordinators approach school support by reflecting on the problem within the school's unique context, their ability to support the principal's instructional leadership needs is enhanced.

Theme 2 identifies the importance of cycles of reflection as a tool for organizational learning and coherence.

Theme 2: Organizational learning empowers central office leaders to continuously reflect and equip principals with the skills, knowledge, and tools necessary for effective instructional leadership.

The iterative nature of organizational learning cycles allows for the continuous refinement and adaptation of interventions based on ongoing feedback, observation, and reflection between school and district leaders. Continuous reflection fosters a learning culture across the organization. It promotes shared responsibility for instructional improvement between coordinators and principals as coordinators continuously reflect on the effects of their support for principals.

Coordinator logs highlighted the importance of organizational learning in promoting collaborative inquiry and continuous improvement in instructional leadership. Coordinator logs provided structured reflection after each research cycle using the SIRR Cycle of Organizational Learning (Search, Incorporate, Reflect, Retrieve). Within assistive relationships, Honig (2008) suggested that central office leaders work in cycles to search, incorporate, and retrieve evidence for decision-making; however, the Action

Research Implementation Team engaged in an additional component, reflection. The process of reflection encourages educational leaders to examine the effectiveness of interventions and to integrate new knowledge into practice. Integrated knowledge is then available for retrieval as evidence for future decision-making, resulting in organizational knowledge and learning (Glanz, 2014; Jeffs & Smith, 1999; Zepeda, 2019).

Search

Supporting principals in clearly identifying the root causes of an instructional problem requires a robust search of evidence. Using school-specific data is critical to determining a clear focus on the problem in context and narrowing the scope of district support. In the four partnerships, coordinators and principals focused on a specific concern identified in the school's student achievement data, staff survey data, or the principal's priorities. Principals contributed to the search for evidence by layering in organizational knowledge, instructional observation data, knowledge of team collaboration, and individual teacher preparedness.

Effective coordinators support principals in searching for relevant evidence to reveal potential solutions to complex problems of instructional practice. For instance, one principal shared his school's literacy data with the coordinator. Achievement data showed that more than 50% of his students were below grade level in reading, even though the school improved Tier 1 literacy instruction with the support of a literacy coach. He needed assistance from a content expert to understand why his students were not making more progress when teachers seemed to be teaching with the approved curriculum with fidelity.

The coordinator emphasized the importance of gathering evidence from various sources, including academic data, teacher surveys, and classroom observations.

Following observations, the coordinator posited, "many of his teachers lacked the content knowledge about the Science of Reading to implement the curriculum with purpose.

They were [teaching the curriculum], but lacking the connections to why, which negatively impacted differentiation for students." Following professional learning, the coordinator and principal surveyed teachers and further refined the focus of improvement efforts. A thorough search for evidence was key to identifying accurate root causes.

Incorporate

During the incorporation phase of organizational learning, the principals/coordinators launched trials to develop support systems to approach a collaborative focus. Coordinators work closely with principals to implement interventions and emphasize shared decision-making and collaborative planning. According to the evidence identified during the search phase, coordinators evaluated and adjusted support for the principal. This iterative process allowed adjustments and refinements based on ongoing feedback and evaluation.

Coordinators used evidence, observation, and professional judgment to inform their support for principals. For example, one coordinator noticed that the principal was not communicating their expectations for instructional improvement to teachers, so she worked with the principal to craft his message for preplanning staff meetings. Another coordinator observed that their partnering principal was struggling to use data to inform his instructional leadership and moved to collaboratively develop a professional learning session for teachers with the principal, thereby modeling the steps of data analysis.

The incorporation phase is iterative and evolves as the coordinator becomes more embedded in a specific school's work and with a particular principal's instructional leadership strengths. As more evidence is revealed from the partnership, coordinators incorporate that new evidence to adjust and refine support.

Reflect

The reflection phase of the organizational learning cycle examined collected data from assistive relationships with principals, considered the extent to which objectives were met, reflected on the information from feedback cycles, and made evidence-based decisions about implementing additional cycles. Coordinators and principals engaged in continuous reflection, examining the effectiveness of interventions and identifying areas for improvement. This reflective process fostered a learning culture and promoted ongoing growth and collaboration.

One of the clearest examples of responsiveness to reflective practices occurred when a principal and coordinator surveyed the school's staff about the effectiveness of previous professional learning sessions. The coordinator described the process of intentional reflection with the principal: "As the principal and I reviewed this data, we decided our future professional learning sessions needed to include opportunities for teachers to practice what they are learning as well as time to reflect and discuss with their peers." The survey responses indicated that teachers wanted more time to "reflect and discuss" during PL as well as "time to practice what they were learning." These survey responses prompted the principal and coordinator to refine the format of future professional learning to incorporate the requests for more practice and modeling, improving the effectiveness of PL.

Reflection is a powerful tool for any educational leader striving for continuous improvement, and central office leaders are no exception. One coordinator emphasized the importance of reflective practices, "We have to constantly ask [ourselves], 'How can we better support principals and teachers?" Sometimes, reflection can be as simple as "just taking the time to reflect on things you've done or said and how that may have impacted the person you're working with, the school, or even the individual teacher."

Reflection is not always the most expeditious path for a busy central office leader. However, one coordinator said, "I think that sometimes we don't give enough time for reflection because we're so focused on the task at hand. But I think it's important to take a step back and reflect on what we're doing and if it is working." Reflection ensures that coordinators are intentional about continuously measuring the impact of their actions and support for the principal's instructional leadership.

Retrieve

Lastly, during the retrieval phase, coordinators integrated the new learning and adjusted objectives, hypotheses, purposes, and strategies generated from the organizational learning process. Coordinators emphasize the importance of using evidence and reflections to inform future practice within and beyond the study. This retrieval process ensures that lessons learned are applied to future initiatives and contributes to the organization's continuous improvement, central office support, and principals' instructional leadership.

Coordinators indicated that they would retrieve lessons learned from their partnerships with principals to inform their future practice. One coordinator recognized the importance of intentionally building relationships, saying, "I will use what I have

learned about building relationships with principals... and be more intentional about building trust and rapport with principals." Another remarked on the importance of reflection in future practice, "I will use what I have learned about the importance of reflection...and make sure to incorporate time for reflection into my professional learning process."

Effective learning organizations continuously retrieve new evidence from assistive relationships to inform future decision-making. When coordinators reflect on their practices, they individually improve their support for school leaders. However, when coordinators and other central office leaders collaborate to inform organizational operations and decision-making supporting principals' instructional leadership, the central office begins functioning as a learning organization.

Central Office Functioning as a Learning Organization

The second research question further articulated the purpose of the study: How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district? Findings related to Research Question 2 included:

- A principal-centered approach enhances the effectiveness of central office support efforts and is characterized by flexibility, adaptability, and responsiveness to principal and school needs.
- A central office functioning as a learning organization requires the continuous reflection and adjustment of support systems to ensure responsiveness to the evolving needs of principals and schools.

Theme 3: A central office functioning as a learning organization is characterized by the continuous evaluation of evidence, principal-centric support systems, and the evolving pursuit of coherence.

Coherence can only be reached through the sustained efforts of leaders across every level of a school district. Coherence requires that school and district leaders collaborate continuously to negotiate the fit between external demands, the district's strategic goals, and the schools' improvement goals (Honig & Hatch, 2004). When functioning as a learning organization, coordinators work in iterative cycles with other central office leaders and principals, who, in turn, collaborate with frontline educators working directly with students. Thus, organizational coherence is a continual state of striving together in cooperative, iterative cycles to solve complex problems of practice.

A Principal-Centered Approach

Coordinators can substantially contribute to teaching and learning outcomes by developing learning-focused partnerships with school principals. Those partnerships deepen principals' instructional leadership practice by continually analyzing evidence to inform and refine instructional decision-making. A principal-centered approach enhances the effectiveness of central office support efforts and is characterized by flexibility, adaptability, and responsiveness to principal and school needs. The terms collaboration, partnership, and support appeared in the data 284 times, further highlighting the reciprocal relationships necessary for strong school and district partnerships.

The key to understanding how best to support principals is actively listening and questioning to understand the principal's perspective of the problem of practice within the school's context. For example, a district curriculum coordinator could easily assume

that poor student writing outcomes may have resulted from inconsistent writing instruction. However, low student outcomes may also result from a master schedule without ample time for writing instruction, inadequate curricular resources, high rates of teacher turnover, or a combination of root causes. Determining the appropriate improvement actions requires coordinators and principals to work together to consider the full context of the problem, beginning with the principal's perspective and various evidence sources from the school.

One coordinator highlighted the importance of considering the principal's perspective before jumping to solutions she successfully used at other schools. She determined that coordinators must "first listen to what the principal has to say" to understand the nature of the problem within the school's context. While coordinators are curriculum specialists, she acknowledged, "the principal is the expert when it comes to the building and staff." An effective coordinator understands that a "one size fits all approach does not work" since principals and schools within the same school district may have drastically different needs.

Coordinators also discussed the importance of meeting principals "where they are" in their instructional leadership journey. Some principals are "very instructionally focused, while others are more operationally driven." Effective coordinators adjust their approach to the leader's needs to build trust and identify appropriate supports.

Collaborating firsthand with principals allows a coordinator to learn about the principal's personality, strengths, and leadership style.

One coordinator reflected on her approach to principals between cycles: "Having the opportunity to work more closely with [two principals] for two cycles allowed my

preparation to be better suited to their needs each time I meet with them." She describes how one principal was very conversational and preferred a relaxed meeting format, while the second principal was prepared to go directly into planning with minimal small talk. Skilled coordinators employ interpersonal skills and situational awareness to determine how to interact with principals in supportive and adaptive ways.

Coordinators were also open to the possibility that multiple approaches may be needed to solve complex problems. They acknowledged the need to "remain flexible and attentive to the principals' needs and vision" throughout the collaborative process. To address district and school goals, coordinators emphasized "the importance of flexibility and willingness to compromise" with school leaders. One coordinator pointed out, "The most important aspect is achieving the goal [for teachers and students], regardless of the path taken to get there."

Arriving at coherence requires constant negotiation, compromise, and collaboration to develop a shared vision and build principals' instructional leadership capacity. Leading instructional improvement on a large scale takes time, practice, and feedback within a relationship of trust and respect with principals (Zepeda & Lanoue, 2017). Principals need ongoing opportunities to interact authentically with central office leaders who can support their growth and adjust to their school's needs.

Reflection within a Learning Organization

Reflection is a crucial component of a learning organization. It allows individuals and the organization to learn from experiences, identify areas for improvement, and make necessary adjustments to enhance effectiveness. Transforming central offices into coherent learning organizations that foster principals' instructional leadership requires

intentional, ongoing reflection in cycles. Coordinators operating as learning organizations continuously reflect on evidence from assistive relationships with principals to inform district operations, organizational decisions, and principal support.

Throughout the study, coordinators frequently reflected, demonstrating its importance in action research and fostering a learning organization. In post-study interviews, all coordinators highlighted the role of reflection in their professional growth and development. One coordinator referenced the importance of "taking the time to reflect and see how [she] can improve." Another emphasized the need to "continually reflect on the positive impact [she] can have on school improvement" when she supports principals' instructional vision and leadership efforts.

The third coordinator emphasized the importance of reflecting on her words and actions and considering their impact on her assistive relationship with the principal. Early in the study, the coordinator explained she just "hoped it was going well" with the principal. As she grew more confident in her collaborative partnership, she began asking the principal for feedback and input following joint work experiences. She also began soliciting collaborative input from colleagues in the Teaching and Learning Department, asking, "What are your thoughts on this?" and "Could I have approached [that conversation] in a different way?" Reflecting on words and actions helps a coordinator learn to approach difficult conversations skillfully.

Coordinators' actions and reflections demonstrated a commitment to ongoing learning, continuous improvement, and the pursuit of coherence. Organizational learning from experience, or trial-and-error learning, translates the evidence from assistive relationships into resources accessible to others for future decision-making, making the

organization more effective (Honig, 2008). By continuously reflecting on what worked and embedding new understandings into future decisions, the organization essentially "learns," and support for principals' instructional leadership improves. Organizational learning within a school district leverages the organization's collective intelligence in continuous, evidence-informed improvement cycles, resulting in coherence and alignment between school and district leaders.

Coordinators as Conduits of Coherence

The third research question further articulates the purpose of the study: How does the Action Research Design Team (ARDT) articulate the impact of the implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large suburban school district? Findings related to Research Question 3 included:

- Coherent systems of support empower coordinators to provide differentiated assistance for principals by adapting their approaches to each school's unique context and the principal's leadership style.
- 2. The iterative cycles of organizational learning foster continuous improvement and promote a culture of collective responsibility for instructional leadership development.

Theme 4: Curriculum coordinators play a critical role in promoting coherence and alignment between the district and schools, leveraging collaborative structures and processes to impact the effectiveness of a principal's instructional leadership and teachers' instruction.

The Action Research Design Team's (ARDT) ongoing analysis and data triangulation throughout the study concluded that curriculum coordinators can be essential conduits between district improvement goals and school-level implementation by ensuring alignment between teaching and learning improvement efforts. The study's evidence demonstrated how coordinators' expertise and assistive relationships resulted in differentiated support for principals' instructional leadership. The ongoing collaboration and continuous search for evidence within principal/coordinator partnerships impacted not only the effectiveness of the school leaders but also enhanced the effectiveness of central office coordinators.

The ARDT recognized that as coordinators developed trusting, assistive relationships with principals, they could differentiate their support in ways that influenced principals' instructional leadership practices. One of the challenges of "leading from the middle" in an organization is that coordinators do not have evaluative or hierarchical power over principals. However, operating within coherent, continuous improvement cycles assisted coordinators in influencing principals' leadership practices and illuminating the need for instructional changes.

The ARDT Focus Group member remarked, "When coordinators partner with principals, the principal becomes stronger in their content knowledge and stronger at using data to make decisions...that's a sign their instructional leadership is developing." Principals and coordinators used the terms evidence and data 157 times, indicating that evidence use is vitally important to designing and monitoring improvement initiatives.

As coordinators and principals worked together in cycles to analyze a variety of data, they developed a shared, deeper understanding of the nuances and challenges in the

school context, resulting in support that enhanced principals' instructional leadership effectiveness.

During the ARDT Focus Group, Director Sinclair emphasized the importance of differentiation in support of school leaders: "Every situation is unique. Principals and schools have different needs...there are a lot of factors that contribute to the success or failure of an initiative." Within trusting, collaborative partnerships, coordinators worked with principals to differentiate their assistance and help the principal identify accurate root causes. This collaborative work supports the development of shared solutions, mutual responsibility, and coherence between district and school leaders.

The advantages of acting as a learning organization are that the organization learns from mistakes, successes, and failures. The collaborative reflection on evidence builds the organization's collective knowledge of how to support school leaders best. Through ongoing data analysis, reflection, and collaboration, coordinators and principals learned from their experiences, reviewed the evidence, and adjusted their practices. Iterative cycles of organizational learning fostered continuous improvement and promoted a district culture of collective responsibility for coherence and instructional leadership development. This created a dynamic, coherent learning environment where coordinators and principals grew together in their instructional leadership and shared understanding.

Chapter Summary

Four overall themes throughout the data relate to each of the research questions.

Research Question 1 investigated how central office leaders, functioning as a learning organization, can collaboratively design coherent systems of support to develop

principals' instructional leadership capacity. The first theme identified that coordinators could foster coherence by establishing collaborative structures and processes that promote shared understanding, evidence-based decision-making, and shared responsibility for instructional improvement. Within the study's context, assistive coordinator/principal relationships operating in iterative cycles built mutual trust, used data and evidence effectively, and established a shared understanding between district and school leaders.

The second theme focuses on how organizational learning empowers central office leaders to continuously reflect and equip principals with the skills, knowledge, and tools necessary for effective instructional leadership. This theme underscores the importance of working in cycles of continuous improvement, which include searching for evidence, incorporating new knowledge, reflecting on outcomes, and retrieving lessons learned to inform future practices.

Research Question 2 explored how curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership. The third theme illuminates how the central office functions as a learning organization and is characterized by the continuous evaluation of evidence, principal-centric support systems, and the evolving pursuit of coherence. This theme emphasizes the importance of coordinators adapting their approach to meet the unique needs of principals and schools and the ongoing reflection and adjustment of support systems to ensure responsiveness to evolving needs.

Research Question 3 explored the perspectives of the Action Research Design

Team and how they articulated the impact of coherent systems and structures on

curriculum coordinators' abilities to develop principals' instructional leadership capacity. The fourth theme highlights curriculum coordinators' critical role as conduits of coherence and alignment between the district and schools. This theme stresses the importance of coordinators operating as the district and schools' go-between, facilitating communication, collaboration, and shared responsibility for school improvement.

Overall, the study's findings illuminate how coherence can be fostered between the central office and schools and coordinators' roles in contributing to developing principals' instructional leadership capacity. These findings have implications for central office leaders, principals, and researchers interested in improving teaching and learning at scale. Chapter 6 presents the study's conclusions and discusses the implications and connections to future central office practices.

CHAPTER 6

CONCLUSIONS, IMPLICATIONS, AND CONNECTIONS TO LEADERSHIP PRACTICES

The purpose of the study was to examine the coherent systems and processes needed to support central office leaders in building principals' capacity to drive teaching and learning improvement. To address the purpose of this study, the following research questions guided this inquiry:

- 1. How can central office instructional leaders, functioning as a learning organization, collaboratively design coherent systems of support to develop principals' instructional leadership capacity in a large, suburban school district?
- 2. How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district?
- 3. How does the Action Research Design Team articulate the impact of the design and implementation of coherent systems and structures on curriculum coordinators' abilities to develop principals' instructional leadership capacity in a large, suburban school district?

This chapter presents the study's overall conclusions, the researcher's propositions to system leaders, implications for policy, and suggested areas of further

research. First, a summary of the research design is presented. Second, the findings and their relation to the guiding research questions are discussed. Next, the current study's limitations are explored, and implications for theory and practice are suggested. Finally, concluding thoughts are offered.

Summary of the Research Design

This action research case study began in the spring of the 2023-2024 school year in the Focus County School District (FCSD), a large suburban district with 34 schools and 32,000 students. The research was designed as a qualitative case study to examine how district-level coordinators could function as a learning organization and design coherent systems of support to enhance principals' instructional leadership.

The study was grounded in a constructivist approach so that the Action Research Design Team (ARDT) and Action Research Implementation Team (ARIT) members could make sense of the learning through the iterative cycles of organizational learning. The emphasis on collaborative sense-making in the action research process was undergirded by the SIRR Cycle of Organizational Learning (Search-Incorporate-Reflect-Retrieve). Operating in iterative cycles reinforced the concept that organizational coherence and principal support are ongoing, dynamic, and evolutionary processes (Cobb et al., 2021; Fullan & Quinn, 2016; Honig, 2008, 2012; Honig & Hatch, 2004; Moore Johnson et al., 2015; Westover, 2020; Zepeda, 2019; Zepeda et al., 2021).

Action Research

This qualitative case study examined principal/coordinator assistive relationships within the Focus County School District (FCSD) to understand how coordinators functioning as a learning organization could design coherent systems of support to

develop principals' instructional leadership capacity. At the time of the study, the researcher served as FCSD's Chief Academic Officer, and her immersion in the study allowed for the co-construction of meaning around moving from organizational fragmentation to coherence. The study included three iterative action research cycles between May 2024 and September 2024, during which participants focused on the three drivers of coherence: building focus and coordination, cultivating assistive relationships, and changing behavior at scale.

The Action Research Design Team (ARDT) included the researcher, an ELA coordinator, two principal supervisors, a director, and a middle school principal. The Action Research Implementation Team (ARIT) included three curriculum coordinators, two elementary principals, a middle school principal, and a high school principal. Data collection incorporated numerous qualitative methods to increase opportunities for methodological triangulation and to reduce personal biases. For each cycle, various data were collected from the observations of principal/coordinator pairs, evidence/artifacts from the partnerships, participant questionnaires, and coordinator logs. Pre/post-study interviews and ARDT focus group responses were also collected to provide richer insights and to verify the evidence collected from the partnerships.

The ARDT used a systematic coding scheme, identifying patterns in the coding, analyzing patterns, and generating themes. To support and enhance the ARDT analysis, Gemini Advanced v.1.5 Pro, a large language model from Google AI, played a secondary role in facilitating the constant comparative method across large volumes of text from data collection. Gemini's advanced language processing capabilities accelerated the

ARDT's initial coding efforts, facilitated data comparisons across sources, refined categories, and identified negative cases in the data.

Triangulated data sources and themes were rigorously "assessed against one another to cross-check data and interpretation," using both manual and electronic analysis to support the credibility of the qualitative research findings (Bloomberg, 2023, p. 277). Additionally, the ARDT and ARIT participants engaged in a final review of the findings and analysis to ascertain if the researcher accurately reflected their experiences and to illuminate insights into the phenomena studied (Bloomberg, 2023).

Theoretical Framework

Aside from principal supervisors and superintendents, many central office leaders and their daily work practices are underrepresented in research about central office effectiveness. Existing research provides limited information regarding what central office leaders need to *know and do* to support the development of coherent instructional systems (Cobb et al., 2018). To address this gap in the research, educational leadership scholars have suggested that school district central offices operate as a learning organization or in learning systems (Honig, 2008; Honig et al., 2010; Moore Johnson et al., 2015; Zepeda et al., 2021). Viewing central office work through organizational and sociocultural learning theories highlights how central office curriculum coordinators might use evidence from their assistive relationships with principals to inform district operations (Honig, 2008).

Substantial educational research and reform efforts support the importance of coherence between central offices and schools (Cobb et al., 2018; Elmore et al., 2014; Fullan & Quinn, 2016; Honig & Hatch, 2004; Lanoue & Zepeda, 2018; Moore Johnson et

al., 2015; Westover, 2020; Zepeda et al., 2021). Various coherence frameworks exist to support school districts in clarifying the complex work of supporting and building organizational capacity for instructional improvement (Childress et al., 2011; Education First and Council of Chief State School Officers (n.d.); Fullan & Quinn, 2016). Organizational coherence in education can be achieved when processes and practices connect to align work horizontally across the central office and vertically with schools and classrooms.

This study used theories of coherence and organizational learning as a guiding theoretical framework to reduce fragmentation and assist coordinators in designing evidence-based, coherent systems and practices to develop principals' capacity to improve teaching and learning. The theoretical framework identified three drivers of coherence: building focus and coordination, cultivating assistive relationships, and changing behavior at scale. Collectively, these concepts assist central office leaders in designing coherent support systems to build principals' instructional leadership capacity for sustainable, continuous improvement.

Logic Model

The SIRR Cycle of Organizational Learning (Search-Incorporate-Reflect-Retrieve) guided the cycles of action research and embedded interventions. The SIRR Cycle denotes the iterative, continuous improvement cycles that central office personnel engage in to move a school district from fragmentation to organizational coherence. It synthesizes ideas from sociocultural and organizational learning theories and the process of reflection central to action research (Coghlan, 2019; Honig, 2008; Zepeda, 2019).

During the search phase, coordinators examined various pieces of evidence to understand specific problems of practice jointly negotiated with or identified by their partner principals (Honig, 2012). The search phase included analyzing various data—student achievement, observation, operations, and personnel—to better understand the problem within the school's context. During the model's incorporation phase, curriculum coordinators developed tools and designed joint work with principals to individualize support for the principals' instructional leadership and targeted problem of practice.

During the reflection phase, coordinators considered feedback and examined evidence of effectiveness from their assistive relationships with principals to systematically reflect on the extent to which objectives were met (Zepeda, 2019). These evidence-based reflections led to the retrieval phase, during which coordinators made evidence-based decisions regarding the next steps in supporting their principals. The retrieval phase also supported coordinators in considering how new organizational learning could be codified and retrieved for future situations to increase central office effectiveness.

Summary and Discussion of the Findings

Historically, curriculum coordinators within the Focus County School District (FCSD) worked within silos of content and pedagogical expertise to support jobembedded professional development for teachers, but they did not provide coherent support to build principals' instructional leadership capacity. School leaders frequently reported receiving fragmented information about improvement initiatives, often resulting in mistrust, miscommunication, and misalignment of efforts. By focusing primarily on supporting teachers to improve classroom instructional practices, FCSD curriculum

coordinators overlooked the importance of partnering with principals to identify areas for school support collaboratively, and they sidestepped opportunities to build the collective instructional leadership capacity necessary to create and sustain change efforts across a large, suburban school district.

This research was guided by three research questions and undergirded by the related seminal literature regarding the theories of coherence and organizational learning. The research questions examined the perceptions of the curriculum coordinators, their supervisors, and the Action Research Design Team (ARDT) members. The questions focused on how central office instructional leaders, functioning as a learning organization, could collaboratively design coherent systems of support to develop principals' instructional leadership within the context of a large, suburban school district.

Through extensive qualitative data analysis, themes emerged connected to each research question. The identified themes were validated by a high-level analysis of word frequency, allowing for a more comprehensive and nuanced view of the experiences of study participants. The data supported seminal findings and extended the existing knowledge base by articulating specific work practices of central office leaders that improve organizational coherence and develop principals' capacity to drive and sustain teaching and learning improvement.

Discussion of Findings from Research Question 1

Theme 1: Central office instructional leaders foster coherence by establishing collaborative structures and processes that promote shared understanding, data-driven decision-making, and shared responsibility for instructional improvement.

Central office leaders exercise essential leadership in collaboration with principals to build organizational coherence and capacity for teaching and learning improvement; however, such leadership requires new abilities, work practices, and organizational relationships (Fullan & Quinn, 2016; Honig et al., 2010; Leithwood et al., 2019; Moore Johnson et al., 2015; Westover, 2020). Curriculum coordinators in large districts must know how to build trusting, assistive relationships with principals to identify and support school-specific areas of need. Additionally, coordinators must skillfully use evidence from various sources to support coordination with principals, identify clear improvement priorities, and focus collaborative efforts. Findings from the study support the claim that trusting, assistive relationships, evidence-based decision-making, and a shared understanding and responsibility for improvement are essential collaborative structures necessary to foster coherence between central office leaders and principals.

Collaborative, trusting assistive relationships between principals and central office leaders are essential for effective instructional leadership support. Throughout the study, principals and coordinators articulated the importance of relational trust, mutual respect, and two-way communication in establishing cohesive district-school partnerships. Although experts of pedagogical and disciplinary knowledge, a leading indicator of a coordinator's initial success with principals was their interpersonal skills and ability to establish trust and rapport.

Central office leaders possessing soft skills, such as relationship building, communication, and collaboration, paired with a deep understanding of instructional leadership and high-quality instruction, contribute to successful teaching and learning

relationships across levels within the school district (Cobb et al., 2018; Ikemoto & George W. Bush Institute, 2021). Sociocultural learning theory underscores the need for "developing the interpersonal capacities of school and central office stakeholders to lead for teaching and learning" improvement (Zepeda et al., 2017, p. 240).

The study's coordinators consistently described relational trust as the foundation of the collaborative process, with one stating that coordinators must "have a relationship before [they] can begin any type of collaborative process." This sentiment was echoed by the studied principals, who unanimously agreed that trust was the foundation of open communication with central office personnel. A high school principal stressed the importance of trust, stating, "If you don't have trust, then you're not going to get productive work." An elementary principal said that after he and his coordinator reviewed student achievement data, they had "a really courageous conversation" about the school's literacy instruction, which led to "being on a different level of connection because [the conversation] wasn't a blame game" about student outcomes. Principals reciprocated candor in discussing student outcomes and instructional challenges when they trusted that their partnering coordinator would support and share responsibility for the principal's improvement efforts and outcomes.

Principals across all grade bands expressed the need to ask questions, share concerns, and seek support without fear or judgment for "not knowing." An elementary principal asserted, "...trust is built when you feel like you're being heard and not judged." A second elementary principal expressed complimentary views: "I have to trust I can be open and honest...and it is not going to be held against me...that I can say [hard truths] to someone at the district." In the absence of psychological safety, principals

protect their positions and autonomy by withholding key details of their challenges, intentionally masking their need for support to improve instruction. Relationships of respect, trust, and mutual accountability are central to school and district improvement and provide principals with non-threatening access to supportive experts in instructional development (Fullan, 2006; Fullan & Quinn, 2016; Lanoue & Zepeda, 2018; Zepeda et al., 2021).

For principals, trust was most effective when coupled with respect for the position. The principals in the study collectively expressed expectations of respect for their decision-making authority and autonomy without a heavy-handed, top-down central office approach. A middle school principal emphasized the importance of respect and autonomy: "...coordinators [must] recognize that principals are the instructional leaders of their buildings...and make decisions based on our own contexts and needs. It's not helpful when coordinators come in and try to micromanage..." Further, an elementary principal stated that principals are "ultimately responsible for the outcomes of their schools... and need to be able to make decisions based on our own data..."

Traditional power dynamics and hierarchical authority structures can stymie collaborative relationships and organizational communication between school and district leaders. Organizational coherence involves improving the quality of organizational relationships, reculturing the central office, and aligning district resources to support teaching and learning (Zepeda et al., 2021).

Beyond monitoring compliance, central office leaders foster coherence with principals by using evidence from multiple sources to promote a shared understanding of the problem of practice and mutual accountability for solutions (Leithwood et al., 2019).

Evidence-based decision-making, using various data sources specific to each school, is critical to identifying a clear focus and targeted support. Within the study, each coordinator began their assistive partnerships with principals by sharing student achievement data or staff survey responses to center their collective problem-solving squarely within school-specific evidence.

Findings from the study indicated that coordinators skilled at building trusting, assistive relationships used evidence to identify improvement priorities with principals collaboratively. As the pairs made meaning from various evidence sources, they developed trust with their partners through repeated interactions, transparently modeling their mutual openness to growth. Situational trust is a component of sociocultural learning and begins when principals trust coordinators as guides for improving their instructional leadership efforts.

Situational trust is not necessarily formed in advance but earned over time as principals work shoulder-to-shoulder with coordinators within assistive relationships to deepen their understanding of effective instructional leadership (Knapp, 2008; Honig, 2012). Ultimately, the work of a curriculum coordinator is successful when it produces lasting improvements in principals' abilities to strengthen teaching practices and student learning outcomes in schools.

Theme 2: Organizational learning empowers central office leaders to continuously reflect and equip principals with the skills, knowledge, and tools necessary for effective instructional leadership.

A learning organization seeks evidence through dynamic improvement cycles rather than fixed, linear processes (Knapp, 2008). The iterative nature of organizational

learning cycles allows for the continuous refinement and adaptation of interventions based on ongoing feedback, observation, and reflection between school and district leaders. This constant reflection fosters a learning culture across the organization and promotes shared responsibility for instructional improvement between school and district leaders.

The SIRR Cycle of Organizational Learning synthesized ideas from sociocultural and organizational learning theories and provided an action research framework for coordinators and principals to examine the impact and effectiveness of interventions (Coghlan, 2019; Honig, 2008; Zepeda, 2019). Within assistive relationships, central office coordinators worked in cycles with principals to search, incorporate, reflect, and retrieve evidence for decision-making (Honig, 2008). The process of reflection encourages educational leaders to examine the effectiveness of interventions and integrate new knowledge into practice. Integrated knowledge is then available for retrieval as evidence for future decision-making, resulting in organizational knowledge and learning (Glanz, 2014; Jeffs & Smith, 1999; Zepeda, 2019).

Search. Central office actions become more coherent and empower school-level decision-making when they search for information about a school's goals and strategies and use that information to continue current processes or make organizational course corrections (Honig & Hatch, 2004). The study's evidence indicated that school and district leaders collaboratively searching for evidence in the context of a specific school community helped coordinators differentiate support through focused professional learning connected to the school's most pressing needs (Honig, 2008; Leithwood et al., 2019; Zepeda et al., 2021).

In the four partnerships, coordinators and principals focused on specific concerns identified in each school's student achievement data, staff survey data, or the principal's priorities. Principals contributed to the search for evidence by layering in organizational knowledge, instructional observation data, knowledge of team collaboration, and individual teacher preparedness. Using school-specific data was critical to determining a clear focus on the problem in context and narrowing the scope of district support.

Incorporate. Organizational learning presumes some form of "active collective inquiry by organizational members" through which collected evidence is interpreted and practical "sense-making" occurs (Knapp, 2008, p. 526). During the incorporation phase of organizational learning, the principal/coordinator pairs launched trials, developed tools, and designed joint work to support their collaborative focus. Coordinators worked closely with principals to implement interventions and support systems, highlighting shared decision-making and collaborative planning.

Coordinators used evidence, observation, and professional judgment to inform their support for principals. For example, one coordinator noticed that the principal was not communicating his expectations for instructional improvement to teachers, so she worked with the principal to craft his message for preplanning staff meetings. Another coordinator observed that her partnering principal was struggling to use data to inform his instructional leadership and moved to collaboratively develop a professional learning session for teachers with the principal, thereby modeling the steps of data analysis.

The incorporation phase is iterative and evolves as the coordinator becomes more embedded in a specific school's work and with a particular principal's instructional

leadership strengths. As more evidence is revealed from the partnership, coordinators continuously incorporate that new evidence to adjust and refine support.

Reflect. The reflection phase of the organizational learning cycle examined collected data from assistive relationships with principals, considered the extent to which objectives were met, reflected on the information from feedback cycles, and informed evidence-based decisions for additional cycles (Honig, 2008, 2012; Zepeda, 2019). Coordinators and principals engaged in continuous reflection to examine interventions' effectiveness and identify areas for improvement. This reflective process fostered a learning culture between coordinators and principals and promoted ongoing growth and collaboration.

One of the clearest examples of responsiveness to reflective practices occurred when a principal and coordinator surveyed the school's staff about the effectiveness of previous professional learning sessions. The survey responses prompted the principal and coordinator to refine the format of future professional learning to incorporate the teachers' suggestions for improvement. Reflection ensures that central office leaders are intentional about continuously measuring the impact of their actions and support for the principal's instructional leadership.

Retrieve. Once central office leaders receive new evidence, they interpret and "make sense of it" to determine if organizational policy or practices need to be adjusted to better support schools. Operationalized and encoded evidence can be retrieved to guide subsequent decisions about the shared work with schools (Honig & Hatch, 2004). Knapp (2008) referred to this organizational learning process as "organizational embedding,

encoding, and memory" through which meaning is ascribed and even "transformed into a repertoire of routines, practices, or guidance for action" (p. 526, emphasis in original).

During the retrieval phase, the study's coordinators integrated the new learning and adjusted objectives, hypotheses, and strategies generated from the organizational learning process. Coordinators emphasized the importance of using evidence and reflections to inform future practice within and beyond the study. This retrieval process ensures that lessons learned are applied to future initiatives and contributes to the organization's continuous improvement, central office support, and principals' instructional leadership.

Effective learning organizations continuously retrieve evidence from assistive relationships to inform future decision-making. For instance, the successful design and implementation of the Nero Elementary Science of Reading initiative was scaled to support districtwide literacy professional learning beyond the scope of the study. The state Department of Education (DOE) also recognized the effectiveness of Nero Elementary's professional learning design as exemplary and highlighted the principal and coordinator's joint work in a Literacy Innovation video for the state's Public Broadcasting website (Appendix B). When coordinators and other central office leaders collaborate to inform organizational operations and decision-making supporting principals' instructional leadership, the central office begins functioning as a highly effective learning organization.

Discussion of Findings from Research Question 2

Theme 3: A central office functioning as a learning organization is characterized by the continuous evaluation of evidence, principal-centric support systems, and the evolving pursuit of coherence.

In 2021, a Wallace Foundation synthesis of two decades of educational research concluded that school leadership is among the most essential school-related factors contributing to student learning and achievement. As such, coordinators can substantially contribute to teaching and learning outcomes by developing learning-focused partnerships with school principals (Honig, 2012; Honig et al., 2010). Such partnerships deepen principals' instructional leadership practices by continually analyzing evidence in cycles to inform and refine instructional practices.

A principal-centered approach enhances the effectiveness of central office support efforts and is categorized by flexibility, adaptability, and responsiveness to the principal and school needs. At the conclusion of the study, coordinators reflected on becoming more intentional about working to understand principals' needs and perspectives. Rather than approaching a problem through purely academic or instructional lenses, one coordinator expressed the need to also "anticipate working with different kinds of leaders...[and] figuring out where principals are coming from and how I can target my approach to best support them and what they need."

Throughout the study, coordinators shifted away from overreliance on the school's academic data, specifically standardized testing data, as the primary source of evidence. Coordinators unanimously agreed that other qualitative measures, such as the principal's perspective, classroom observation data, knowledge of staff members and

teams, and the principal's public endorsement of the work, enhanced the coordinator's effectiveness and impact.

Coordinators highlighted the importance of considering the principal's perspective before jumping to solutions successfully used at other schools. One coordinator determined that she must "first listen to what the principal has to say" to understand the nature of the problem within the school's context. While coordinators are curriculum specialists, they recognize that "the principal is the expert when it comes to the building and staff." An effective coordinator understands that a "one size fits all approach does not work" since principals and schools within large school districts may have drastically different needs. Taking a principal-centered approach to support broadened the coordinators' understanding of the unique needs of a school community and refined the focus of their support.

A central office functioning as a learning organization requires the continuous reflection and adjustment of support systems to ensure responsiveness to the evolving needs of principals and schools (Zepeda et al., 2021). The study's coordinators accepted the possibility that multiple approaches could be needed to solve complex problems. They acknowledged the need to "remain flexible and attentive to the principals' needs and vision" throughout the collaborative process. To address district and school goals, coordinators emphasized "the importance of flexibility and willingness to compromise" with school leaders. One coordinator wisely noted, "The most important aspect is achieving the goal [for teachers and students], regardless of the path taken to get there."

When the central office acts as a learning organization, collective work can be described as a fusion of educational leadership, organizational learning, and sociocultural learning (Blazer & Schueler, 2022; Knapp, 2008; Leithwood & Azah, 2017; Honig, 2008, 2012; Honig & Hatch, 2004). Coherence requires that school and district leaders collaborate continuously to negotiate the fit between eternal demands, the district's strategic goals, and the school's improvement goals (Honig & Hatch, 2004; Zepeda et al., 2021). When functioning as a learning organization, coordinators work in iterative cycles with other central office leaders and principals, who, in turn, collaborate with frontline educators working directly with students. Thus, organizational coherence is a continual state of striving together in cooperative, iterative cycles to identify and solve complex problems of practice.

Discussion of Findings from Research Question 3

Theme 4: Curriculum coordinators play a critical role in promoting coherence and alignment between the district and schools, leveraging collaborative structures and processes to impact the effectiveness of a principal's instructional leadership and teachers' instruction.

Central office coherence plays a vital role in school success, and assistive partnerships between principals and district leaders are foundational to the sustained improvement of teaching and learning (Fullan & Quinn, 2016; Honig et al., 2010; Leithwood et al., 2019; Moore Johnson et al., 2015; Westover, 2020). Coherent systems of support empower coordinators to provide more prescriptive support for schools. The trusting, assistive relationships in the study surfaced contextual information and provided

coordinators with powerful insights into how to differentiate their professional learning support for principals and teachers.

The Action Research Design Team's (ARDT) ongoing analysis and data triangulation throughout the study concluded that curriculum coordinators were essential conduits between district improvement goals and school-level implementation through the continuous negotiation and alignment of teaching and learning improvement efforts. The study's evidence demonstrated that coordinators' expertise resulted in targeted, differentiated professional learning support to meet the school's improvement needs and enhance principals' instructional leadership actions.

Collaborative structures and processes increase coherence and support the effectiveness of both coordinators and principals. The ARDT focus group noted, "When coordinators partner with principals, the principal becomes stronger in their content knowledge and stronger at using data to make decisions...that's a sign [the principal's] instructional leadership is developing." As coordinators and principals worked together in cycles to analyze various data, they developed a shared, deeper understanding of the nuances and challenges in the school context, resulting in support that enhanced principals' and coordinators' instructional leadership effectiveness.

The ARDT focus group further emphasized differentiating central office support for school leaders: "Every situation is unique. Principals and schools have different needs...there are a lot of factors that contribute to the success or failure of an initiative." Within collaborative partnerships, coordinators worked with principals to differentiate their assistance and help the principal strategically identify accurate root causes. This

joint work supports the development of shared solutions, mutual responsibility, continuous improvement, and coherence between district and school leaders.

Improving the quality of support that principals and other school leaders receive from the central office has emerged as a lever for enhancing instructional leadership and student achievement (Honig, 2012, 2013; Honig & Rainey, 2015; Ikemoto & George W. Bush Institute, 2021; Rogers, 2022; Zepeda et al., 2014; Zepeda & Lanoue, 2017). Fullan and Quinn (2016) claimed that "cultivating [a] collaborative culture is the heart of system transformation" (p. 12). Trusting relationships between the central office and school leaders are foundational to making instructional improvement a collaborative priority within a school district. Zepeda and Lanoue (2017) explained that principals learning to lead instructional improvement "takes time, practice, and feedback—all within a relationship of trust and respect" (p. 61). School leaders need ongoing opportunities to interact openly and authentically with central office leaders who can support their growth within trusting, supportive partnerships.

The advantages of acting as a learning organization are that the organization learns together from mistakes, successes, and failures. Collaborative reflection on evidence builds the organization's collective knowledge of how to support school leaders best. Through ongoing data analysis, reflection, and collaboration, coordinators and principals in the study learned from their experiences, reviewed the evidence, and adjusted their practices. Iterative cycles of organizational learning fostered continuous improvement and promoted a district culture of collective responsibility for coherence and instructional leadership development. This created a dynamic, coherent learning

environment where coordinators and principals grew together in their instructional leadership and shared understanding.

Limitations of the Current Study

No matter how well designed and conducted, qualitative research has inherent limitations (Bloomberg, 2023). Qualitative researchers assume that the participant-observer will impact the study by providing guidance and promoting collective sense-making (Merriam & Tisdell, 2016). Additionally, "case study research is a qualitative approach in which the investigator explores a bounded system (a case) ...over time, though detailed, in-depth data collection involving multiple sources or information" (Merriam & Tisdell, 2016, p. 40). As a qualitative case study, the research was bound to the Focus County School District context and focused on curriculum coordinators' and principals' assistive relationships. Qualitative research emphasizes the specificity of the context of the study, thus creating challenges to the generalizability of the findings to other contexts (Bloomberg, 2023).

Additionally, the researcher holds a higher position in the organizational hierarchy within the study's context than the participants. As such, there is a possibility of a phenomenon called "participant reactivity" (Bloomberg, 2023, p. 312, emphasis in original). Participant reactivity occurs when participants know the researcher and may "try overtly hard to cooperate by offering the kind of responses they perceive the researcher is seeking" (Bloomberg, 2023, p. 312). Conversely, participants may be guarded and less candid if they know the researcher and may withhold information, they believe contrary to the researcher's views. To mitigate this phenomenon, anonymous questionnaires were submitted after each cycle so that participants could candidly

respond to open-ended prompts. Additionally, pre- and post-interview data were triangulated with observational data and artifacts to strengthen the objectivity of interview responses. However, the impact of participant reactivity on the study's findings cannot be ruled out entirely.

Another limitation of the study was the sample selection. The study's selection criteria required participants to be open to collaborative partnerships between school and central office leaders. Selecting participants with a natural propensity for collaboration and a positive perception of school and district partnerships narrowed the field of participants to those most likely to succeed at establishing coherence. Further study is needed to examine the barriers to coherence with principals or coordinators who view school and district relationships as adversarial or prefer the power dynamics of a formal organizational hierarchy.

Implications and Recommendations for Practitioners

Developing schools, systems, and instruction to meet the needs of all children involves redesigning how schools and central offices collaborate and a shared organizational commitment to continuous improvement (Honig & Rainey, 2015; Ikemoto & George W. Bush Institute, 2021; Lanoue & Zepeda, 2018; Zepeda et al., 2021). School districts are complex learning organizations that cannot be effectively led by central office or school leaders acting in isolation.

Although responsible for overseeing one or more disciplines or areas of curriculum, instruction, and assessment, curriculum coordinators must also be fully engaged and committed members of the Chief Academic Officer's continuous improvement team. Curriculum coordinators should work in tandem with one another,

schools, principal supervisors, and other district leaders. According to Zepeda et al., 2021, "The challenge is forming a cohesive team with district administrators whose expertise is in a specialization but not necessarily in collaborating on common goals with others outside of their division" (p. 125). Coordinators must balance their highly specialized disciplinary leadership with the coherent and collective processes necessary to support one other, other central office divisions, and schools.

Traditional power dynamics and hierarchical authority structures can hinder trusting collaborative relationships and open organizational communication between school and district leaders. In contrast to the "command and control power dynamics" of central offices focused on compliance, collaborative central office leaders are responsive to school leaders and school needs, demonstrating a culture of support and forging strong relationships with principals and across central office departments (Ikemoto & George W. Bush Institute, 2021).

Central office leaders build trust by establishing clear expectations for principals' instructional leadership and the consistent modeling of the articulated beliefs about central office leadership as school support (Fullan & Quinn, 2016; Ikemoto & George W. Bush Institute, 2021; Lanoue & Zepeda, 2017; Moore Johnson et al., 2015; Westover, 2020; Zepeda et al., 2021).

The onus is on central office leaders to dismantle the silos of traditional central office leadership by continuously striving to establish a culture of coherence between school and district leaders and between central office divisions. System reform is a complex and challenging task and is a primarily social process where success depends more on shaping organizational culture than structural change (Chapman, 2019). Central

office leaders must sometimes cede their positional decision-making power to develop school leaders' instructional decision-making abilities. Collaborative decision-making within trusting school and central office assistive relationships can increase organizational intelligence, collective instructional leadership, and systemwide coherence. Staying attuned to internal and external power dynamics, competing interests, and peer networks influencing organizational decision-making is critical to anticipating conflict and forwarding districtwide teaching and learning improvement.

By incorporating the constructs of coherence and organizational and sociocultural learning theories, school districts can evolve, adapt, and improve to provide coherent, responsive support for principals and increase equitable outcomes for students districtwide. Critical shifts are required to move school districts from fragmented organizational hierarchies to coherent learning organizations. Table 6.1 illustrates the shifts in practices and mindsets needed to move from fragmentation to coherence.

Table 6.1

Central Office Shifts Supporting Coherence

Traditional Central Office	Central Office Functioning as a Coherent
Functions	Learning Organization
Central office divisions and personnel	Central office leaders operate as a coherent
operate in silos of individual effort	learning organization with shared goals,
and isolated practice resulting in fragmented, competing initiatives.	aligned resources, and coherent initiatives.
	Collaborative, responsive central office
Command and control power	support is characterized by trusting, assistive
dynamics drive compliance and	relationships between district and school
organizational hierarchy. Decisions	leaders. Structures are in place to
are made at the central office with	systematically engage in two-way
limited input from principals or teachers.	communication and evidence-based decision-making across all organizational levels.
teachers.	making across an organizational levels.
The central office primarily serves	In addition to supporting district operations,
bureaucratic and regulatory purposes,	the organization collaboratively pursues
overseeing operations and ensuring	coherence, alignment, and continuous
compliance with local, state, and	improvement. District and school leaders work
federal policies, rules, and regulations.	together in continuous improvement cycles to
	design, measure, reflect on, and refine district support for schools.
Principals are valued for operational	In addition to operational leadership,
leadership effectiveness with limited	principals' instructional leadership is valued,
expectations for principal engagement	respected, and systematically developed to
in improving teaching and learning	drive and sustain teaching and learning
	improvement at the school level.
outcomes.	improvement at the school level.
Teaching and Learning curriculum	Teaching and Learning curriculum
coordinators serve as disciplinary	coordinators serve as expert advisors guiding
experts of curriculum and pedagogy,	curricular and pedagogical decision-making
dictating school improvement	and collaborating with principals to
requirements with a "one-size-fits-all"	differentiate support within each school's
approach.	context.
External demands and high-stakes	Collaborative systems and processes promote
accountability systems measure school	shared understandings of success, data-driven
and school personnel's success,	decision-making, and a shared school/district
resulting in the fragmented pursuit of	responsibility for sustainable instructional
arbitrary, short-term fixes to improve	improvement.
standardized test scores	•

standardized test scores.

Systematic transformation to a coherent learning organization requires more than a list of belief statements and presentations. Instead, central office transformation requires a steadfast commitment to aligning central office support, strategic planning, human and fiscal resources, and multi-level leadership development.

Implications and Recommendations for Research

This study has several implications for research on educational leadership and central office coherence. First, this study suggests that the assistive relationships between mid-level central office leaders and school principals deserve further exploration. Figure 5.1 presents the frequency of key terms from participant responses including trust, leadership, collaboration, partnership, support, progress, planning, learning, and evidence/data. This high-level word count analysis emphasizes the relative importance of these concepts in the context of assistive partnerships and joint work. Researchers would deepen knowledge in this area by focusing on the daily work practices and micro decision-making of mid-level central office leaders to further illuminate the leadership moves employed to influence and strengthen principals' instructional leadership.

Studying the partnerships between principals and central office leaders within districts yielding multiple years of high student academic growth could further clarify central office leaders' best practices. Repeating this or similar studies within multiple school districts varying in size, locale, and demographics could also support and expand the study's findings for generalization to broader contexts.

Second, this study suggests that the collaborative relationships between central office personnel within and across divisions deserve further exploration. Researchers would deepen knowledge in this area by studying the collaborative systems, structures,

daily work practices, mindsets, and leadership skills needed for central office administrators at all levels of district leadership to operate collectively in support of schools.

Organizational and sociocultural learning theories could be used to study how central office executive leaders develop systems to improve organizational coherence and develop the capacity of central office personnel to function collectively. Researchers might explore the systems and daily practices needed to support central office personnel's coherent, connected, and collaborative leadership across all divisions. Additionally, future research might illuminate the leadership skills and shared understandings that empower central office leaders, often with highly specialized knowledge outside of the field of education, with an operational understanding of instructional leadership and their role in supporting teaching and learning improvement.

Finally, whether working directly with principals or designing operational systems, the work of all central office leaders is successful when it produces demonstratable and lasting improvements in organizational coherence and alignment to support principals' instructional leadership. Future research would significantly strengthen knowledge in this area by measuring and connecting central office leadership practices and performance outcomes across all levels and divisions of district leadership.

Implications and Recommendations for Policy

According to the U.S. Department of Education, "Education is primarily a State and local responsibility in the United States. It is States and communities, as well as public and private organizations...that establish schools and colleges, develop curricula, and determine requirements for enrollment and graduation" (2024, para. 1). This study

highlights the critical role of local central office leaders in supporting principals and teachers in improving teaching and learning outcomes for students. The findings also have significant implications for school boards and state policies to ensure a high-quality educational experience for all children.

School District Boards of Education

School boards are responsible for ensuring that all children enrolled in public schools have equitable access to a high-quality education. They fulfill this responsibility by implementing policies that cultivate a culture of continuous improvement, aligning school district funding and budgeting, and advocating for educational policy that equitably supports all schools. In the state where the study took place, school boards also select, hire, and evaluate the superintendent to oversee the school district's operational and instructional programs. As such, school board members are also actors and learners in the districtwide improvement process (Bransford & Vye, 2008).

The most important roles of an elected board of education are hiring an effective superintendent, adopting a strategic plan, and approving a budget to support school and student needs. In most school districts, the board of education collaborates with the superintendent, district leaders, school leaders, teachers, students, and community stakeholders to develop a district strategic improvement plan. The plan operationalizes the district and stakeholders' shared vision, beliefs, and values, clearly focusing on improving student learning and achievement. This collaborative process fosters a sense of shared ownership for student learning and aligns all stakeholders to work together to achieve common goals for the students in their community.

Beyond adopting the strategic plan, exemplary school boards systematically monitor the effectiveness of school and district leaders' continuous improvement efforts and support the superintendent in securing adequate resources to execute strategic improvement initiatives. School boards primarily secure fiscal resources by setting the millage rate for local property taxes and approving the school district's annual budget. Second only to recruiting, developing, and retaining highly qualified teachers and school administrators, board members should prioritize adequate local funding for central office positions directly supporting principals and teachers in improving teaching and learning for all students. These positions may include teaching and learning executive leadership, principal supervisors, principal coaches, curriculum coordinators, and instructional coaches.

Superintendents and school boards exercise important leadership in advocating for state and local policy changes to align funding to benefit all students. As elected officials, board members face external pressures from constituents and political activists to reduce annual property taxes that support education. Fiscal conservatives perceive central office expenditures as bureaucratic waste or "big government," in part because central office leaders have historically served regulatory functions. Constituents do not understand the expanded support roles of central office leaders or how their targeted support contributes to the success of school administrators, teachers, and students.

Well-informed board members can clearly articulate the roles and responsibilities of central office leaders, how their work aligns with the community's collaboratively identified strategic goals, and the accountability systems used to measure school and central office effectiveness. Board members and superintendents can use their positional

influence to impact decision-making at the local and state levels and advocate for state policies that adequately fund and support public educators, from cabinet to the classroom.

Local and State Policymakers

State governments are solely responsible for ensuring that all students have access to a high-quality education, regardless of where they live or their socioeconomic backgrounds. They can fulfill this responsibility by implementing policies that promote equitable resources and outcomes for public schools. Increasing state funding for public education, eliminating unfunded state educational mandates, and ensuring that funding is distributed equitably are crucial for addressing the needs of all students in all school districts. Allocating adequate funding for each school district may necessitate revising state funding formulas to address student and community characteristics such as family socioeconomic status, English learner status, and special education needs. Additionally, community characteristics that impede a district's ability to generate local revenue, such as low property values or the absence of a commercial and industrial tax base, should be mitigated by the funding formula at the state level.

In the state where the study occurred, the educational funding formula was last updated a half-century ago, in 1985. In the five decades since its inception, the state's population has roughly doubled, and the cost of public education expenses like transportation, technology, school counselors, mental health providers, school psychologists, wraparound services, school safety resources, and special education have radically changed (Williams, 2023). Additionally, the state is one of six in the United States that does not allocate additional funds to support the educational needs of students living in poverty.

In a 2024 special examination of school system spending, the State Department of Audits and Accounts noted, "Administrative expenditures have increased since fiscal year 2019, with central office spending outpacing school administration" (Griffin & Kieffer, 2024, p. 4). The report identified central office "Instructional Specialist" positions as the highest growth area, including locally funded instructional specialists and academic coaches for federal grant programs. The number of instructional specialists in the state increased by 67% between fiscal years 2019 and 2023, from 1,765 to 2,952, indicating that superintendents and central office executive leaders value the individualized support that instructional specialists can provide principals and teachers (Griffin & Kieffer, 2024).

Between 2020 and 2023, federal COVID-19 relief grants allowed many school districts to add temporary instructional support positions that were unsustainable in district local budgets. In the Focus County School District, 83% (40 of 48) of grantfunded district mathematics, literacy, MTSS, and special education instructional coaches were eliminated in 2024. The general fund absorbed five MTSS support specialists, and three literacy coaches were reallocated to an existing state literacy grant. Only the 12 curriculum coordinators remain to support 34 schools' academic improvement efforts. These statistics highlight a gaping chasm between the value school district leaders place on instructional support positions and the state's legislative obliviousness, intentional or otherwise, to the type of central office support teachers and school administrators need to improve teaching and learning outcomes for all students.

This study's findings have critical implications for state policymakers and illuminate the need to prioritize support and funding to leverage continuous professional

development and coaching of public educators. According to the National Center for Education Statistics, in 2022, U.S. public elementary and secondary schools enrolled 49.6 million students in PreK-12th grades. State elected officials are solely responsible for ensuring that every one of the 49.6 million children has access to high-quality, free public education provided by highly skilled professional educators and school leaders. Elected officials must ensure equity in public school funding and invest in permanent solutions for continuous, sustainable support for school leaders and teachers.

Concluding Thoughts

As the newly appointed Chief Academic Officer of the Division of Teaching and Learning, I was welcomed by my new colleagues and passed a white notebook entitled "Central Office Handbook." Eager to learn about my new division, I gratefully accepted the notebook and opened it immediately to find an index page containing no page numbers. The entire notebook was empty except for that incomplete index page. My well-meaning colleagues shared a laugh at my expense and then explained that there was no instruction manual for district leadership. The central office instructional leaders for a school district serving over 32,000 students and over 2,000 certified staff in 34 schools were hired based on their experience, expertise, and talents as school-level instructional leaders. However, once appointed to a district leadership position, individuals were on their own to "figure it out" and "do their best."

Like most educators approaching a new learning opportunity, my initial response was to research what my team and I should be doing to support school and district improvement. With only a few exceptions, much of the literature detailed the *inability* of central offices to provide impactful support to schools, describing fragmented

organizations which operate in silos and fail to provide coherent support or a collective vision for teaching and learning (Honig et al., 2010; Moore Johnson et al., 2015; Zepeda et al., 2021). Understanding the nature of peoples' work *inside* the central office can be a first step to engaging the school district's development of systemwide learning processes (Bransford & Vye, 2008). Educational researchers seem to have overlooked practitioners' needs altogether and largely failed to articulate what central office leaders need to *know* and do to impact teaching and learning collectively (Honig, 2008). The proverbial handbook of central office instructional leadership was nearly empty, but it cannot remain so.

This action research study sought to establish the Focus County School District (FCSD) Teaching and Learning Division as an evidence-based learning organization that continuously evaluated, revised, and expanded systems of support to equip principals with the skills, knowledge, and tools necessary to develop high-quality instruction within their buildings. The study's findings underscore the vital role that central office instructional leaders play in fostering coherence and alignment between district goals and school-level implementation.

Central office leaders, from superintendent and chief academic officer to curriculum coordinators and instructional coaches, provide essential leadership in developing the collective instructional leadership capacity of principals, school administrators, and teacher leaders. The coherent, connected efforts of a central office functioning as a learning organization can promote the type of transformational leadership needed for principals to impact teaching and learning outcomes for all students.

However, achieving this level of organizational coherence requires fundamental shifts in how school districts operate. Traditional, hierarchical structures must give way so that a culture of coherence and organizational learning can take hold. Coherence requires a unified commitment across all levels of organizational leadership, from cabinet to the classroom.

District and school leaders must embrace organizational and sociocultural learning principles and learn to improve by using action research and continuous reflection to "get better at getting better" (Bryk et al., 2015, p. 18). Currently, many educational leaders work in silos and fail to tap the collective capacities embedded within the organization to innovate and improve. Imagine if educators leveraged the vast resources and authority of the central office connected with the creativity and resourcefulness of educators districtwide, collectively searching, incorporating, reflecting, and retrieving knowledge to improve on behalf of students. The organizational possibilities dwarf even the most optimistic individual outcomes.

Central office coherence is key to unlocking principals' instructional leadership capacity and organizational learning. This action research study illuminates a path forward in which effective central office leadership practices are not a mystery to be solved in isolation but a collective journey of growth and improvement in partnership with school leaders. The promise of coherence, connectivity, and collaboration between school and district leaders will fill the "Central Office Handbook" blank pages with stories of shared successes for our students.

REFERENCES

- Anderson, E., & Young, M.D. (2018). If they knew then what we know now, why haven't things changed? An examination of district effectiveness research.

 Frontiers in Education, 3(87), 1–20. https://doi.org/10.3389/feduc.2018.00087
- Anderson, S.E., Mascall, B., Stiegelbauer, S., & Park, J. (2012). No one way:

 Differentiating school district support for school improvement. *Journal of Educational Change*, *13*(1), 403-430. https://doi.org/10.1007/s10833-012-9189-y
- Augustine, C., Gonzalez, G., Ikemoto, G.S., Russell, J., Zellman, G.L., Consant, L., Armstrong, J., & Dembosky, J.W. (2009). Improving school leadership: The promise of cohesive leadership systems. RAND Education. https://doi.org/10.1037/e647032010-001
- Blazar, D., & Schueler, B. (2022). Why do school districts matter? An interdisciplinary framework and empirical review. *EdWorkingPaper*. Annenberg Institute at Brown University. https://doi.org/10.26300/58m4-fs65
- Bloomberg, L.D. (2023). Completing your qualitative dissertation: A road map from beginning to end. (5th ed.). SAGE Publications.
- Bransford, J.D., & Vye, N. (2008). District reform and learning sciences: Issues and opportunities. *American Journal of Education*, 114(1), 665-672.
- Bryk, A.S., Gomez, L.M., Grunow, A., & LeMahieu, P.G. (2015). *Learning to improve:*How America's schools can get better at getting better. Harvard Education Press.

- Chapman, C. (2019). From hierarchies to networks: Possibilities and pitfalls for educational reform of the middle tier. *Journal of Educational Administration*, 57(5), 554–570. https://doi.org/10.1108/JEA-12-2018-0222
- Childress, S., Elmore, R., Grossman, A., & Johnson, S.M. (2007). *Managing school districts for high performance: Cases in public education leadership.* Harvard Education Press.
- Childress, S., Elmore, R., Grossman, A.S., & King, C. (2011). *Note on the PELP Framework*. (PEL-10). Harvard Business School Publishing. https://projects.iq.harvard.edu/files/pelp/files/pel010p2.pdf
- Cobb, P., Jackson, K., Henrick, E., & Smith, T.M. (2018). Systems for instructional improvement: Creating coherence from the classroom to the district office.

 Harvard Education Press.
- Cochran, A., Hart, R., & Casserly, M. (2020). Trends in principal supervisor leadership and support: Results from two surveys of principal supervisors in America's Great City Schools. Council of Great City Schools.
- Coghlan, D. (2019). *Doing action research in your own organization* (5th ed.). SAGE Publishing.
- Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organization* (4th ed.) SAGE Publishing.
- Denzin, N.K., & Lincoln, Y.S. (2018). *The SAGE handbook of qualitative research* (5th ed.). SAGE Publishing.

- Education First and the Council of Chief State School Officers. (n.d.). *Coherence lab:*Coherence toolkit. An Initiative of Council of Chief State School Officers and

 Education First. https://coherencehub.org/the-toolkit/
- Elmore, R.F., Foreman, M.L., Stosich, E.L., & Bocala, C. (2014). *The internal coherence*assessment protocol & developmental framework: Building organizational

 capacity for instructional improvement in schools. Strategic Education Research

 Partnership Institute.
- Focus County School District. (2024). Focus County School District: FY2023 Budget Overview.
- Fullan, M. (2006). The future of educational change: Systems thinkers in action. *Journal of Educational Change*, 7(1), 113–122. https://doi.org/10.1007/s10833-006-9003-9
- Fullan, M., & Quinn, J. (2016). Coherence: The right drivers in action for schools, districts, and systems. Corwin Press.
- Georgia Department of Education. (2023). Georgia insights: Data dashboard. https://georgiainsights.gadoe.org/
- Georgia Leadership Institute for School Improvement. (2024). Base camp leadership summit: Participant Guide.
- Glanz, J. (2014). Action research: An educational leader's guide to school improvement (3rd ed.). Rowman & Littlefield.
- Governor's Office of Student Achievement. (n.d.). Downloadable data.

 https://gosa.georgia.gov/dashboards-data-report-card/downloadable-data

- Governor's Office of Student Achievement. (2023). Direct certification: Measuring student poverty [Memo]. https://gosa.georgia.gov/directcert
- Griffin, G.S., & Kieffer, L. (2024). School system spending: System flexibility permits variation in systems' allocation of resources. Georgia Department of Audits & Accounts.
- Hall, J.J. (2017). There's a consultant for that: When school districts are doing too much but can't help themselves. *The Phi Delta Kappan*, 99(4), 60-65. https://doi.org/10.1177/0031721717745547
- Honig, M.I. (2003). Building policy from practice: District central office administrators' roles and capacity for implementing collaborative education policy. *Educational Administration Quarterly*, 39(3), 292–338.
 https://doi.org/10.1177/0013161X03253414
- Honig, M.I. (2008). District central offices as learning organizations: How sociocultural and organizational learning theories elaborate district central office administrators' participation in teaching and learning improvement efforts.

 *American Journal of Education, 114(1), 627–664. https://doi.org/10.1086/589317
- Honig, M.I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly*, 48(4), 733–774. https://doi.org/10.1177/0013161X12443258

- Honig, M.I. (2013). From tinkering to transformation: Strengthening school district central office performance. In *AEI Outlook Series*. American Enterprise Institute. https://link.gale.com/apps/doc/A338603148/AONE?u=uga&sid=ebsco&xid=e06a 4345
- Honig, M.I., Copland, M.A., Rainey, L.R., Lorton, J.A., Newton, M., & Center for the Study of Teaching and Policy. (2010). *Central office transformation for district-wide teaching and learning improvement*. Center for the Study of Teaching and Policy. https://www.wallacefoundation.org/knowledge-center/pages/introduction-central-office-transformation.aspx
- Honig, M.I., & Hatch, T.C., (2004). Crafting coherence: How schools strategically manage multiple, external demands. *Educational Researcher*, *33*(8), 16–30. https://doi.org/10.3102/0013189X033008016
- Honig, M.I., & Rainey, L.R. (2015). *How school districts can support deeper learning:*The need for performance alignment. Jobs for the Future.

 https://www.jff.org/resources/how-school-districts-can-support-deeper-learning-need-performance-alignment/
- Honig, M.I., & Rainey, L.R. (2020a). A teaching-AND-learning approach to principal supervision. *The Phi Delta Kappan*, 102(2), 54–57.
 https://doi.org/10.1177/0031721720963234
- Honig, M., & Rainey, L.R. (2020b). *District systems to support equitable and high-quality teaching and learning. Brief No. 10.* EdResearch for Recovery Project. https://annenberg.brown.edu/sites/default/files/EdResearch_for_Recovery_Brief_10.pdf

- Ikemoto, G., & George W. Bush Institute. (2021). *Prioritizing principals guidebook:*Central office practices that support school leaders. The School Leadership

 District Cohort. George W. Bush Institute, Education Reform Initiative.

 https://www.bushcenter.org/publications/prioritizing-principals-guidebook
- Jeffs, T., & Smith, M.K. (1999). Informal education: Conversation, democracy and learning. Educational Heretics Press.
- Knapp, M.S. (2008). How can organizational and sociocultural learning theories shed light on district instructional reform? *American Journal of Education*, 114(1), 521–539. https://doi.org/10.1086/589313
- Knapp, M.S. (2017). The practice of designing qualitative research on educational leadership: Notes for emerging-scholars and practitioner-scholars. *Journal of Research on Leadership Education*, 12(1). The University Council of Educational Administration. https://doi.org/10.1177/1942775116647365
- Kotter, J. (2012). Leading change. Harvard Business Review Press.
- Kruse, S.D. (2020). Hiding in plain sight: Systems thinking and school organization.

 *Journal of Educational Administration, 59(1), 43–58.

 https://doi.org/10.1108/JEA-01-2020-0011
- Lanoue, P.D., & Zepeda, S.J. (2018). The emerging work of today's superintendent:

 Leading schools and communities to educate all children. Rowman & Littlefield.
- Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective at closing the achievement gap. *Leadership and Policy in Schools*, *9*(3), 245–291. https://doi.org/10.1080/15700761003731500

- Leithwood, K., & Azah, V.N. (2017). Characteristics of high-performing school districts.

 Leadership and Policy in Schools, 16(1), 27–53.

 https://doi.org/10.1080/15700763.2016.1197282
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership Management*, 40(1), 5–22. https://www.doi.org/10.1080/13632434.2019.1596077
- Leithwood, K., Sun, J., & McCullough, C. (2019). How school districts influence student achievement. *Journal of Educational Administration*, *57*(5), 519–539. https://doi.org/10.1108/JEA-09-2018-0175
- Lencioni, P. (2002). The five dysfunctions of a team: A leadership fable. Jossey-Bass.
- Liou, L., & Daly, A. (2020). The networked leader: understanding peer influence in a system wide leadership team. *School Leadership & Management*, 40(2), 163–182. http://www.doi.org/10.1080/13632434.2019.1686611
- Marzano, R.J., & Waters, T. (2009). District leadership that works: Striking the right balance. Solution Tree.
- Merriam, S.B., & Grenier, R.S. (2019). Qualitative research in practice: Examples for discussion and analysis. John Wiley & Sons.
- Merriam, S.B., & Tisdell, E.J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). John Wiley & Sons.
- Mertler, C.A. (2021). Action research as teacher inquiry: A viable strategy for resolving problems of practice. *Practical Assessment, Research, and Evaluation*. 26(19). 1-12. https://doi.org/10.7275/22014442

- Mitchell, C., & Sackney, L. (2011). *Profound improvement: Building learning community capacity on living system principles* (2nd ed.). Routledge. https://doi.org/10.4324/9780203826027
- Moore Johnson, S., Marietta, G., Higgins, M.C., Mapp, K.L., & Grossman, A. (2015).

 Achieving coherence in district improvement: Managing the relationship between the central office and schools. Harvard Education Press.
- National Center for Education Statistics. (2024). *Public School Enrollment. Condition of Education*. U.S. Department of Education, Institute of Education

 Sciences. https://nces.ed.gov/programs/coe/indicator/cga
- National Center for Education Statistics. (2023). *Digest of educational statistics*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/digest-dashboard
- National Institute for Excellence in Teaching. (2021). The untapped potential of the principal supervisor: How support for school leaders should change. National Institute for Excellence in Teaching. https://eric.ed.gov/?id=ED612646
- Owens, S. (2022, August 9). Three ways to fix Georgia educational funding. *Georgia Budget and Policy Institute*. https://gbpi.org/three-ways-to-fix-georgia-education-funding/
- Rogers, L.K. (2022). Is role change enough? District organizational supports for principal supervision. *Educational Administration Quarterly*, *58*(4), 527–560. https://doi.org/10.1177/0013161X221081828

- Rorrer, A.K., Skrla, L., & Scheurich, J.J. (2008). Districts as institutional actors in educational reform. *Educational Administration Quarterly*, 44(3), 307-357. https://doi.org/10.1177/0013161X08318962
- Scott, C., Darling-Hammond, L., Burns, D., & Learning Policy Institute.

 (2020). Instructionally engaged leaders in positive outlier districts [Research brief]. *Positive Outliers Series*. Learning Policy Institute.

 https://learningpolicyinstitute.org/media/468/download?inline&file=Positive_Outlier_Instructionally_Engaged_Leaders_BRIEF.pdf
- Seashore Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). Investigating the links to improved student learning: Final report of research findings. Wallace Foundation. https://hdl.handle.net/11299/140885
- Smith, A.K., Watkins, K.E., & Han, S-H. (2020). From silos to solutions: How one district is building a culture of collaboration and learning between school principals and central office leaders. *European Journal of Education*, *55*(1), 58-75. https://doi.org/10.1111/ejed.12382
- Stringer, E.T., & Aragón, A.O. (2020). *Action research*. (5th Ed.). SAGE Publications, Ltd.
- Thompson, C.L., Sykes, G., & Skrla, L. (2008). *Instructionally-focused district*leadership: Toward a theoretical account. The Education Policy Center at

 Michigan State University.
 - https://education.msu.edu/epc/forms/Thompson_et_al_2008_Coherent_Instructionally_Focused_District_Leadership.pdf

- Trujillo, T. (2013). The reincarnation of the effective schools research: Rethinking the literature on district effectiveness. *Journal of Educational Administration*, *51*(4), 426–452. https://doi.org/10.1108/09578231311325640
- United States Census Bureau. (2020). State profile.

 https://data.census.gov/profile/Georgia?g=040XX00US13
- United States Department of Education. (2024, December 9). An overview of the Department of Education: Federal role in education.

 https://www.ed.gov/about/ed-overview/federal-role-in-education
- Vygotsky, L.S. (1978). *Mind and society: The development of higher psychological processes*. Harvard University Press.
- Waters, T.J., & Marzano, R.J. (2006). School district leadership that works: The effects of superintendent leadership on student achievement [Working paper]. Mid-Continent Research for Education and Learning (McREL).

 https://www.mcrel.org/school-district-leadership-that-works-working-paper/
- Westover, J. (2022). Districts on the move: Leading a coherent system of continuous improvement. SAGE Books. https://www.doi.org/10.4135/9781544387666
- Williams, R. (2023, January 17). Georgia's circa 1985 K-12 school funding formula set for redo: Big state budget expense politically fraught. *Georgia Recorder*. https://georgiarecorder.com/2023/01/17/will-this-finally-be-the-year-georgia-lawmakers-rework-the-states-1985-vintage-education-funding-formula/
- Wong, L.S., Coburn, C.E., & Kamel, A. (2020). How central office leaders influence school leaders' decision-making: Unpacking power dynamics in two school-based

- decision-making systems. *Peabody Journal of Education*, *95*(4), 392–407. https://doi.org/10.1080/0161956X.2020.1800175
- Xia, J., Shen, J., & Sun, J. (2020). Tight, loose, or decoupling? A national study of the decision-making power relationship between district central offices and school principals. *Educational Administration Quarterly*, 56(3), 396-434. https://doi.org/10.1177/0013161X19851174
- Zepeda, S.J. (2017). *Instructional supervision: Applying tools and concepts* (4th ed.). Routledge.
- Zepeda, S.J. (2019). Professional development. What works (3rd ed.). Routledge.
- Zepeda, S. J., Derrington, M.L., & Lanoue, P.D. (2021). Developing the organizational culture of the central office: Collaboration, connectivity, and coherence.

 Routledge.
- Zepeda, S.J., & Lanoue, P.D. (2017). Conversation walks: Improving instructional leadership. *Educational Leadership*, 74(8), 58-61. http://www.ascd.org/publications/educational-leadership/may17/vol74/num08/Conversation-Walks@-Improving-Instructional-Leadership.aspx
- Zepeda, S.J., Lanoue, P.D., Price, N.F., & Jimenez, A.M. (2014). Principal evaluation— Linking individual and building-level progress: Making the connections and embracing the tensions. *School Leadership and Management*, *34*(4), 324-351. https://www.doi.org/10.1080/13632434.2014.928681

Zepeda, S.J., Parylo, O., & Klar, H.W. (2017). Educational leadership for teaching and learning. In D. Waite & I. Bogotch (Eds.), *The Wiley international handbook of educational leadership* (pp. 227-252). John Wiley & Sons, Inc. https://doi.org/10.1002/9781118956717.ch13

APPENDIX A

Empirical Findings Table

Author (Date)	Title	Purpose	Methods	Major Findings	Implications
Anderson & Young (2018)	If they knew then what we know now, why haven't things changed? An examination of district effectiveness research.	To examine research on district practices associated with school performance and student achievement to better understand how to use the research to foster district empowerment. The study sought to develop a framework of 13 district practices from the body of research.	This exploratory review of research used a sample of 98 peer-reviewed journals, reports, books, and working papers to identify patterns of district effectiveness characteristics.	The literature analysis on school district effectiveness revealed a significant amount of consistency across 13 key practices across 3 areas related to effective district practices at a general level.	Developing a high-quality instructional program, aligning district resources, and supporting and developing school-level leaders are critical drivers for central office effectiveness.

APPENDIX A

Author (Date)	Title	Purpose	Methods	Major Findings	Implications
Honig (2012)	District central office as teaching: How central office administrators support principals' development as instructional leaders	To identify the specific work practices of executive-level central office staff who provide instructional leadership support to principals.	This study used qualitative comparative methods. Data for the study came from 283 interviews, approximately 265 observation hours, and 200 documents in three urban school districts.	This study established empirical support for central office leadership practices consistent with ideas from sociocultural learning theory and supported the development of principals' instructional leadership capacity. Support practices identified were engaging in joint work, differentiation of support, modeling instructional leadership, developing and using tools, and brokering and buffering for principals.	Central office leaders are the teachers and builders of principals' instructional leadership capacity. To accomplish this work, fundamental shifts in central office leaders' traditional systems and work practices are needed. The daily work practices of central office leaders should provide jobembedded support to build the instructional leadership capacity of principals.

APPENDIX A

Author (Date)	Title	Purpose	Methods	Major Findings	Implications
Honig & Hatch (2004)	Crafting coherence: How schools strategically manage multiple external demands	This research analysis aimed to reconceptualize coherence as a dynamic process.	This research analysis draws on theories of institutional and organizational change, as well as empirical illustrations from the literature on school reform and educational policy implementation, to present new directions for research on policy coherence.	This research defined coherence as an ongoing negotiation process between school and district leaders who continually craft the fit between external policy demands and the school's goals and strategies.	The craft of coherence is an ongoing negotiation between school and district leaders. Through highly collaborative relationships, school and district leaders share leadership and decision-making.

APPENDIX A

Author (Date)	Title	Purpose	Methods	Major Findings	Implications
Leithwood et al. (2019)	How school districts influence student achievement	This large-scale, quantitative study aimed to test the effects of nine district characteristics on student achievement, explore the conditions that mediated the effects of such characteristics, and understand the role school-level leaders play in district efforts to improve achievement.	Data were provided by the responses of 2,324 school and district leaders in 45 school districts in two surveys. Student achievement evidence was provided by standardized measures of math and language achievement. The analysis of these data included calculations of descriptive statistics, confirmatory factor analysis, and regression mediation analysis.	Seven of the nine district characteristics contributed significantly to student achievement and three conditions served as especially powerful mediators of such district effects and school-leader effects on achievement. The seven characteristics with significant indirect effects on student learning are: uses of evidence; coherent instructional programs; mission, vision, and goals; district alignment; relationships; professional leadership; and learning-oriented school improvement processes.	None of the effective district characteristics dominated the results, supporting claims that comprehensive, coherent, and coordinated efforts by districts are likely needed to improve student achievement at scale.

APPENDIX A

Author	Title	Purpose	Methods	Major Findings	Implications
(Date)					
Moore	Achieving	To identify the	This mixed methods	High-achieving	Regardless of a district's
Johnson	coherence in	strategies leaders	study extended the	districts employing	strategic approach, district-
et al.	district	employ to achieve	Public Education	both centralization and	school relationships are
(2015)	improvement:	district coherence	Leadership Project	decentralization	critical to achieving
	Managing the	resulting in school	(PELP) and sampled	strategies demonstrated	coherence.
	relationship	improvement.	six large urban school	system coherence.	
	between the		districts with varying	The study identified	Productive, coherent,
	central office		strategic orientations.	three factors	supportive principal
	and schools		The study was situated	contributing to	relationships are central to
			at the district level and	coherence:	district reform and
			focused on district and	stakeholders, culture,	strategic improvement.
			school relations.	and external	
				environment.	

APPENDIX A

Empirical Findings Table

Author (Date)	Title	Purpose	Methods	Major Findings	Implications
Zepeda et al. (2021)	Developing the organizational culture of the central office: Collaboration, connectivity, and coherence.	To rethink the impact of the central office on system and school initiatives, understand and apply transformational thinking and change strategies at the central office to develop new instructional designs, prioritize resources, and establish new leadership approaches founded on systems review and change.	This scholarly literature compiled research findings on central office effectiveness, coherence, leading systems, leading transformation, equity and social justice, and teaching and learning. Contributions from exemplary district leaders connected theory to practice.	Coherence can only be built by organizing internal structures and relying on (1) mission and vision to drive beliefs and goals, (2) relationships built on trust and mutual accountability, and (3) the strategic plan serves as the guide for transformation.	Coherence and connectivity within the central office are critical to organizational and academic improvement and system transformation. Strategic planning aligns everyday actions and accountability with organizational beliefs and goals. Relationships of trust and mutual accountability are central to school and district improvement.

APPENDIX B

Coherence and Instructional Leadership: Exemplar Video

Near the conclusion of the study in late July 2024, the Georgia Department of Education (GaDOE), in partnership with Georgia Public Broadcasting (GPB), produced a professional video featuring the assistive relationship and literacy leadership of Mr. Rodney Wilkerson, principal of Nebo Elementary, and Mrs. Kimberly Freedman, K-5 ELA Coordinator (identified with permission). The video was featured by the GaDOE Deputy Superintendent of Teaching and Learning, Dr. April Aldridge, at the Georgia Association of Curriculum and Instructional Leaders (GACIS) 2024 Fall Conference.

By the study's conclusion, Principal Wilkerson and Coordinator Freedman scaled their work to the entire school staff, served as a districtwide literacy PL design model, influenced the literacy leadership of other district principals, and influenced curriculum leaders across the state. The 8-minute video provided in Figure 7.1 exemplifies central office and school coherence, organizational learning, and the impact of assistive principal/coordinator relationships on a principal's instructional leadership.

Figure 7.1

GPB Literacy Innovation Video QR Code



https://www.gpb.org/education/school-stories/literacy-innovation/paulding-county-schools

GPB Literacy Innovation

APPENDIX C

Post-Study ARIT Interviews

Research Questions	ARIT Interview Prompts
Q1: How can curriculum coordinators work as a learning organization to collaboratively design coherent systems of support	How would you describe your experience collaborating with your principal/coordinator during the study?
to develop principals' instructional leadership capacity in a large, suburban school district?	Were there any specific moments or interactions that stood out to you as particularly insightful or impactful?
	When you were working collaboratively, did you encounter any challenges or obstacles along the way?
	What aspects of the collaborative process did you find most beneficial for your own learning and growth?
Q2: How do curriculum coordinators describe the process of working as a learning organization and the impact of coherent systems of support on	Reflecting on the entire experience, what were the key factors that contributed to a sense of coherence in your collaborative work?
of coherent systems of support on their abilities to develop principals' instructional leadership capacity in a large, suburban school district?	Within the three research cycles, we focused on the three levers of coherence: building focus and collaboration, cultivating assistive relationships, and changing behavior at scale. From your perspective, how well does the coherence framework capture the key elements that are necessary for collaboration and instructional leader development?
	What role did the process of organizational learning play in your effectiveness? (Search, Incorporate, Reflect, Retrieve)
	What advice would you give other districts seeking to improve coherence between central office and school leaders to enhance instructional leadership?